


Contact

M A N A G E M E N T

ERICSSON 

INFORMATION FOR ERICSSON MANAGERS WORLDWIDE

NO 1 1989



Fang Ping Wen, deputy head of Factory 738 in Beijing, shows Ericsson's path to the future in China.

Ericsson on the right road in the Middle Kingdom

The pace of Ericsson's business in China is picking up. It is already the largest supplier of public telecommunications equipment.

In one of the Chinese capital's northeastern suburbs is located Factory 738 — the Beijing Wire Communications Plant, which is a key partner for Ericsson in the Middle Kingdom.

The factory, under license, will manufacture the MD110 private communication system, with an annual output of some 10,000 extensions.

Fang Ping Wen is the deputy head of Factory 738.

"Ericsson was off to a flying start in its local manufacturing," says Fang, who sees Factory 738 as the

perfect manufacturing partner for Ericsson.

Claes Thorson has visited Factory 738 and here he reports on the increasing activities in China. He also interviewed P.O. Björk, who coordinates Ericsson operations in China.

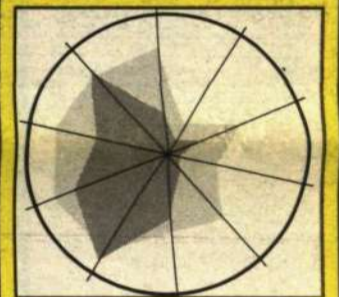
Continued on centerfold



Gustafsson appointed head of ESA

Bengt Gustafsson has been named to head the newly formed Ericsson Sverige AB. He says Ericsson will be the leading supplier of business communications equipment in the Swedish market.

Page 2



Can one believe in OPUS?

Are Cables employees in Latin America more productive than their colleagues in Sweden? According to OPUS research, they are. But can one believe in OPUS. And what makes the difference?

Page 8



Meeting in Mexico

A Cables meeting in Mexico highlights the difference between operations in Latin America and Sweden.

Page 8

Better by 1 Billion • Page 3



We can all be glad that 1988 has been a strong and successful year for Ericsson. The preliminary annual results we have recently presented shows that the positive trend that was established in the preceding year will continue. We are now on the road to stable profitability. As such, we are also better equipped to face the future.

That we have managed so well is the result of impressive contributions from every member of the company's staff. We have achieved goal-oriented productivity in our key area, with telecommunications at its core. This is equally true of products and systems as of marketing. This situation implies changes for many employees and we should, even in the future, reckon with considerable changes in what has come to be our dynamic markets. To cope with these, we should not miss the opportunities. And we certainly do not intend to do so in the future.

The fact that we have placed so much emphasis on the key activities of the business may not have been so apparent earlier. But now, the results are manifest in the current year's figures.

Orders for our systems and products have increased, and we are in a good starting position for 1989.

With the same goals in mind, we shall now strive toward an even better performance in 1989 in order to achieve the supremacy that the long-term demands of growing competition place upon us. I am convinced that we shall achieve this objective after having seen the collective result of our input.

Thank you, one and all, for a fine job.

Björn Svedberg



On January 1, Ericsson Sverige AB (ESA) took shape when the Swedish division within Ericsson Network Engineering AB switched over to a separate entity. At the same time, Eripax sales came under Ericsson Business Communications AB. On April 1, operations within the current Ericsson Radio Systems Sverige AB were merged with Ericsson Sverige AB.

The aim of ESA is to strengthen even further the position of business communications on the Swedish market. Operations will involve

some 1,400 employees, in about 50 locations throughout Sweden. These include subsidiaries, service and installation units that will come under the aegis of four regional offices. With an annual turnover of SEK 1.2 billion, ESA will be Sweden's largest supplier of business communications.

ESA represents Ericsson's activities within the areas of teledata and mobile communications. The areas that are not included are heavy cables, defense electronics, street

and railroad signals as well as public telecommunications.

This means that ESA will be responsible for sales of switchboards, personal paging, rapid communications systems, local area networks (LAN), cable systems, modem, multiplexes and radio links as well as products and systems for mobile communications.

The market for ESA centers on complete package solutions with projects, installation and service. Company headquarters are located in Sievert House, in Sundbyberg.

ESA's Director:

'We will be the leading suppliers'

Ericsson will be the leading supplier in business communications on the Swedish market, says Bengt Gustafsson, head of the newly formed company Ericsson Sverige AB (ESA).

"Ericsson has unique opportunities to supply a full-service line of products to our customers in the Swedish market," says Bengt, who feels that customers already see Ericsson as a collective entity today.

"Eventually, it is up to us to set a functioning market approach now. We intend to avoid any upheavals on our part that would make matters more complicated than is necessary for our customers."

At the same time, Bengt foresees a period of change in the market, a time for more flexibility from each and every one.

Enthusiasm and energy

Despite the changes, we should not lose our place. Customers should note the positive effects of our restructuring. We ourselves will emerge from the process with in-

creased satisfaction in this new setup.

Bengt is well versed in getting new projects off the ground.

"A difficult assignment is a fun assignment," he notes, adding that in such a situation he exudes energy and enthusiasm.

His new colleagues can expect an interesting and stimulating exchange of ideas from Bengt. He is very communicative, an ardent listener and fast with intake and decision making.

"Some may think I am a little too direct; but I am not one to dally around or to stew in resentment," the head of the new Ericsson Sverige AB says.

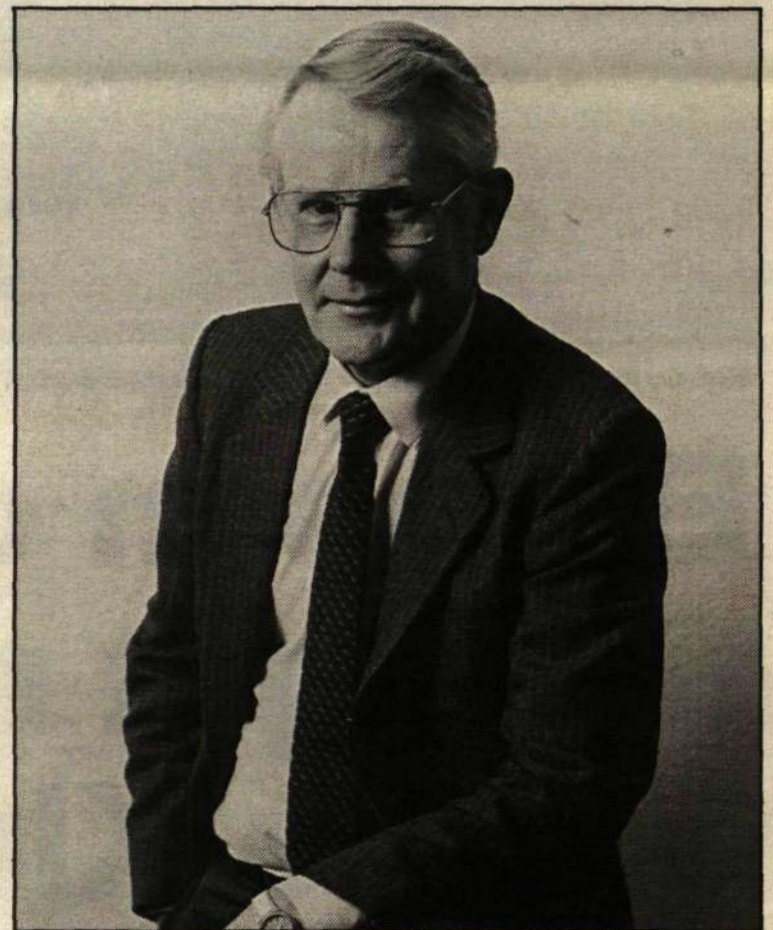
Responsibilities

Exactly how Bengt plans to go about developing ESA, he would prefer not to go into details just now.

"I will do that with my colleagues personally. It would afford us invaluable opportunities to learn from each other," he says.

Representing Ericsson here at home is an extra challenge for Ericsson Sverige, says Bengt.

"We have many knowing and interested eyes on us. Not least of our responsibilities would be to



Bengt Gustafsson has been named to head Ericsson Sverige AB.

try and satisfy the needs of other Ericsson units."

Bengt has a long and varied career within companies that have eventually become part of the Ericsson world.

In 1963, he began with Standard Radio and Telephone (SRT), which later became STANSAAB and then DATASAAB. When Ericsson bought DATASAAB at the beginning of the eighties, Bengt was division leader for Interactive Data Systems (IDS). IDS was then integrated into Ericsson Radio Systems AB.

During 1981-1984, he was chief

engineer in the Ericsson parent company, where he built up an installation department to deal with turnkey contracts for, among others Libya, Iraq and Saudi Arabia.

In 1984, Ericsson Signal Systems AB was set up, and Bengt was named director. Under his directorship, ENR has steadily increased its turnover and profits. Operations today are in the region of 600 million kronor and have about 1,000 employees, covering companies in Sweden, Denmark, Finland, Spain, Italy and Australia.

Earnings Report

Strong increase in income and profit per share

Ericsson's order bookings in 1988 amounted to SEK 35,600 million, an increase of 7 percent over orders booked in 1987 (SEK 33,405 million), according to preliminary figures on 1988 operations.

Net sales decreased 3 percent, to SEK 31,300 million, compared with SEK 32,400 million a year ago. These results represent a marked increase in both order bookings and sales for comparable units, since substantial divestitures were made during the year. Income before appropriations and taxes in 1988 is estimated at SEK 1,840 million (1987: SEK 1,108 million) including capital gains of SEK 0. (1987: SEK 337 million.) This represents an improvement in earnings of slightly more than one billion Swedish kronor, excluding capital gains.

Net profit per share after taxes amounted to SEK 27, equal to SEK 24 after full conversion of debentures outstanding in 1988, compared with SEK 18 per share, after full conversion in 1987.

Earnings continued to improve during the fourth quarter. Income for the period includes compensation from the Swedish employer organizations of SEK 192 million, related to the strike of white-collar employees in Sweden in early 1988. All Business Areas reported higher earnings than in 1987 except Defense Systems, which incurred a loss. Net financial expenses decreased sharply.

A continued increase in earnings and profitability is expected in 1989.

The Board of Directors intends to propose that the Annual General Meeting approve a dividend of SEK 10.50 per share for 1988, an increase of SEK 1.50 over the 1987 dividend.

Ericsson's President and Chief Executive Officer, Björn Svedberg, said: "It is highly gratifying to note that concentrating our strength in our main business areas is now yielding a stable increase in earnings and profitability."

"In a highly competitive industry that is subject to continuous, major changes, we have succeeded in further strengthening our position. We will continue to work purposefully over the long term, with restructuring measures the rule and not the exception, in pace with the changes in today's dynamic world of telecommunications."

"Ericsson has the prerequisites to remain a strong and independent international telecommunications company."

Audited figures on 1988 operations will be released March 16. The Annual General Meeting will be held May 16.

Australian PTT places major order for AXE

Ericsson has won three orders worth a total of AUD 55 million (USD 48.4 million) from Telecom Australia. One of the contracts was a bonus order received for on-time delivery earlier this year of AXE equipment. The bonus order (AUD 11.7 million, USD 10.3 million) covers AXE digital equipment mainly for Remote Subscriber Equipment (RSE), in all states.

The second group of orders valued at AUD 17.6 million (USD 15.5 million) covers AXE exchange equipment and technical development and support as well as rural exchange equipment.

The third order, a group of contracts worth a total of AUD 24.8

million (USD 21.8 million), is for delivery of radio base station equipment and AXE mobile switch equipment to be used in the AXE-based Australian cellular mobile telephone network now serving 55,000 subscribers.

In July 1988, the number of AXE lines in service in the Australian public switched telephone network (PSTN) passed the one million mark. The installation of AXE lines in Australia has increased dramatically during the last two years. All together, there are more than seven million telephone lines in the Australian public network.

The first AXE exchange, Endeavour Hills in the state of Victoria, was cut over in late 1981. In 1983, there were 56,000 lines in service and during the subsequent years, 1984-86, respectively 130,000, 250,000, and 450,000 AXE lines were installed.

Today, the Australian public

telephone network comprises 193 AXE exchanges, 26 of them Rural exchanges, and 436 remote subscriber sites.

Telecommunications is an important component of the Australian economy, which has enjoyed a sustained growth. The number of main lines increased by 75 percent over the past decade, while the number of calls nearly doubled.

Two features have characterised the expansion of the Australian public telecommunications network over the last decade:

- A rapid increase in the share of households connected to the telephone network
- The growing importance in the Australian economy of service industries, which are the most intensive users of telecommunications.

Ericsson Australia manufactures the radio base station equipment in its plant in Melbourne.

Restructuring among the telecommunications companies continues at a hectic pace. Just now, Ericsson's competitors in Britain, Plessey and GEC, are involved in a mutual battle that can have lasting significance for strengthening relationships in the telecommunications field.

Structure Fever Around the World

While Ericsson in the last few years has been able to rejoice over increases in its order books and higher profits, reports have been coming in about structure fever among other telecommunications companies around the world.

The largest manifestation of this is the British electric concern GEC's bid, together with Siemens of West Germany, for the British concern Plessey, which has operations in telecommunications, defense electronics and microelectronics.

The noteworthy aspect of all this is that GEC and Plessey are close partners in GPT, a telecommunications venture, which develops and sells the British System X, the counterpart of Ericsson's AXE system.

System X has close to 80 percent share of the British market for public telephone stations; Ericsson has the remainder.

Siemens and GEC are now thinking of sharing ownership of GPT, if they are lucky enough to buy Plessey, so that GEC will own 60 percent and Siemens the remaining 40 percent. The GPT bit has been valued by analysts at about 1.2 million pounds, with a sale price of about the same amount. In the deal, Siemens would gain a toehold in the British market, but in exchange will have to help with technology and marketing overseas.

Since the beginning of January, the battle has been heating up: a newly formed group, with, among others, Plessey, tried to make an offer for GEC. For a few hectic days, some of the world's leading telecommunications executives flew to London to see if the offer was worth it. Among them were the chief executive officers of AT&T and Northern Telecom. But they bowed out. Now a counteroffer has sprung up for GEC, and Siemens is intensifying its efforts to take over Plessey.

Another indication of the strong undercurrents in the field just now is the Siemens takeover of manufacture and product development of computer giant IBM's office switching producer Rolm. IBM bought the company four years ago for \$1.5 billion in an attempt to break into the telecommunications market.

But Rolm has been running up huge losses most of the time. This can surely be seen as proof that integration between

telecommunications and data has been up to now a major business flop for the traditional specialist giants in their respective fields.

This is also true of the world's largest telecommunications concern, the American AT&T, whose newly appointed chief executive officer, Robert E. Allan, in the beginning of December, could only say that "we are on the right road to making a profit in our data operations."

AT&T will also show a loss for the first time in its 103-year history. This is not the result of bad management, but stems rather from the fact that technical development has gone so fast that equipment in long-distance networks (AT&T is also a "telenetwork") has become economically pensionable. Hence, \$6.7 billion was written off against profits, making for a hefty year's loss.

The other North American telephone giant, Northern Telecom, was forced to make a similar bookkeeping transaction. Northern has shown similar results for 1988 and is now setting aside \$200 million for a major company restructuring that will "affect" some 2,500 employees.

Northern Telecom can be glad, then, that the digital switching in its DMS 100/200 system, made a breakthrough in Hungary at the end of November. There are two Australian companies that will deliver to Hungary for between \$81 million \$162 million. Ericsson was, however, ahead with its international switching in September for about 50 million kronor.

Europe's No.1, the French-dominated Alcatel, has not been able to avoid the problems of restructuring either. Two years ago, when Alcatel merged with Standard Elektrik Lorenz (then owned by ITT), it inherited a loss-bearing data and office communications division.

That accounted for 23 percent of SEL's turnover, with its 5,400 employees. Now, a clean sweep is going to be made. According to sources, thousands of employees may be laid off so that losses, which are now estimated in the hundreds of millions of Deutsche marks, can be absorbed.

Turbulence in the telecommunications sector continues, alas, and it will surely continue to do so for many years still.

And now, Ericsson Advances in CHINA

China is one of the world's largest markets — from the points of both area and population. And for Ericsson, China is now a priority market that has to be "conquered." ...Telecommunications is clearly a key ingredient in the development of "The Middle Kingdom."

The Chinese government has newly put the brake on several areas of development to regain control of a "runaway" economy. But as far as telecommunications are concerned, allocations and expansion will continue at a brisk pace.

Many international telecommunications companies want a share in building up the Chinese infrastructure. Up to now, Ericsson has always been a lucky contributor. After having installed the first telephone system around the turn of the century, Ericsson, today, is the largest supplier of public systems for China. Moreover, recently a licensing agreement was signed for local manufacture of Ericsson's MD110 private communications system. In 1988, Ericsson also received a contract for a mobile telephone system in one of the world's largest cities, Shanghai — and that is to be paid with credit from Japan!

During 1987-1991, Ericsson is planning a turnover of some 500 million kronor annually in the Chinese market. In 1988, a fantastically successful year for business, orders amounted to some 700 million kronor. And it looks equally promising for 1989. Our correspondent, Claes Thorson, reports from China.

In one of the Chinese capital's northeast suburbs is located Factory 738 — the Beijing Wire Communications Plant, which is destined to become a major joint partner for Ericsson in China. Factory 738 will be manufacturing Ericsson's MD110 private communications system under license. It will be producing a switching system with some 10,000 hookups annually.

"Factory 738 is the perfect joint partner for Ericsson," says Fang Ping Wen, deputy director of the plant. "We are already familiar with telecommunications. Ericsson already has a headstart with local manufacture," he continues.

The red tile buildings that make up Factory 738 are situated in Beijing's Chaoyang district. The Beijing Wire Communications Plant — the commercial name for Factory 738 — was built in the early fifties and has been manufacturing telephone switches for almost thirty years. Company officials say that about 40 percent of the telephone switches operating in China were manufactured at Factory 738. Today, when the plant is selling digital switches, it is but a reflection of its high ambitions.

"Our goal is to help customers to learn to handle the equipment, to repair it and to carry out service and overhaul," says Fang Ping Wen. "In order to achieve that, we have an education department where customers can be trained at no extra cost."



P.O. Björk is the regional coordinator for Ericsson in China. In recent years, he and his co-workers have reaped huge successes for the business areas that are active in the Middle Kingdom.



Components shortage

Factory 738 is also one of China's major data manufacturers. The big PC best seller, "The Great Wall," originates from the Beijing Wire Communications Plant, which also works with Digital's VAX data equipment. One of the plant's major problems is an acute shortage of components.

"Our production of personal computers is still so limited as a result of a lack of components," says Fang Ping Wen. "We simply do not have the right channels for assuring us of the right components of good quality and in the desired volumes. In this respect, we are still somewhat weak on the management side. China has been closed to world innovations for such a long time."

The Beijing Wire Communications Plant has some 5,000 employees. In the research and development department, 150 persons work with switching and 140 with data development.

A very effective way of raising the level of technical developments in China is the import of foreign technology. Factory 738 has been an avid participant in this area, most recently with its agreement for local manufacture under license of Ericsson's MD110 communications system.

Local manufacture

"The Chinese want to have local manufacture; that, the government has made quite clear," says P.O. Björk, regional coordinator for Ericsson in China. "It is only natural that the Chinese should insist on manufacturing in China, considering the huge need for communications in the country."

The latest economic reforms in China have led to more independence in decision-making for local factories. Previously, the government made all the major decisions concerning, among others, financing, raw materials apportioning, investments and wages. Now, companies have become more result oriented and have more autonomy in striving to meet economic goals.



The Chinese are obviously pleased with their cooperation with Ericsson. Hence, it is not without reason that the Ericsson flag is placed between the Swedish and Chinese flags. On the sofa, with the telephone in his hand, is deputy director of factory 738, Fang Ping Wen, right, and the assistant technical chief, Zhao Ri Xin.

"Now, we go to the bank ourselves and apply for loans. Moreover, we decide for ourselves, at the factory level, what our investment needs are. When it comes to wages, the government determines the total extent of bonus packages, but we decide ourselves how it should be distributed among the different employees at the plant," says Fang Ping Wen, adding that "indeed, Factory 738 is profitable today."

Why Ericsson?

Why have the Chinese turned to Ericsson when it comes to the question of joint manufacture of switching? Many of those with whom we spoke at Factory 738 pointed out that Ericsson's long history of manufacturing telecommunications equipment guaranteed quality and long-term cooperation.

Our Chinese hosts also emphasized, with an intensity that should put Björn Svedberg in top humor, that Ericsson is one of the world's leading telecommunications companies.

"For us it is important to verify that production techniques on the MD110 have already been tested in a number of countries

around the world. The MD110, as a network system for voice and data, meets the demands of Chinese customers. In suma, we feel that Ericsson, from a technology point of view, is well ahead of its competitors here in China," says Fang Ping Wen.

He also emphasizes that Ericsson management should be aware that Factory 738 for its part wants real local manufacture as soon as possible, not merely to be an assembly point for half-manufactured equipment.

Key advantage

On the Chinese side, one can't help noting that the top international telecommunications concerns with local manufacture in China (among others, Philips, Siemens, Harris, Plessey) have chosen to work with companies that have not really been in the telecommunications field.

"This gives Ericsson a key advantage. We do not need to go through the difficult process of gearing our production to telecom — we are already there," says Zhao Ri Xin, assistant technical chief at Factory 738.

Claes Thorson



"Welcome to your workplace. Take it easy on the way home." In front of the billboard with this friendly greeting stands deputy director Fang Ping Wen. To his left is the assistant technical chief of Factory 738, Zhao Ri Xin.



Cycles, in all their forms, are still a very popular means of transport in China.

Ericsson largest in China in telecommunications

Ericsson is at a high point now in its business dealings with China, according to P.O. Björk, regional coordinator for operations. He notes that, in the public sector, Ericsson is now the largest supplier of telecommunications equipment. "In any event, that is the opinion of the responsible ministry," Björk affirms.

Ericsson is working with China through four different business units. In the public sector, it is dealing with AXE, transmission equipment, installation and cable to a certain extent. Private communications systems, particularly the MD110, are sold to a large extent directly to organizations and companies. Ericsson has just now signed an agreement for local manufacture under license of the MD110. In radio communications, Ericsson has two units in the Chinese market: mobile radio and mobile telephones. Mobile radio is a network linked to emergencies, police, taxis and certain service companies. The mobile telephone system is a public network.

"We have had considerable success in recent years with all four business units," notes Björk.

The public sector — which is Ericsson's largest area of activity in China — has grown rapidly over the past few years. In the public sector, it has been acknowledged — and the relevant ministry has concurred — that Ericsson is now the largest supplier of telecommunications equipment to China.

In Guangdong province in the south, Ericsson undertook a major agreement in principle in 1988 in the public sector. Under the agreement, 210,000 lines were to be delivered within a three-year period. Already, negotiations are under way for an additional 100,000 to 150,000 lines for Guangdong, which borders with Hongkong and which is the most expansive province in all of China. A large number of companies from Hongkong have moved their factories to Guangdong.

In the heavily industrialized Liaoning province in the northeast, Ericsson has signed an agreement in the public sector for the installation of 200,000 AXE lines. In an earlier project, 80,000 lines were already installed in Liaoning.

In Jiangsu province, which is known as "China's Småland," with a large number of small industries, an accord was concluded in June last year on a public network that would

connect 26 "small towns," each with 100,000 inhabitants. Jiangsu province lies in the "hot" area along the coast north of Shanghai.

First in China

In Sichuan province — in the interior of the country — an accord is in the process for a public network in what is actually considered the world's most densely populated city, Chongqing. In addition, the capital of Beijing and Shanghai have purchased AXE systems. Beijing was the first city in China to buy the AXE system, in 1984.

In Guangdong, last spring, Ericsson signed a huge agreement on a mobile telephone system covering the Pearl River Delta. Following that, contracts for Ericsson's mobile telephones were signed for Shenzhen, Zhuhai, Macao and, most recently, for Shanghai.

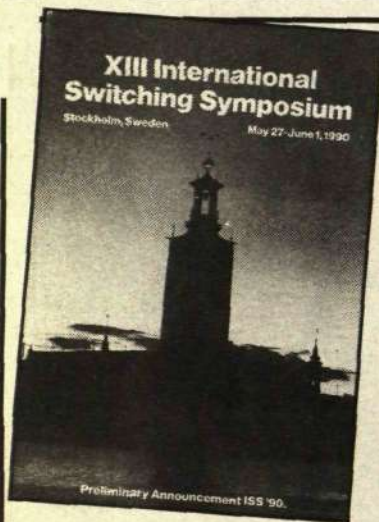
"We have also had a contract for Hongkong's mobile telephone system. This means that the Ericsson mobile telephone system is now complete for southeast China with roaming facilities. This means that a subscriber can move around in Hongkong, Guangdong and Macao, using the same telephone, very much like the way the Nordic mobile telenet functions. This is extremely important for us. And for the telephone oriented companies, it offers immense possibilities for expansion," says Björk.

Costly Cable Network

The mobile telephone system provides a solution to a serious problem in China. In such a large country, with such a low telephone density, it is very costly to build up a telecommunications network with cable. A network built around radio base stations is a more economical feasibility.

"Mobile telephones will become very important for factories and organizations that have to have ready contact with the outside world. Even in the public sector, many small villages can have access to the outside world through the use of a mobile telephone and a transmitter. An ordinary, public network can prove to be extremely expensive," Björk points out.

It is interesting to note that Ericsson won the contract for the Shanghai mobile telephone network in an international bidding contest. The network is to be financed with Japanese money. Ericsson, then, is building a mobile telephone network in the old Chinese trading city of Shanghai for Japanese money. This success has surprised — and impressed — many competitors.



Switching Symposium in Stockholm

The International Switching Symposium has, up to now, been held twelve times, every three years. But never in Sweden, a country at the forefront of telecommunications.

In 1990, for the first time, the XII International Switching Symposium will take place in Stockholm from May 17 to June 1, when Sweden is at its most inviting.

The symposium is a major event for leading technicians from around the globe. The venue normally alternates between Europe, North America and Japan. It was last held in Phoenix, Arizona, with some 3,000 participants. The Stockholm event is expected to attract about 2,500 participants, as well as a large number of attendants.

Televerket and Ericsson are the principal arrangers of the symposium.

Seminar on Culture

Are you aware of the similarities and dissimilarities between your own and foreign customer's frames of reference?

Do you understand and respect these people's values and expectations?

Are you aware of their communication methods and decision processes, so that you can adapt your approach to them?

These and a number of other questions will be dealt with at a seminar on intercultural communication that will take place in Marievik from April 17-18.

Jean Phillips-Martinsson, author of "Swedes, As Others See Them" and a consultant in intercultural communication, will be a guest speaker.

Ericsson receives French ATC order

The French State Railways, SNCF, has placed an order for Automatic Train Control (ATC) equipment, valued at FFR 200 million. The Ericsson equipment will be manufactured under licence by Alsthom, France.

In addition to licence revenues, the contract between Ericsson and Alsthom also covers design and equipment de-

liveries from Ericsson Signal Systems AB, valued at approximately FFR 65 million.

"The French order represents a breakthrough for Ericsson's ATC system in the European railway market," commented Bo Gedda, president of Ericsson Signal System AB.

Malta to modernize Telecom System

Fatme, Ericsson's largest Italian subsidiary, has been selected by Telemalta Co., Malta's PTT, to expand and modernize Malta's telecommunications network. The contract, valued at USD 28 million, is for the supply of an international AXE telephone exchange, 10 local AXE exchanges having an initial capacity of 74,000 lines, over 100 km of fiber optic cable, plus transmission equipment and radio links that will be used for interconnecting new and existing exchanges.

ERICSSON UPDATES

Repeat order in Pakistan

Ericsson has signed a contract, valued at USD 16 million, with the Pakistan Telephone and Telegraph Department to supply Ericsson's fully digital AXE telephone system to Rawalpindi and Lahore.

The AXE order covers two new local exchanges and four extensions of existing local exchanges. The exchanges will be equipped with the CCITT No 7 common channel signalling system, which has been specified in Pakistan for the first time.

In addition to the AXE equipment, the contract includes Ericsson's new range of telephone sets, "Dialog 2000," as well as power and cooling equipment. An extensive training program is also included in the contract.

Army contract for radar

Ericsson Radar Electronics of Sweden has signed a contract with the Swedish Defense Materiel Administration for a new type of C31 search radar system tactical air defense, designed GIRAFFE 75. The order value is in the range of SEK 450 million. Deliveries to the Swedish army will start in 1990.

During the last month of 1988, Ericsson also received firm orders and development contracts for air defense systems and microwave communications equipment from other customers worth SEK 400 million.

Los Angeles signs agreement for MD110

The Los Angeles County Office of Education has awarded Ericsson a volume purchase agreement and purchase order for an MD110 Intelligent Network, integrated voice/data communication system. The agreement enables 95 Los Angeles County school districts and community college districts to procure telecommunications equipment from Ericsson and become part of an area-wide telecommunications network.

The agreement covers a seven-year period and can mean the delivery of up to 60,000 MD110 lines. The first order is valued at \$801,000.

"This agreement strengthens Ericsson's position in the U.S. market. It is the second major transaction in recent months," says Rolf Eriksson, Vice President, Business Communications AB.

AXE orders to Denmark worth USD 135 million

Ericsson has received orders for AXE digital telephone exchanges worth DKK 900 million (USD 135 million) from the five Danish Telephone Administrations KTAS (Copenhagen Telephone Company), Jutland Telecom, Funen Telecom, Tele Sønderjylland and Telecom Denmark.

The orders have been placed within the framework of the current delivery contract between the five administrations and Ericsson's Danish subsidiary L.M. Ericsson A/S and cover a six-year period beginning 1990.

Commenting on this latest Danish order, Torbjörn Andersson, Vice President and General Manager, Nordic Operations, Ericsson's Telecom, said:

"The Danish Administrations have with this latest contract confirmed their confidence in Ericsson as a supplier of exchanges for the networks of the future. As network operators they must be able to meet the high demands on network facilities and services made by the business community."

The orders constitute a continuation of the deliveries of AXE digital telephone exchanges begun in 1983, but cover AXE exchanges with important new functions:

- Business Group Services (CENTREX) with possibility to offer PBX facilities in the public network and to build nationwide "private" networks for business groups.
- ISDN (Integrated Services Digital Network) will be introduced on a general basis. The first AXE pilot exchanges with ISDN are already scheduled to be put into service in mid-1989, but with this new contract it will be possible to integrate these functions in all AXE exchanges.

The contract with the five Danish Administrations opens up possibilities to introduce Intelligent Network (IN) functions in the Danish public network. Using computerized advanced billing and routing functions, the IN functions provide possible connection of Value-Added-Network Services (VANS).

U. of Mass. MD110 contract

Ericsson Business Communications has received an order for \$29.5 million (about 190 million kronor) from the University of Massachusetts for installation of the MD110.

The contract is one of the largest to date for a private communications network.

The order involves installation of more than 30,000 lines and will equip university departments in Amherst, Boston and Worcester with voice and data communications.

"There are now some 130 persons programming on either side of the Atlantic. All the programming will be ready by summer of '89, when we will begin testing," says Lars Boman, technical head of the data communications division within Ericsson Business Communications.

The university of Massachusetts' order brings to 30 the number of the MD110 orders placed by American universities.

On The Move

Olof Höstbeck has moved to the Corporate Markets group working with Europe and North America and is responsible for France, Italy, Spain and West Germany along with the coordination of EC issues.

Lars Ståhlberg will be joining Ericsson, effective March 1, from the Swedish Department of Foreign Affairs, to take responsibility for Africa and Export Control in the Corporate Markets group.



Business school for salesmen

A new school has been set up, a tailor-made business school for our mobile telephone sales staff — the Hotlines Business School.

Already this year, we expect a few hundred sales staff from around the world to participate in courses over a few days. The Swedish sales personnel is starting in February-March; later in the spring, other Nordic groups will begin, and, in the autumn, overseas staff will start their courses.

The program will stress boutique development, sales technique, business planning, etc.



Getting Elektriska Bureau's Telecom operations; leaving highway and railway signaling field

Ericsson is acquiring the greater part of the telecommunications operations of Elektriska Bureau A.S. (EB) in Norway and is simultaneously selling its highway and railway signaling business to EB. This is the content of an agreement reached between the two companies. Ericsson is thereby continuing to consolidate its resources in its core business, telecommunications.

Under this agreement, Ericsson will buy EB's so-called Telenet operations, which comprise mainly the development and production of equipment for digital telephone exchanges, including manufacturing in Hisoy, in southern Norway.

Ericsson will also purchase EB's operations in the field of communications control systems, with applications in military command communications business. A jointly owned defense communication company will be formed in Norway. In addition, Ericsson will acquire EB's holding in EB-Ericsson, which has been owned jointly by the two companies to date.

The EB sectors that Ericsson is acquiring have total annual sales of approximately NOK 700 million, with 700 employees.

Under the agreement, EB will purchase Ericsson's operations in the field of highway and railway signal and safety systems. The signal business is estimated to have sales of about SEK 750 million in 1989. It employs approximately 1,000 persons in ten subsidiaries in Sweden, Denmark, Finland, Italy, Spain and Australia.

IMCC premiere fulfills a wish

Behind the abbreviation IMCC, lies a conference that has long been seen as a need, a wish, an idea. They all became a reality in Stockholm during December 12-14. There, for the first time, was staged the International Marketing Communication Conference — IMCC — for Ericsson managers in marketing communications from around the globe.

The objective for IMCC was to set in motion an open dialogue on how to give a picture of unity within Ericsson's market communications and public relations.

In the end, there were some 45 foreign participants from 30 countries. In addition, there were about 40 Swedes.

After the conference, interviews with Kontakten, a company publication, gave a quick appraisal of



Christina Helander, Finland.

events by four participants from four different countries. They responded to three questions, around which the interviews ventured: Did the conference achieve its goal? What did you get out of the meeting? Do you feel that IMCC should be repeated?

Christina Helander, Finland: "Certainly, some changes were made to the program, but overall the goals were met. I made new contacts. One is not as alone as one sometimes thinks. We learnt to reach a common manner of addressing marketing issues. Yes, the conference should be held every year and, preferably, in a different country."

Jorge Arrendodo, Mexico: "Yes, the goals were met. We now have a fantastic opportunity to build up a strong picture of ourselves. I feel stronger in the knowledge I acquired and we should aim to build further so that we can

fulfill our potential. As for repeating IMCC, yes, but on two levels. First, regional, and then international. Of course, it does not necessarily have to take place in Sweden."

Connie Fischer, U.S.A.: "Yes, initially, it was a little too much of the obvious. But in the end, we did achieve our goal. There were many contacts. Needs and problems were aired, which in themselves could help me to solve some of my problems. IMCC should definitely be repeated, at least annually. It can be anywhere in the world."

Brian McKay, Australia: "Yes, the conference came into its own in the second half. The important benefits for me were the new contacts. It was important — and interesting — to discuss problems within market communications. As for repeat, I say yes. But I see it taking a different shape. I think an increased level of group sessions and discussions on concrete projects would give more results."



Brian McKay, Australia.



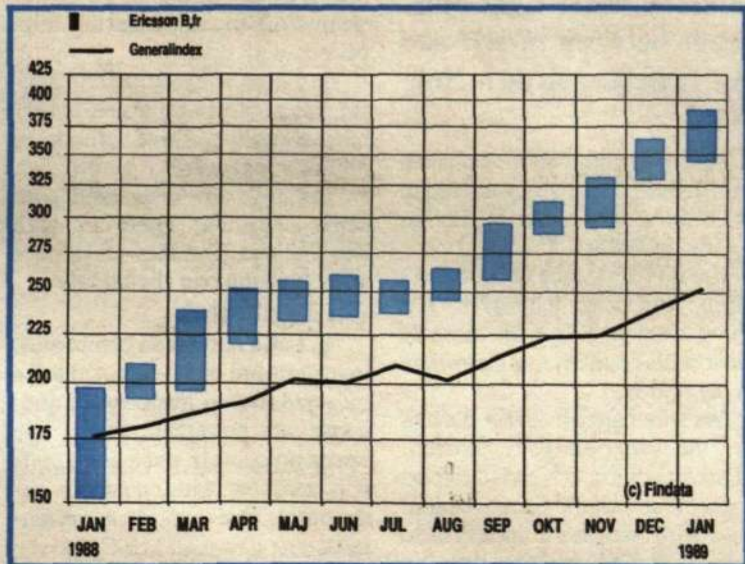
Jorge Arrendodo, Mexico.

SHARE TRADING

For the Stockholm Stock Exchange — and for Ericsson shares — 1988 was one of the best years ever. The overall index finished at plus 51 percent, while Ericsson B free shares gained 141 percent.

As a result, Ericsson was one of the year's winners, in third place after Nordström and Thulin (up 328 percent) and Argonaut (170 percent), both in shipping.

Ericsson's bourse activity is very unusual, considering the company is so large and its shares some of the most widely traded on the Stockholm Bourse. In comparison with the average for the "industrial company" group, Ericsson's share rise was more than double. The industrials went up 61 percent in 1988.



But this is still a long way from a total return to the share movements of 1983-1987. The average share movements over the last five years for Ericsson's B free shares is still a minus 7 percent. This compares with an increase in the total index of 130 percent over the

same period, or 97 percent for the industrial index.

Nevertheless, the new year has begun well, with a gain from 356 kronor for B free shares at the end of last year to 386 kronor by the end of January this year.

CLIPPINGS

"Major Job Victory" and "Ericsson Victory in Washington." Two headlines in Dagens Industri on January 26. Two headlines among many others that spoke of Ericsson during January.

The "major job victory" deals with the fact that the American mobile telephone sector had chosen Ericsson's digital system TDMA as its standard.

The battle revolved around the American AT&T and Motorola with its FDMA system on the one hand and Ericsson and the Canadian Northern Telecom with its TDMA on the other.

The term "job victory" stems from a phrase that was used by the director of Ericsson Radio Systems, Lars Ramqvist, in an interview with Dagens Industri.

In the interview with the Stockholm business daily, Ramqvist went on to say:

"This is the largest system choice in the mobile telephone sector. The most important factor is that we avoid having to expand our organization toward another different system, such as our competitors are being forced to do."

To convince the purchasers of TDMA's advantages, an on-

site test was carried out in Los Angeles. It was this test that eventually resulted in victory for Ericsson with unanimous approval in a branch meeting.

"Ericsson victory in Washington," with the appendage "Sweden exonerated in tele war," explained that Ericsson and the Swedish government "in tacit accord scored two important victories in Washington trade politics."

In one case, Sweden was exonerated from the accusations of having closed off American companies from the Swedish market. Word came from Reagan's international trade policy-making body, USTR, in one of its last decisions before the change in the presidency.

If Sweden had not been exonerated from these accusations, the United States could have imposed duty penalties of as much as 100 percent on a number of raw materials.

Parallel with USTR, the American telecommunication authorities, TCC, carried out its own investigations on countries that discriminated against American companies in their home markets.

The Americans had previously criticized the Swedish telecommunications monopoly on high-speed modems and certain switches.

Since the Swedish government lifted these restrictions last year, the U.S. trade authorities were satisfied, Dagens Industri said.

PRODUCT NEWS

Pre-tested modules for AXE

In Ericsson Telecom, a project group is working on a new process for manufacturing and delivering directly from the factory pre-tested modular housing for AXE systems.

The objective is to provide better delivery quality and reduce delivery time, both of which result in savings for the company and an improved Ericsson image among our customers.

Simultaneously, one gains time in the installation process, which becomes somewhat easier.

Much of the know-how for this process is already there. Today, already being delivered are pre-tested compact AXE stations to British Telecom's factory in Scunthorpe.

EnergyMaster becomes STÖK in Televerket

Televerket and Ericsson Components' power division plan to market within Televerket a Guide and Monitor System for Power Equipment, to be known as STÖK. The system is being built by Ericsson's EnergyMaster for production

and maintenance of energy and power equipment and includes development and viability in keeping with the needs of Televerket. STÖK has been tested over the past two years in Kristianstad and Eskilstuna.

Source system for AXE stations

Ericsson Telecom is in the process of developing a source system for AXE, APT210-12RI, so that one can have functionality with ISDN, BGS and POTS in the same telephone system.

This is being done to consolidate the source system and improve the benefits. At the same time, the old system that is used in APT210-10 will be "retired."

"With the three functionalities in one and the same system, one might say we merge the united States with the rest of the world," says Karl Alsmar, head of the product development division within ETX. Today, there is a plain system for each and every ISDN, BGS and POTS in different parts of the world.

The new source system is expected to be introduced at the end of 1990 in France. The following year, it will be introduced in the United States, the Netherlands, and Switzerland. It will be a broad introduction but in a limited number of markets.

OPUS — an acronym stemming from the Swedish *opinionsundersökning*, opinion research — is the approach that is used in Ericsson to measure the employee's attitude in terms of his relationship to the workplace.

The process has been used in different areas of Ericsson over the past five years.

At the end of last year, Lars Berg, the head of the Cables business area, brought together eight plant managers

to a conference in Mexico City. Four of them came from factories in Sweden, the others are or have been managers for Latin American operations.

OPUS research was carried out entirely among Cable units, and the result was resounding. The Latin American employees had a more positive outlook toward their managers and toward the company than their colleagues in Sweden.

At the Mexico City meeting, among

other matters discussed were the reasons for this great difference in attitudes. Ericsson's corporate editor, Anders Gummesson, carried out a number of interviews, which formed the basis for this report.

Three principal reasons for the differences stood out:

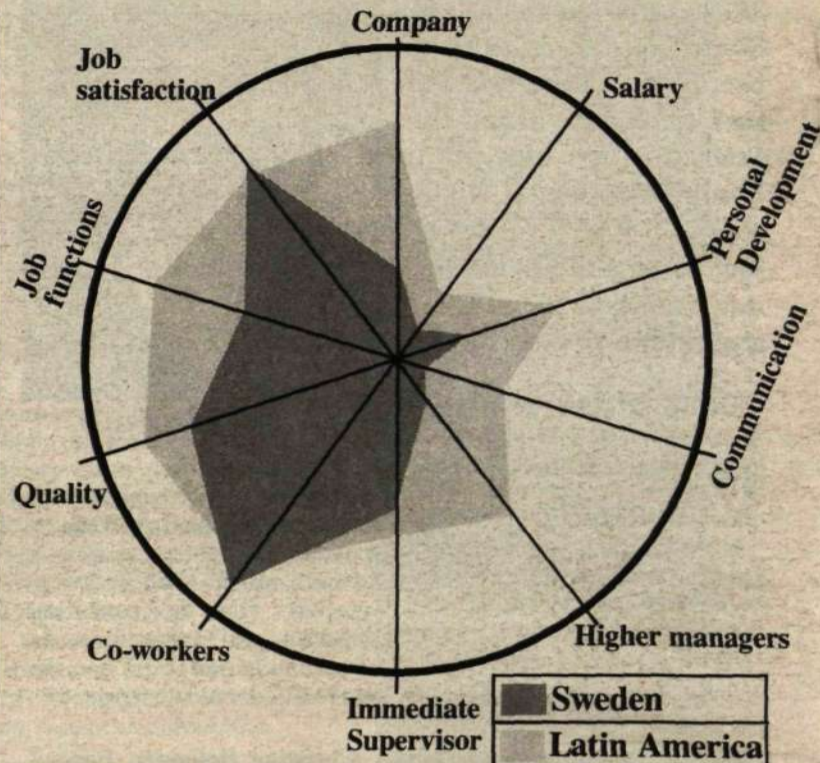
- Latin America places the question of personnel development higher up in the organizations than is done in Sweden.

- Managers devote more of their time to employees in Latin America. (In Sweden, managers pursue their own projects and are taken up with committee work, etc., to a greater extent than their Latin American colleagues.)

In Latin America, communication with lower-ranking employees are often more direct than is the case in Sweden, where the union system prevails. (This in itself does not affect the evaluation..)



Business Area Cables brought together Swedish and Latin American managers to a meeting in Mexico City at the end of last year. Among other things, they visited Latincasa in San Luis Potosi. Above, from left, Bo Gustafsson, head of Latincasa in Mexico; Gerhard Skladal, Colombia; Lars Berg, head of Business Area Cables; Kaj Nielsen, formerly in Colombia and now with Business Area Business Communications; Arvid Jauring, Argentina, and Jan Andersson, Brazil.



The OPUS wheel for Cables' factories in Sweden and Latin America. The nearer the evaluations approach the wheel's outer circle, the better the results.

Cable-OPUS: Huge differences among the factories

OPUS has been around in Ericsson for some years now — some units have done several research projects, others have just begun. Fundamental to OPUS is the fact that in the first place comparison should be made within the same units from one research project to another.

Other comparisons — for example, between departments or factories — give a dramatic impression. But in most cases, there can be very natural explanations for major differences.

As indicated in the OPUS wheel, it is mainly in the right half that the major differences appear.

For example, this is the case in relationships with and attitude toward higher managers, where Latin American workers reflect a significantly more positive attitude.

The same applies to communications, "upward" and "downward," where Latin

Americans are significantly more at ease than their Swedish colleagues.

Attitudes toward the opportunities for personal development within the company are for the most part significantly more positive in Latin America.

Attitudes toward the company as a whole are considerably more positive among the Latin Americans.

Altogether, this gives a rather dim view of Sweden while all seems to be fun and frolic in Latin America.

But, naturally, it is not all that simple.

Perhaps the truth is more closely borne out in comments about the results from one of the Latin American managers:

"Everything is relative. In an OPUS research in Sweden workers are compared with what they know of a world that is outside their company — that is their frame of reference.

Several attempts at explanations will be found in the adjoining article, which is based on interviews with managers in Latin American cable factories.

A Latin American Manager: "I do not have so many intermediaries"

"I think we work more with personnel in Latin America. I do not have so many intermediaries, not so many water-tight bulkheads between myself and personnel as you do in Sweden."

The preceding quote is taken from material that was gathered at the Cables meeting in Mexico at the end of last year.

The speaker is one of Ericsson's Latin American managers. His views were in line with those of most of his counterparts elsewhere in the region.

"As a manager in Latin America," the plant manager continued, "I am much more exposed to personnel than I would be in Sweden. I live with them as a company head in a much different way than my Swedish counterpart would. He has an organization that functions all the way. We have to work in another manner."

Go downstream

"To a considerable extent, company management in a Latin American country has a project leader-

ship role. Tough project leadership in seeing that drawn up plans are followed and that decisions are carried out.

"In order to assure myself that this is done, I have to go downstream time and again and talk with people at all levels."

This exposure, the plant manager notes, is what makes workers have a more positive attitude to him as a manager.

"Initially, one is greeted with some suspicion. There are high expectations, and they all wonder what position one should take."

On a pedestal

"In Latin American companies, managers are often expected to be on a pedestal — inaccessible and, hence all powerful. When one opens up oneself, even a little bit, it is accepted with enormous enthusiasm. One thinks that it is fantastic that above all I can go to the factory floor and talk with the workers.

"For my part, I think it is quite natural, as natural for a manager in Sweden to do."

Relationships with employees depend to a great extent on how much, as an executive, one is directly involved with personnel

matters at such in Latin America, one of the plant managers noted.

The trade union system in Sweden makes for common ground between two groups — the company as an institution and the union as an institution.

Appreciation

"In Latin America, we try to work more with the individual. Employees observe and appreciate that. They appreciate getting a response directly from the company."

The managers in Latin America are more conscious of how they act as managers. But what would happen if they were suddenly called home to be a manager in a Swedish factory. "I think they will function alright," said one of those interviewed. "Maybe not quite one hundred percent at the beginning, but we could increase productivity by making workers more interested in their jobs. Our method of leadership could have positive results."

So much for the Latin American plant managers. In a coming issue of this newspaper, Swedish managers will have an opportunity to give their assessment of OPUS.

Anders Gummesson