

# Contact

M A N A G E M E N T

No 1

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PHOTO: KARL-EVERT EKLUND

## Swedish rail modernizes

Switches are extremely important for both companies: Ericsson has its own that sees to it that telecommunications run smoothly. SJ, the Swedish railways, has its own that sees that the trains run smoothly. Ericsson is a dozen years older than SJ, which is now entering its hundredth year. During these 100 years, SJ has been a major customer for Ericsson. In 1889, the state railways bought

a telephone switch with 100 connections from Ericsson. One hundred years later, SJ is in full swing, moving toward becoming a top modern-day transport company. This is being done with, among other things, the help of a new MD110 business switch from Ericsson, with 4,000 subscriber connections.

Center



### 2 big events in 1 day

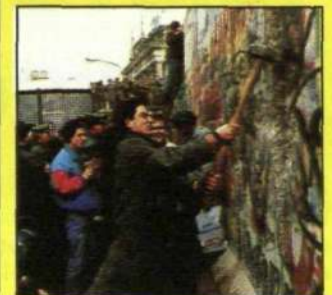
Tuesday, December 12, was a major news day for Ericsson. First, Hans Werthén was retiring as chairman of the board, Björn Svedberg was named as his successor and Lars Ramqvist was designated chief executive officer.

The other news was that Ericsson and Televerket was expanding their collaboration and that Ericsson was selling Ericsson Sverige AB to Televerket. Page 2



### Compass award again

The compass in the picture is no ordinary one. It is "Compass of the Year." It has been awarded to Ericsson Data Services for the most outstanding performance in data operations for 1989. It is the second time that EDS has won the award. Page 6



### Old switch to the rescue

Ericsson's new international AXE station in Budapest came to the rescue when East Berlin's old international system proved inadequate as the Berlin Wall fell. Page 8

**A switch in time • Center**

# New but experienced at the top of Ericsson

Hans Werthén has begun to scale back his activities in Swedish business and has chosen to retire as Chairman of the Board of Ericsson. Björn Svedberg has been designated as his successor. After 14 years as President and Chief Executive Officer, Björn Svedberg will be succeeded by Lars Ramqvist.

That will be the answer to questions about the makeup of Ericsson's top leadership at the shareholders' meeting in May 1990.

The guessing has gone on for a long time both inside and outside Ericsson. When will Hans Werthén retire as chairman of the board and who will be his successor? If Björn Svedberg becomes the new chairman, who will become the new president? On Tuesday, December 12, the designations were made, which will be presented at the next shareholder's meeting.

It is usual in Swedish business circles that a board chairman in a Stock Exchange listed company would retire at 70, but Hans Werthén's came after the last shareholders' meeting.

Now, he will retire with the shareholders' meeting scheduled for May 8, 1990, after his second active period with Ericsson. The first began in 1959 and ended in 1967, when he left as technical director to become president of Electrolux.

Björn Svedberg has been designated as board chairman after Hans Werthén and Lars Ramqvist as new president after Björn Svedberg.

At 11.50 on the morning of Tuesday,

December 12, Ericsson released the news about the changes in leadership. The company held a press conference two hours later.

When TV, radio and the print media arrived at the board room at Telefonplan in Stockholm, they found the three men in their seats. But it was not easy to determine who the key figure was.

It was the beginning of the end of an era with the free-talking, debate-loving, truth-spouting Hans Werthén. It was also an indication that the era of Björn Svedberg as president had come to an end and that he was entering a new one as chairman. It was indicative too that Ericsson in 1990 could have a new president in Lars Ramqvist.

## All main figures

TV concluded that Hans Werthén was the main figure and conducted long interviews with him. The other media concentrated equally intensely on Björn Svedberg and Lars Ramqvist.

All three stressed that the changes at the top were in no way radical.

Hans Werthén gave an example in his powerful symbolic speech, when he took the podium to explain his withdrawal.

"There is nothing as old as a weather report," he said, referring to his old visions of the future.

But pressed to be a bit more serious, when reporters wanted the facts and the photographers wanted eloquent pictures, he went on to say:

"I think I am leaving the chairmanship in safe hands now. Engineer Björn Svedberg will take over and he in his turn will be succeeded as president by Lars Ramqvist. With that, the succession within Ericsson is clear for the nineties."

## No less Active

Naturally Björn Svedberg faced the question of whether he could "bear" not being president, when now, after



Three happy gentlemen face the cameras at a press conference in the boardroom at Telefonplan in Stockholm. The main figures were all three. From left, newly designated President Lars Ramqvist, outgoing Chairman of the Board Hans Werthén and outgoing President and designated Board Chairman Björn Svedberg.

14 years, he was being designated chairman.

"Lars and I have worked so long together that I myself have no qualms on this point," he said. "It is he who will be the president. As chairman of the board, I can offer a great deal when it comes to long-term strategy. I shall not be less active as chairman than I was as president. But I shall be active in another way. I feel very positive about that."

Above all, the consensus among the three was manifest. They agreed, for example, that for L.M. Ericsson, the

39-year-old Björn Svedberg was the man of the eighties and that the 51-year-old Lars Ramqvist will be the man of the nineties.

## Direct line

"I see this as a natural continuation of what we have done together in the Ericsson leadership," says Lars Ramqvist. "I do not mean just Björn and I, but all our colleagues in the leadership. It is a conviction of trust from the board over what we have accomplished together in recent years. We have succeeded in turning around a diffi-

cult situation and now we will continue on the right track."

Lars Ramqvist also had a special message for all Ericsson employees, who, now after 14 years, will have a new leader.

"I hope to be able to continue in Björn's frank and open style and I believe that those who work with me, including the trade union representatives, will feel that they have a direct line to me. I hope to continue with that."

Bengt Plomgren  
Photo: Bo Binette

## Ericsson, Televerket cooperation grows

# Televerket takes over Ericsson Sverige AB

Ericsson and the Swedish Telecommunications Administration have signed an agreement covering development and marketing of telecommunications equipment in Sweden. The terms also include acquisition by the Telecommunications Administration Group of the operations of Ericsson's sales company in Sweden, Ericsson Sverige AB, at year-end 1989. All 800 employees of the company are being offered employment with the Telecommunications Administration Group. Negotiations with the trade unions, as specified by the Co-determination Act in Sweden, have been initiated.

Ericsson and the Swedish Telecommunications Administration have cooperated extensively for many years through the 50/50 joint-owned development company Ellemtel. The AXE exchange and the MD110/A335 subscriber exchange are examples of products developed within the framework of this cooperation. As a result of ongoing technological developments and

increasingly sharper competition in the market, both parties determined that further extension of this cooperation was necessitated.

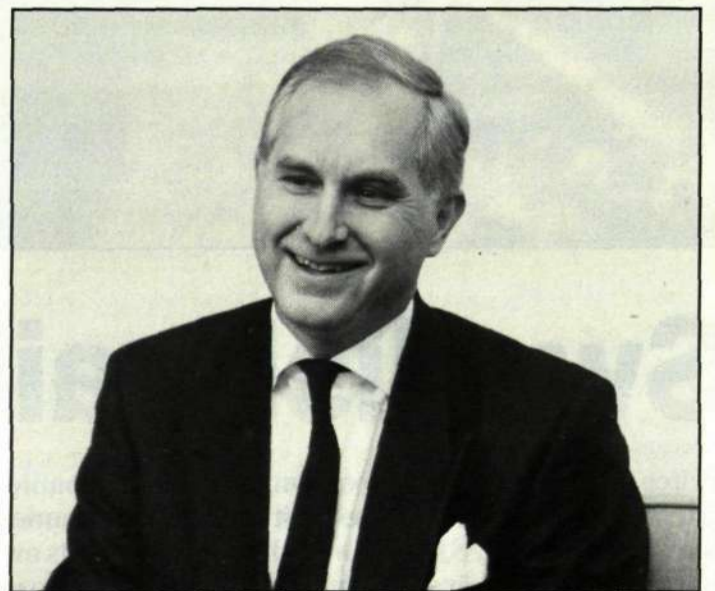
Both parties stated their common ambition to further develop public telecommunications and data communications systems, as well as subscriber exchanges for large and medium-sized companies and

organizations within the framework of the Ellemtel agreement.

"Cooperation with the Telecommunications Administration, which is a qualified and highly competent communications company, has been valuable for Ericsson's product development. This cooperation is now being further strengthened," commented Björn Svedberg, President of Ericsson.

The Telecommunications Administration's General Director, Tony Hagström, said that "The agreement establishes firm ground for the continued development cooperation with Ericsson. In the marketing area, significant rationalization gains can be realized that strengthen the competitiveness of Swedish telecommunications technology."

## Ericsson's new CEO



Lars Ramqvist was born 51 years ago in Grängesberg in southern Dalarna. He holds a doctorate in technology having presented his thesis in 1969 on the electron structure in solid materials. Previously, he was with the Stora company and then with the Axel Johnsson

Group. He came to Ericsson in 1980 and has held a number of top positions there. A year ago he was named president of Ericsson Radio Systems and head of the Radio Communications business area. He is a member of the Swedish Engineering Science Academy.

# New digital milestone on the Pacific Rim

## *Third digital AXE international exchange in Hong Kong*

**Cable and Wireless (HK) has ordered a third AXE International switching Centre for Hong Kong.**

**The new exchange, which comes into service in 1990, is called Zodiac, and it joins Electra (1987) and Hermes (1984), which are themselves to be expanded by Ericsson.**

At present, Electra and Hermes have a joint capacity of 34,000 lines, and Zodiac will add a further 20,000 lines. Zodiac will be unmanned, controlled from Electra and Hermes. It incorporates Ericsson's new APZ 212 super-capacity processor, handled the most common international signalling systems (including CCITT Nos 5, 6 and 7, in conformity with the CCITT's Red Book standards), and is equipped with integrated echo-cancellers.

### **Hong Kong: biggest gateway on the Pacific Rim**

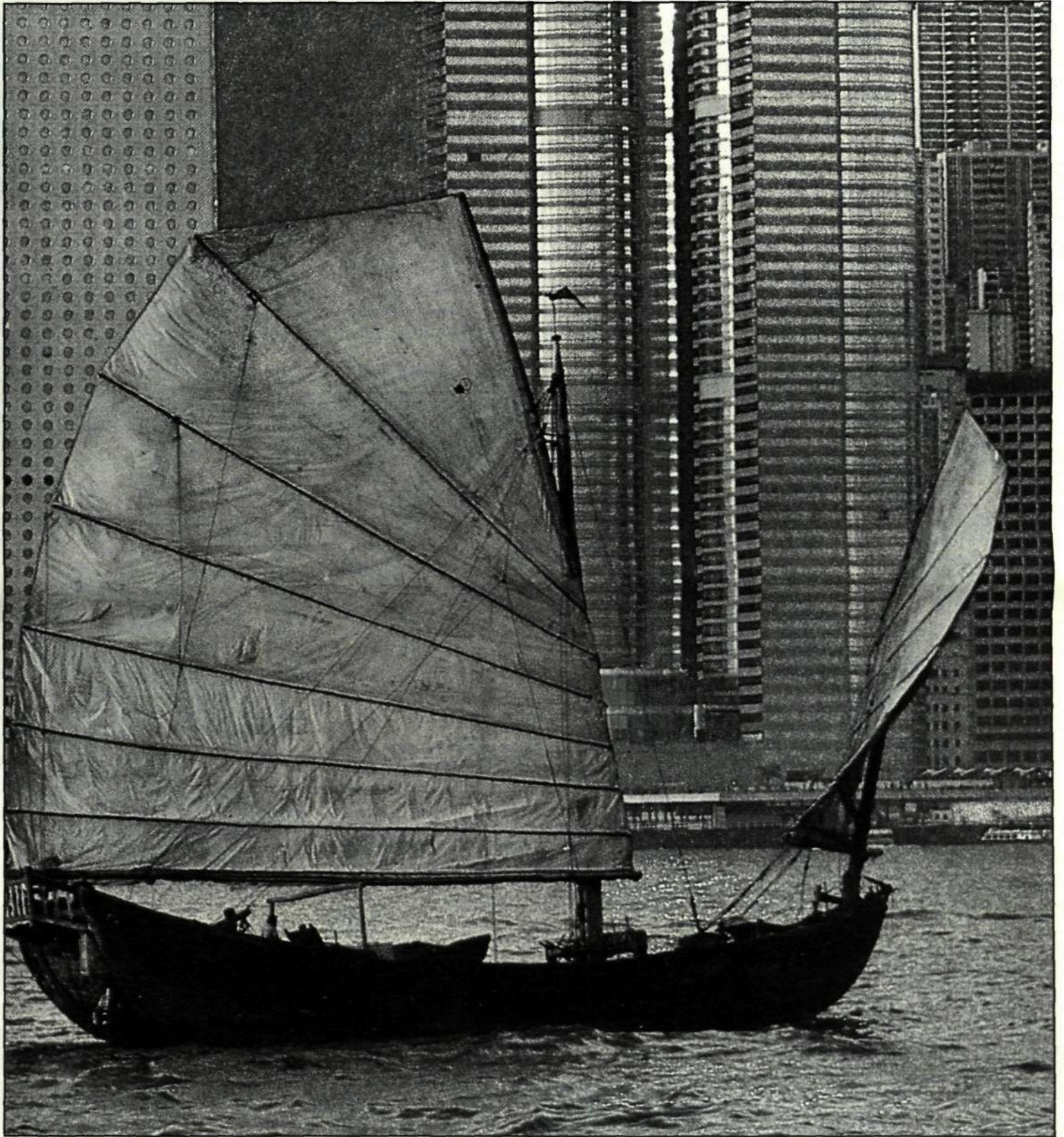
Hong Kong has a population of 5.6 million in an area of just 1,070 square kilometres. Yet Zodiac will give Hong Kong greater international capacity than even Japan, with its nearly 378,000 square kilometres and a population of 122.6 million.

The extra capacity is needed. Hong Kong has direct international links with 60 countries, and in 1987/88, Electra and Hermes carried almost 52 million IDD (International Direct Dialling) outgoing calls. Hong Kong's international traffic is doubling every four years. Zodiac will add not merely extra capacity, but also greater security. With three switches, the opportunity to re-route traffic in case of any failure at the existing switches provides the reliability which is always crucial at international gateways — and increases the attraction of Hong Kong for international traffic.

The Pacific Basin is tipped by many analysts as the world's main focus of growth in the next few decades, and competition between centres on the Rim is fierce. Quite apart from Japan and Australia, of course, Hong Kong, Taiwan and Singapore offer first-league international communications. South Korea and Thailand are also pitching strongly, and there is development in Indonesia, Malaysia and the Philippines. International traffic within the South-East Asia region is growing faster than anywhere else in the world.

Hong Kong, with its route into China through Guangzhou, is very well placed. Until China's infrastructure catches up with the rest of the world's, large international companies tend to choose Hong Kong in preference to Guangzhou itself, Shanghai or Beijing — though in all these centres Ericsson is helping the People's Republic to strengthen its telecommunications infrastructure very rapidly.

Meanwhile, banks and financial in-



*Old and new meet as a Hong Kong junk passes the business area.*

*Courtesy of Cable and Wireless plc*

stitutions in particular find Hong Kong commercially attractive. Hong Kong does its best to maintain its telecommunications leadership, fully aware that international companies will locate themselves wherever telecommunications are cheapest and easiest. Local calls are free — which encourages high telephone usage — and the national network matches the international network in efficiency. The Hong Kong Telephone Company offers a comprehensive range of advanced domestic services, while Cable and Wireless (HK) uses its full battery of satellite, submarine cable and microwave links to provide a global international service which

embraces digital voice, data, facsimile and video-conferencing.

### **Completing the Global Digital Highway**

The Global Digital Highway is the Cable and Wireless concept of a fibre-optic based network linking all the world's main financial and commercial centres.

Microwave and satellite technologies, though much used by Cable and Wireless, have done nothing to reduce the importance of this fast, secure cable network. In fact, though the pendulum periodically swings away from cable, it tends always to swing back. Submarine telegraph cables

were followed by HF radio telephony. That in turn was followed by submarine telephony cables, which gave vastly improved speech quality. Then, for a time, satellite transmission seemed likely to replace cable altogether. As it became clear that data transmission would become of greater and greater importance — and that satellite transmission was simply too slow for high-speed data — fibre optic cable with fast digital transmission arrived to take over the task. Cable and Wireless is installing the Region's first fibre cables.

Working west round the world, the highway begins in London, UK, which is linked to the US by the PTAT

cable. Transmission across the US is by landline through Cable and Wireless North America or Cable and Wireless partner Sprint. The North Pacific cable links the US to Japan, and a cable 40% owned by Cable and Wireless (HK) links Japan to Hong Kong. The final link back to London is planned for completion in 1990, and branch links to such centres as Taiwan, Singapore and the Philippines are being installed rapidly.

Geographically, Hong Kong is the natural springboard for the next leap westwards. The new Zodiac exchange helps to provide the motive power for the leap.

*(Excerpted from Connexion)*

# From analog to digital switching SJ changes course after 100 years

When Ericsson Business Communications recently delivered the 24th digital telephone switch, an MD110, to SJ, the Swedish Railways, in the Stockholm area, the event also marked the occasion of 100 years of collaboration between SJ and Ericsson.

It was in 1889 that the then L.M. Ericsson delivered its first switch to SJ, still a major customer to this day. The delivery to the company's main office in Stockholm heralded the start of SJ's own telephone network.

The first switch was a one-sided switch with single-wire inductor lines with a capacity of 100 lines. When it was initially brought into use, only 36 of these were used.

The new switch, which was in-

resolved them in an ideal way, says Rune Sander.

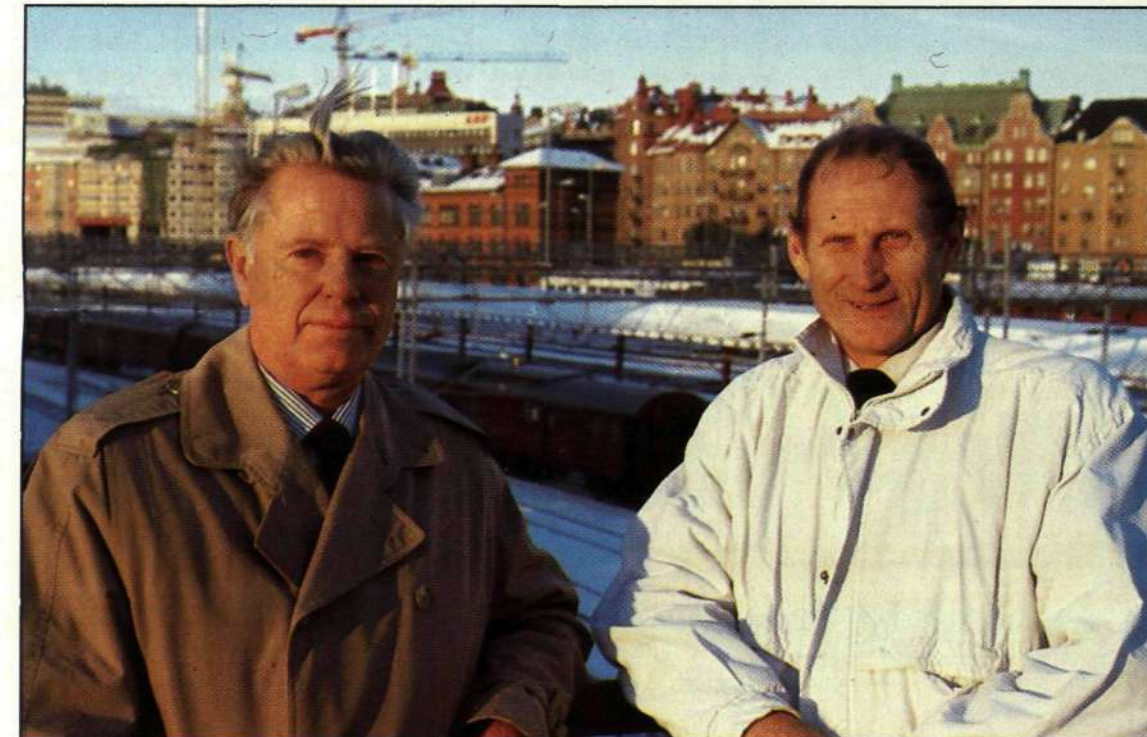
"I also feel that I can say that Ericsson has also had a great deal of use and benefits from us. On more than one occasion, we have been a bit of a research guinea pig, through which new solutions and products were tested, he continues.

#### 4 switch change

SJ's first telephone installation had an early character of a so-called subscriber switch, a local telephone switch with connection leads to the Stockholm telephone network. In May 1905, SJ ordered

tion, but he has been there long enough to be aware of how it functions.

"It has functioned remarkably over the years," he says. "Surely, it can be difficult at times, but on

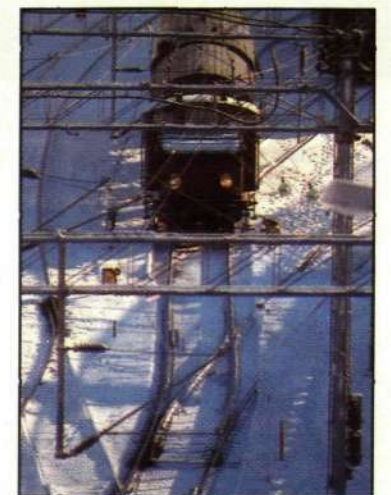


Rune Sander, left, Stab Tele at SJ, and Evert Carlsson, responsible for the telephone system at Banverket, were both involved in the expansion of the Swedish railway's automated telenetwork in the 1960s.

stalled in mid-November, is an MD110 with 20 individual units, so-called LIM, each with 300 lines. The system provides about three times as many LIM units, which gives an indication of its total capacity.

"The 20 LIM units which are now in use are located in six different sites in Stockholm," says Rune Sander, of Stab Tele at SJ. Each LIM is hooked up with a centrally placed group selector with two digital systems each with 30 conversation channels. Linked up are 4,000 subscriber extensions within the company, 200 direct call lines to Televerket and a similar number of lines within the network itself. Telephone operators will continue to remain in the locations where they are now.

the whole we are very pleased. We have had deliveries on time and products have functioned as expected. If problems arose — for that happens in all collaborations — Ericsson has come forward and



In 1989, Ericsson delivered the first switch. Now, SJ is changing course and is going over from analog to digital switching.

a new switch from the then L.M. Ericsson. This was delivered half a year later and had room for two operators as well as a capacity for 150 lines.

The year 1916 was a notable one for SJ's telephone development. At that time the first permanent long line was connected to Stockholm's Central — Hallsberg. With the railway electrification, there were several successors. At the end of 1945, there was a total of 57 section and other long-cable connections to the main office switch.

#### New switch

SJ's first automatic subscriber switch was hooked up to the main office in 1934. The capacity was 800 lines, of which 600 were set in use when the switch was put into operation. Eleven years later, line activity was so hectic that a new switch had to be installed. The new switch had 10 operator



Cooperation between SJ and Ericsson marked its 100th year in November. At the same time, Ericsson delivered the 24th switch to the railways in the Stockholm area.



Inga-Britt Volosin, supervisor for operators in SJ, is happy about the new switching, which has more incoming lines than the previous one.

panels, and 80 long lines as well as some 50 selector leads. This switch went into use up to 1969, when it was then replaced with a code selector switch AKD791. Its capacity of 3,000 lines had now become insufficient, so a change to an MD110 was therefore necessary.

#### Satisfied operators

Inga-Britt Volosin, supervisor for the 15 operators, is delighted with the new switch:

"We are very happy with our new switch and will certainly con-

tinue to be so in the future," she says. "We were happy too with the earlier ones, but they became a little burdensome in the last years. The current system has quite another speed and moreover it is a joy to work with the new technology. We have also got a much higher capacity with more incoming lines than before, an advantage not least for those who are calling us. In future, there will be no risk that you would get a busy signal at the switchboard.

Text: Kåbe Lidén

Photo: Karl-Evert Eklund

# Broad modernization of railway telenetwork

No fewer than about 400 persons are working with planning, installation and service of the telesystem that is needed to give Swedish Railways, SJ, its full potential for competition.

SJ's telenetwork — together with that of defence the only existing one alongside Televerket's — is currently undergoing broad modernization and renewal. The annual investment is about 70 million kronor.

The railroad tele functions involve traditional as well as low current equipment which does not have an immediate link with traffic safety. Above all, there is wire- and radio-linked telephony, data communication, even installation for loudspeakers, train monitoring, remote steering of locomotives as well as data systems for information about train positions.

The basis for SJ's telesystem comes from a transmission network that spans a total of 10,700 kilometers of tracks with forking at the larger junctions (2,400 kilometers). Apart from the physical connections, since a long time ago, the network has also included 12- and 120-channel carrier frequency

systems. At the end of 1986, the switch was made from analog to digital transmission and presently, for the main part, opto cables and pulse code modulated systems of 2, 8, 34 and 140 Mbit/s are being installed.

Even radio links are included in the transmission network, which is commonly used to meet most of SJ's needs:

A staggered telephone network is envisaged for the communications that will be required for directing essential rail operations. The network must be accessible to a large number of places along the tracks. In line with the expansion of the opto cable network, the stage connections are replaced with ordinary switch junctions.

A remote telephone network, which links all the major places and to which SJ's collective services staff has access, has 36,000 subscribers. This consists of nine junction station switches and 65 terminal station switches. In addition, the network has 100 smaller subscriber switches of different connecting types. The older types of switches will be rapidly replaced with digital switches.

The data communications network will become even more important. Depending on the expansion of data supported routines for heavy operative systems in rail operations — not

least in the field of goods transport — the need for data communications will increase tremendously. The bulk of data traffic will be handled through the packet data network ERIPAX. The network involves nine junction points to which computers and terminals are linked. For the present, 6,000 out of a total of 7,500 terminals are linked to the ERIPAX network.

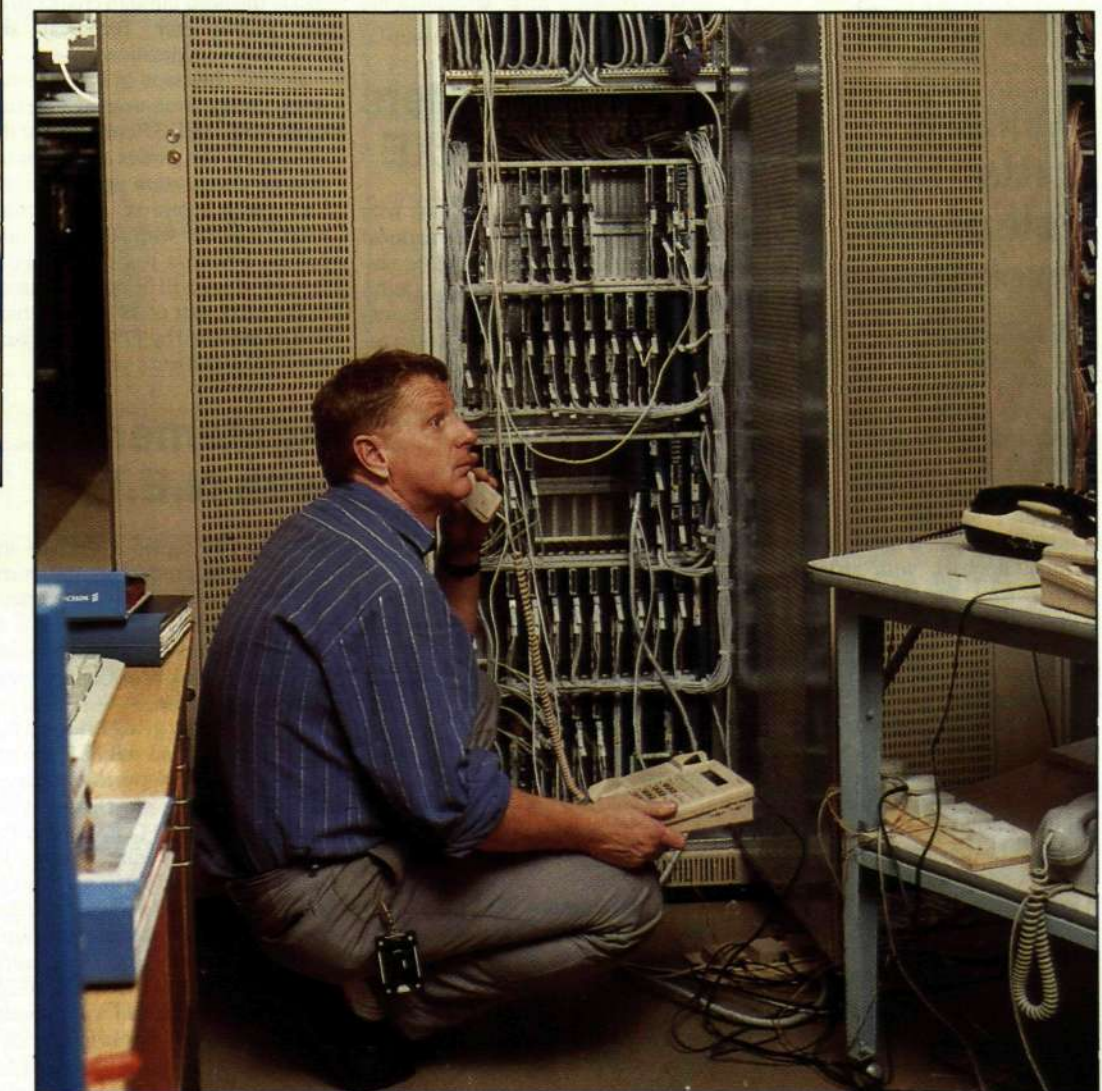
The connections that are used for the signals security system, the electrical train operations emergency stop, remote substation electrical operations, the reception of alarms from train monitoring detection systems are among other factors.

#### Mobile communications

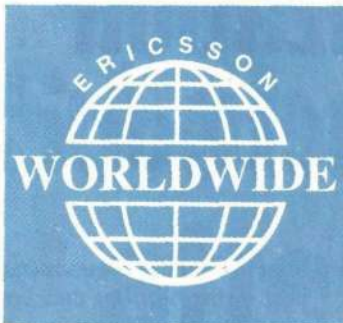
The immense need for mobile communications in railway operations has been the base for an ongoing expansion of radio connections. For train and track personnel, radio has partly replaced wire-bound communication, which in most instances is mainly retained in reserve. The radio network is nationwide and includes 2,000 fixed base and linkage stations spread over 800 locations. The base stations are connected to the main wire-bound transmission network.

Text: Kåbe Lidén

Photo: Karl-Evert Eklund



Rolf Fransson, of the Banverket, is one of SJ's roving tele technicians.



## Ericsson and Nobel set up new company

Ericsson and Nobel Industries intend to work together in the area of command and control systems. The Ericsson Radar Electronics Division Command and Control Systems will merge with Bofors Electronics AB with effect from January 1990 to form a joint company under the name Bofors Electronics AB. The new company will be 80 percent owned by AB Bofors and 20 percent by Ericsson. The merger will concentrate Swedish expertise and capacity in the Command and Control systems into the foreseeable future.

The new company will be responsible for the development, manufacture and marketing of advanced electronic systems for defense and civil applications. As such it will cover the same product areas as those at present served by Ericsson's Command and Control Systems Division and Bofors Electronics AB.

In a commentary on the merger, Ericsson's CEO, Björn Svedberg, says "Those projects which are of interest in the Command and Control systems area demand a major investment in engineering talent. A coordination of the expertise that is available in Sweden is thus a logical and natural step to take."

## Military order for telephone exchanges

Ericsson Radio Systems has received an order worth SEK 67 million from the Defence Material Administration of Sweden for AXT 121 telephone exchanges. AXT is the military version for AXE.

The exchange will be used in the Swedish military telecommunications network, a grid shaped national network with stringent requirements for connection speed, availability and reliability. The new exchanges will replace AKE exchanges delivered by Ericsson during the 1970's.

Ericsson has previously supplied AXT 121 exchanges to the military telecommunications network. The new order covers delivery of additional exchanges, and network modernization with a number of new operation and maintenance features.

Deliveries will start during the autumn of 1991.

The equipment will be manufactured at different Ericsson locations around Sweden, but primarily in Visby, Norrköping and Katrineholm.

## For SAS passengers and parliamentarians

Now business travelers with SAS in Scandinavia can rent a HotLine pocket phone for 90 SEK a day. The pocket phones will be available at all major airports in Sweden, Norway and Denmark.

Renting will be very simple and smooth for customers. Payment can be made with a credit card.

For SAS, it is an additional service that it can offer passengers. And for

Ericsson, it is an excellent way to market the pocket phone for an interesting customer group.

The Swedish parliament is also interested in the HotLine.

The fact that the parliament has chosen the HotLine model shows Ericsson as a victor for quality. Ericsson nationwide network of service stations was a major factor in the choice. (ERA Nyheter)

## TVAB sold to Forsheda

Ericsson and Forsheda have reached a preliminary agreement for the sale of Täckfors Verkstads AB (TVAB) to Forsheda.

TVAB is Scandinavia's leading manufacture of automotive cables and the world leader in auto seat heaters.

The final contract will be signed during January, 1990, following acceptance by the respective companies' Boards of Directors.

Additional information concerning conditions of the sale will be made available after agreement has been finalized.

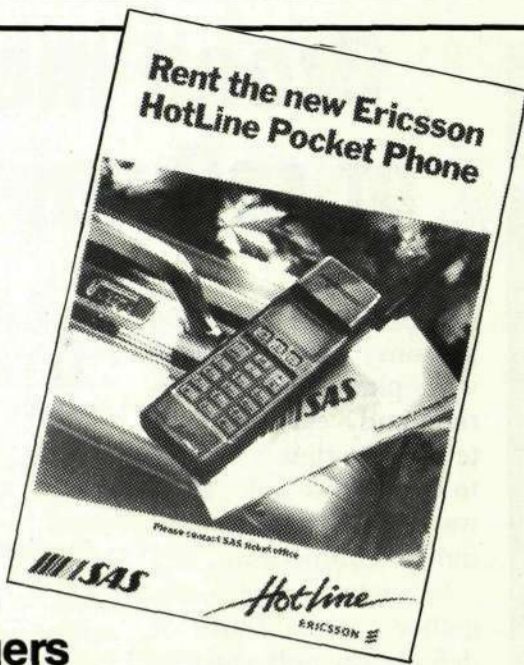
## Ericsson enters India with AXE

Ericsson has signed a contract with India to provide four international gateway AXE exchanges to the major Indian cities Bombay, Delhi, Madras and Calcutta. The exchanges will connect 6,500 international and national trunk circuits.

The contract, which was won by Ericsson in stiff international competition, represents a breakthrough for the AXE system in India, and takes the number of AXE countries to 77. The new exchanges will be delivered from Sweden and put into service during 1990-91.

Ericsson has been present in India for many years, and in the middle of the seventies, an electro-mechanical local exchange of 10,000 lines was cut into service in Delhi. This exchange has served as a good reference when choosing the AXE system.

With 800 million inhabitants, India is the largest democracy in the world. The purchasing power of 80 million of this people is the same as that of the average West European, or even higher. As many as 76 million of these 80 million people and 450,000 Indian villages have no telephones. India is planning to increase the number of telephone lines to 20 million by the end of the century.



Ericsson Business Communications AB in Stockholm, said that the combination of Ericsson's and N.E.T.'s systems and technology, together with Ericsson's worldwide presence, will serve national as well as multi-national companies and organizations with more effective and flexible solutions for business communications.

"Ericsson will, through the agreement, be one of the leading suppliers of complete single source solutions of business communications worldwide. It will strengthen our position and increase our market potentials," said Rolf Eriksson.

N.E.T., based in Redwood City, California, develops, manufactures, markets and supports advanced communications products and services that enable large, information-intensive organizations to build and manage wide-area networks. These networks interconnect computers and communications devices among geographically dispersed locations, enabling organizations to utilize their information systems to competitive and economic advantage.

## Contract with U S West

Ericsson has signed an agreement with U S West Communications to deliver AXE central office switches for the telecommunications company's modernization of its 14-state network over the next several years.

Ericsson has previously delivered several AXE switches to U S West in the state of Idaho and in Canon City, Colorado.

"This means that Ericsson will continue to be a supplier of switches to U S West," said Leif Källén, president and chief executive officer, Ericsson North America, Inc.

## Ericsson receives order from Algeria

Ericsson Telecom AB has received a SEK 230 million order for AXE equipment for local and operator-assisted teleservices from the Algerian Ministry of Post and Telecommunications. A large training program is also involved.

The order is also a part of the extension of the Algerian telecom network and the equipment — scheduled for production in Sweden — will be installed in 1990-1991. The project is financed through credits from the Agency for Technical and Economic Cooperation.

In 1987, Ericsson in stiff international competition won an Algerian order worth SEK 350 million. At the same time, the parties signed an industrial cooperation agreement for local manufacture of AXE equipment. Together with Algerian companies, Ericsson has established a factory which will be up and running in the early part of 1990 and which will be extended by 1994 to a capacity of 200,000 lines a year.

## Agreement with N.E.T.

Ericsson has signed a systems integration and product development agreement with Network Equipment Technologies, Inc. (N.E.T.). The agreement will enable Ericsson to expand its Business Communications' product line.

The agreement gives Ericsson the right to market and sell N.E.T.'s Integrated Digital Network Exchange (IDNX) family of transmission resource managers (TRMs) and integrated access multiplexers in Ericsson systems packages worldwide. IDNX-based networks will be part of turn-key communications solutions based on Ericsson's MD110 PBXs and ERIPAX X.25 data network. Ericsson will provide full service and support for the entire system.

Rolf Eriksson, Vice President,

## Norway extends mobile network

Ericsson is to supply exchanges for the Norwegian Telephone Administration's extension to its mobile telephone network. The contract — awarded to Ericsson in keen competition with Nokia, among others — has a potential value of over US\$ 39 million. It covers the period from 1990 to 1995, when the number of mobile subscribers in Norway is expected to increase from 250,000 to 450,000.

## Cellular contract with Kuwait

Mobile Telephone Systems Co. (K.S.C) in Kuwait has ordered an E-TACS mobile telephone system worth around US\$ 46 million.

The contract is a turnkey undertaking covering the supply of one AXE exchange and 86 radio base station cells. Initially serving 20,000 subscribers, K.S.C. plans to increase the capacity to 50,000 subscribers in the near future.

With this contract Ericsson strengthens its position as the leading cellular systems supplier in the Middle East. Ericsson systems are already in service in Saudi Arabia, Oman and the United Arab Emirates.



A happy Bengt Bolin, president of Ericsson Data Services, holds the 1989 Compass of the Year award for the most efficient computer installation. Here, he is flanked on the left by Blitz Konsult's Ulf Johansson and Thomas Blitz, president.

## 'Oscar' for Ericsson's 'HUGO'

Ericsson Data Services has been awarded the 1989 Compass of the Year. In keen competition with more than 80 Nordic companies Ericsson Data Services was chosen as having the years most efficient computer installation. With a more efficient ADB production, the company was able to save 75 million kronor a year. This is the second time Ericsson Data Services has won the award.

Blitz Konsult named the computer company with the best result. The Compass method is one way of analyzing ADB production. The analysis system was developed by Blitz Konsult. By gathering a number of questions and analyzing the answers, one arrives at the Compass number "HUGO," which

measures quality, resources use and performance in relation to cost. For Ericsson Data Services, the number has been halved during 1988-1989.

The jury made its choice on the fact that Ericsson Data Services was quickly able to adapt to meet both increased and reduced volumes and to combine consistent and high quality in delivered services without diminishing productivity.

The company has also automated operations so that personnel can bypass routine information, has acquired and used equipment in such an effective way as well as achieved remarkable production gains through the consolidation of equipment.

# 6,000 receive updated information via 'NYTT'

Each day 6,000 Ericsson employees log on to the NYTT system. This is an information system which provides everyone with access to a terminal with rapid and updated information, press releases, job openings etc.

The system does not need user identity. Write an "N", press "Enter" and you have access to information.

NYTT is a complement to other information in Ericsson.

"Everyone should have the possibility of reading about what happens in Ericsson as soon as it happens, and also where one is in the company. This possibility is now to be found in NYTT," says Ken Ryan, who developed the system.

It began as a "garage project" but it has now become a system that is sought more and more by users. The number of log-ons are increasing all the time.

NYTT is an attempt to use available program wares, terminal networks and terminals to distribute, in a cost effective way, general and specific information to all within Ericsson. Users pay no charges, all of which is borne by Corporate Information.

## Current Information

It is possible to update small amounts of information several times per day. The system is designed in a hierarchic way so that the reader can choose his area of interest. Information is dated but in many cases it remains long enough for employees who



Ken Ryan from Ericsson Data Services is the one who developed the NYTT system and who also updates the information daily. Above, left, he chats with a few young engineers who are learning more about NYTT.

have been away for a while to catch up with events.

NYTT includes information on Ericsson's share prices on the Stockholm Stock Exchange, press releases in English and Swedish, job openings, training, information from the business areas and a notice board with general information. NYTT also offers technical information, for example new patents etc.

As soon as information is available it is put into the system and updated on the main menu. The reader can immediately see on logging on that there is new information and can obtain it readily if he/she wants to read it.

NYTT is user friendly and if you are familiar with Memo it is easy operating the NYTT system which is

based along the same lines. It is the same PF tangents that are used so the training process is an easy one.

## Development

There are broad development possibilities with the system.

"We have started HELP, an entirely new system which uses the same basic programming wares," Ken Ryan explains. The system is linked to Customers Service Center at Ericsson Data Services.

"Today, there is no really good possibility of printing out information from NYTT or HELP. But with the help of a new module, we hope to do so in the future," says Ken Ryan.

Kristina Hägg  
Photo: Bo Binette

## OUTLOOK

BY MATS HALLVARSSON

The world's largest telecommunications supplier, Americas AT&T, will eventually see 1989 as a turning point. Stock prices and profits are rising again, bloodbaths in losing operations are shrinking and overseas investments are beginning to show results.

The year 1983 was a traumatic one for the giant AT&T, which today has a turnover of close to USD34 billion, about 200 billion SEK. That was when the company lost its monopoly position on the American telecommunications market. It retained development, manufacture and sale of telecommunications equipment, as well as the operations of long-distance traffic in competition with, above all, two other American companies, MCI and GTE Sprint.

Bureaucratic, unaccustomed to competition and totally domestic market oriented, AT&T began a difficult transition process. The market share for long-distance traffic fell to about 68 percent in the year. Overseas expansion saw five years of minor results.

But now things are beginning to turn around. In one year, the share price has risen from \$27 to \$40. Behind this rise there is still no spectacular profit increase. AT&T's profit has been hard to pin down in the last few years, because of large writeoffs here and there in loss-making operations and the changing value of inventory and network equipment. But things are going significantly better, as is clear from the increase in operating margins, that is the gross profit in relation to turnover, which grew from 10 percent in 1988 to close to 14 percent in the third quarter of 1989.

Behind these figures lie a number of successes on many fronts. The organization has trimmed back heavily on two different occasions, which resulted in a drastic reduction of 75,000 employees. Responsibilities have now been delegated to 19 different smaller business units, which, with considerable independence, have developed into market-oriented and aggressive companies.

Above all, the new president, Robert E. Allen, has succeeded in cutting back losses in a number of operations. Allen took over when his predecessor, James E. Olsson, died suddenly in April 1988.

Among the operations, for example, was the computer division which today has a turnover of over \$2 billion. This had ended up with losses of about \$200 million in the last two or three years, according to outside sources. The losses are down to \$50 million in 1989, with good prospects for a loss-free 1990.

What this means for Ericsson — as a competitor — such equipment operations in AT&T, is that the American market has become tougher since European and Japanese competitors came into the picture about five years ago. The expected huge wave of orders has dwindled for the future and the price competition has intensified.

In the very hard market for private switches, AT&T had to fight to keep its 30-percent share.

But in 1989, losses were reduced significantly thanks to rationalization and reorganization. In transmission operations, the situation

was also tough, with a reduction in personnel of some 20,000 and a huge diversification of activities.

To a large extent, AT&T has succeeded in retaining its market position over the last few years in the American public switching market, but again at the cost of tough pricing competition. Even here, rationalizations met with a downturn in margins.

AT&T had hoped that overseas investments in the international switching market would provide significantly better results than what it has had so far. One objective was that of the total investments 20 percent should come from overseas operations, compared with 10 percent today.

This led in 1986 to a cooperation agreement with Dutch Philips, a joint venture known as Network Systems International.

Sales in 1988 amounted to \$600 million, with equipment going mainly to the Dutch and Belgian markets.

But the major breakthroughs were yet to come. In France, AT&T and a number of other international suppliers of telecommunications equipment were beaten out by Ericsson.

In 1989, however, there was a breakthrough. In February, AT&T was chosen as a partner by Italtel, the Italian tele supplier which was given the main responsibility for the extensive modernization program of the Italian telecommunications network.

With this, AT&T got a solid European foothold. Besides hopes for billions of dollars from the Italian modernization program, worth upwards of 140 billion kronor over 1989-1992, it also provided AT&T with a base for continued expansion, for example, in the European Economic Community.

This may not be exactly good news for Ericsson and its European competitors. But there is a great deal of logic in this development. The same way 1989 became an international breakthrough year for AT&T, so too it was a breakthrough year for Ericsson in the American market, thanks to the newly publicized contract as main supplier to one of the largest American operating companies.

With that, the stage was set for the globalization of the switch market, which so many spoke about during the eighties. The large tele suppliers will be increasingly selling in their competitors' respective home markets or traditional major markets.

For AT&T, this is a last-minute comeback. In telephony's early years, AT&T dominated a large part of the world's telecommunications market. With control over companies in many parts of the globe, among them Nippon Electronic Company (now known as NEC) in Japan and Standard Telephone and Cable in England. Now, we are back in the international game again.

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## SHARE TRADING

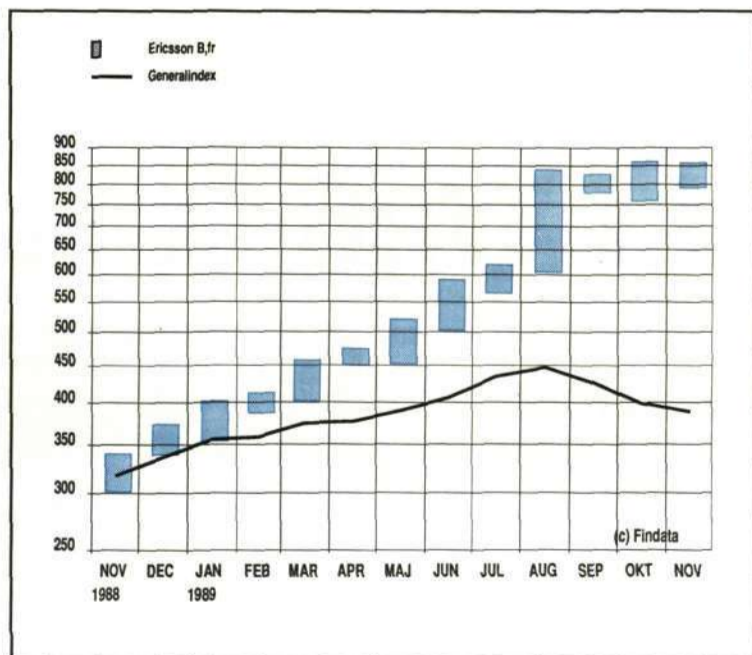
Ericsson's shares are showing good resistance in a down market. During November, which turned out to be one of the lowest performing periods in a long time for the Stockholm Stock Exchange, Ericsson's B-free shares did not slide more than 3 percent, while the total market decline was 10 percent.

In the main, strangely enough, the market downturn was the result of a positive quarterly report for the nine-month period a month ago. Among other factors, the report boosted the earnings forecast for 1989.

But expectations for Ericsson have been driven up considerably and additional surprises, positive though they may be, often cause the market to react with a little "disappointment downward."

During the first week of December, however, Ericsson shares were able to recoup their November losses.

Hopes for a continued good earnings increase this year are still buoyant. Despite the steep share trend in 1989 of almost 120 percent, most investment bankers and analysts recommend buying Ericsson shares. With the earnings forecast for 1990 and envisaged higher dividends, the shares do not appear to be facing any major challenge.



## ERICSSON'S SHARES

	Mutual Fund		Share Savings Fund	
	Share Price (SEK)	Assets (MSEK)	Share Price (SEK)	Assets (MSEK)
31 Dec. 1987	70	27,1	147	31,7
31 Dec. 1988	135	52,2	343	56,0
31 Oct. 1989	286	93,3	758	76,7
30 Nov. 1989	290	92,4	774	75,9

After the latest month's gains, the share prices up to now have risen 215 percent in the mutual fund and 220

percent in the share savings fund. The valuation for November is based on a share value of 287 kronor.



*The scene was overwhelming when crowds from East and West gathered at the Berlin Wall. The wall's opening was the signal for political mass upheaval in East Germany, releasing the suppressed needs and expectations that streamed forth in torrents. Among other things, East Berlin's old international telephone station was totally inundated. Rapid and unexpected help came from Budapest, which earlier had obtained a new international AXE station from Ericsson.*

## Unexpected role for AXE as Berlin Wall falls

Ericsson's first AXE station in East Europe was introduced in Budapest on March 7, 1989. It was intended, among other things, to serve as a bridgehead to the previously almost closed market in the East. After the fall of the Berlin Wall, it also acquired an important and unexpected role in meeting the exploding communication needs of East Berlin.

A few months ago, it seemed totally unlikely. But a few dramatic weeks later, the seemingly impenetrable Berlin Wall came tumbling down with immense jubilation and heightened expectations for radical change and new living standards.

Overnight, the collapse of the wall has created needs that call for rapid investment. Here, in a rather remarkable way and without any direct intervention on its part, Ericsson has played a major role in meeting the increased telecommunications traffic from and to East Berlin.

When the wall fell, it was not only the hole in the wall and the streets between East and West Berlin that were overwhelmed. People on both sides of Berlin also began to call each other, in

a stream of traffic that was completely unthinkable before the collapse of the wall.

From other areas, too, mainly from West Germany, there were many calls that had to be processed through the old international station in East Berlin. It was an impossible situation for an aging and underdeveloped switching system.

### Solution in Budapest

The solution to the problem was found in Hungary's capital, Budapest. In March last year, Hungary became the first country in East Europe to obtain an AXE station from Ericsson.

Delegations from the other East European countries came to look at the new AXE station with its 7000

lines for international traffic in the old housing at Mihaly Horvath Square. But the old station hardly aroused much interest. It is not easy to attract a buyer for a still functioning but nevertheless old international station.

But Ericsson's AXE delivery to Budapest proved to be the timely solution for East Berlin's rapid need for increased capacity in its international telecommunications traffic. Had Budapest not obtained a new station, there would not have been an old but still functioning one that lay idle and that could be put into service so quickly. Already on November 20, a delegation from East Germany arrived to look at the old and now disconnected international station in another part of the building at Mihaly Horvath Square.

### Bought directly

The East Germans decided to buy it straight away and dismantling of the old station began a few days later. In a few weeks, they hoped to have the old station hooked up and operating in East Berlin.

**Bengt Plomgren**



*Budapest's old international telephone station does not appear like much to the world, especially in a partly dismantled state at the end of November. But the old station, which became "free" through Ericsson's AXE, proved to be the solution for East Berlin's exploding communication needs.*

PHOTO: PRESSENS BILD AND BENGT PLOMGREN