contact

ERICSSON PUBLICATION FOR EMPLOYEES WORLDWIDE

No.7 • SEPTEMBER 1996

Eusila Baralywo is one of 500 employees at Gilgil Telecom Industries in Kenya. She and her colleagues manufacture telephones as well as AXE switches. The Gilgil plant produces 100,000 AXE lines annually. Photo. VICTOR LENSON BROTT

Eusila assembles AXE in Kenya plant

Africa's first AXE assembly plant was inaugurated at Gilgil, Kenya, earlier this year. The plant is a prime example of Ericsson's advances on the African continent.

MIDDLE

Trailblasing function

The task of the Corporate Markets function is to establish an Ericsson presence in new markets and to nurture Ericsson's contacts with governments, authorities and customers in established markets.

Page 6

100 years in Colombia

The telecom market in Colombia is growing at an explosive rate. Ericsson has been in the market in this country for a century.

Page 10

GSM among feudal lords

The little island of Sark in the English Channel is in may ways still living in the past. Nevertheless, a modern mobile telephone system has been installed on this feudal governed isle. Ericsson Ltd. has supplied GSM systems to most of the channel islands.

Page 22

Strong year for MXE

Ericsson Messaging Systems Inc. is the Ericsson expert in messaging platforms. The company scored a breakthrough in 1996 for its exciting MXE product

Page 18

"China can and will become a major market for Customer Services," says Wendy Ma, Customer Services account manager for the enormous Chinese market within Ericsson's Public Telecommunications business area. Raised in Shanghai, Wendy is well acquainted with Chinese culture. Sales of Customer Services constitute a real challenge in China, but if successful, the potential is tremendous.

The art of selling services

Ericsson has an installed base of more than 7 million AXE lines in China and this figure is growing continuously. The local Ericsson company, Ericsson China, works on a broad front to meet the requirements of the operator, the Ministry of Post and Telecom, and the Ministry's local provincial boards.

Nine specially selected employees currently market and sell Customer Services within Ericsson China's three regions, plus an additional two staff based in Beijing, where the company has its head office. Wendy Ma acts as a market support function from Global Product Line Management in Stockholm.

actively sell professional services and secure long-term regulated service agreements – is relatively new in the telecommunications sector. In China, Ericsson is still regarded primarily as a supplier of hardware.

"China has no traditions or culture in the service area," explains Wendy Ma. "The average Chinese customer is totally unaware of the value of service work. At Ericsson, we have to explain the way in which we think. And it's not enough to merely talk about it – you also have to demonstrate what you mean. Show the business benefits, the profit potential and the efficiency improvements – while at the same time demonstrating one's sensitivity to, and consideration for, customer networks and personnel.

"Good relationships are extremely important in China. The way in which things are done is very different compared with Sweden. Business is conducted on much more of a personal basis in China. At the same time, we Chinese are great believers in respect. For example, we use the word 'you' in different ways and the way in which we use it demonstrates our respect. Business relations are founded on trust. We must always be prepared to stand for what we say – and we should never promise more than we can deliver."

Wendy Ma's goal is to ensure that China becomes a major market for Customer Services.

"China can and will become a major market for Customer Services," says Wendy Ma, Customer Services account manager for the enormous Chinese market within Ericsson's Public Telecommunications business area. Photo: PETER NORDAHL

Ericsson, the right choice

Wendy came to Sweden from Shanghai in 1990, as a guest student. She had already received the equivalent of a degree in civil engineering from the University of Shanghai.

"I have always wanted to travel and had several Swedish acquaintances in China. For me, Sweden had an exotic appeal; it was a country with many opportunities," she recalls.

After having read Swedish at the University of Linköping, Wendy arrived in Stockholm to study economics. Examination work at ABB in Ludvika increased her desire to work for a large industrial company. With her extensive range of skills, this young woman was a real find for Ericsson, who quickly snapped her up when Wendy approached the company. Today, as account manager responsible for the Chinese market, she feels that she really has made the right choice.

Job is important

"My job is interesting and important to me. I fit in here, since I understand both cultures, the Western and the Chinese. I also wanted to work for an international company, where I can fully utilize my know-how."

The concept underlying Customer Services operations – to

Breakthrough deal

Wendy works independently and assumes a great deal of responsibility, which she seems very capable of handling. All new employees undergo an introductory training program, but at the same time Wendy learns as she works.

"We receive a lot of on-the-job training when problems occur and must be resolved, for example," she notes. "I have also received a lot of help from my colleagues, particularly from my predecessor Bryan Oates."

"Wendy is full of enthusiasm and has a natural drive for this type of work," says Bryan, who has nothing against being regarded to some extent as Wendy's mentor. "It is also a huge plus that she is so fluent in Chinese, which is hugely valuable in contact with the customers."

Ericsson's focus on Customer Services in China was initiated towards the end of 1994 in cooperation with the Public Telecommunications and radio Communications business areas. Joint training is provided within the sales and marketing areas in Beijing. Three regional support offices have also been built up, plus a support center in Beijing itself. The company's service operations are supplied from this base and involve a large number of employees.

In March this year, Ericsson China's Customer Services unit secured its breakthrough deal. Beijing's local operator, Beijing Telecom Administration, signed up for a long-term service agreement that is based on the provision of core services, including customer service, fast trouble-shooting and updates.

Major potential

"To date, Chinese customers have focused mainly on capacity, or a great many lines. Ericsson would like to do more in the area of improving the network and increasing performance. A network package, which gives customers a better return from existing installations, could open new doors for us," believes Wendy.

A large installed base already exists in Guangdong Province in southern China. The industrial and business community in the province is substantial and flourishing and a relatively large degree of openness exists in the region. Here, concepts such as services for the benefit of business are already a reality. In Guangdong, as in the rest of the country, Ericsson China is currently intensifying its efforts within the Customer Services area. The sales-force is focusing hard on marketing these services to the customer. The first step is to sell a package of core services.

"I was in China for three weeks during June," says Wendy. "I met the Chinese sales team for the first time. Among a great deal else, we exchanged ideas and thoughts, and formulated routines for the future. I understand the market situation far better now, having been there myself. Being on the spot, you see the practical difficulties, and the opportunities, in a different light."

Personal contacts

Wendy underlines the value of personal meetings. Since visiting China and seeing the operation from the inside, she views her work quite differently. While she naturally maintains daily contact with the sales team in China via memo, Internet and telephone, she realizes that personal contact adds another, invaluable dimension.

In future, Wendy plans to travel to China more regularly.

"My job is not simply to provide support, but also to actively participate in the work. If we are to succeed in China, we also need to be close to the market, the local company and the customers. The local company and the home organization must develop together."

The two staff members from Beijing will visit Sweden in the near future. They face a tough schedule, which includes a visit to all of the product areas. The exchange of know-how will continue, with all personnel responsible for sales and marketing – both locally and in Sweden – undergoing further training to raise their skills levels.

Realistic goals

How far will Customer Services in China have progressed in a year's time?

Wendy uses the experiences learned on her trip to China to formulate realistic goals.

"We aim to have successfully described the value of Customer Services operations to our customers, and to also have sold a number of basic service packages. In future, we also intend to focus on providing higher levels of customer service. That may take a couple of additional years, but when we come up to speed we should be able to sell a lot of contracts. Ericsson is clearly a pioneer in the Customer Services segment in China. Our competitors have not focused to the same extent on this area – which gives us a lead that we intend to maintain."

KARI MALMSTRÖM

Freer, more open recruitment for key executive posts at Ericsson is on the way. **Anne Christine Carlsson**, who is currently **in charge of Management Planning** at Corporate Human Resources and Organization, wants employees with management experience who are interested in working in other countries to get in touch when a post as subsidiary manager is advertised. This also applies to people who have been identified as candidates. They should take the initiative, Anne Christine says. "Don't just sit back and wait for an offer... .

Photo: PATRIK LINDÉN

Management recruitment on a broader front

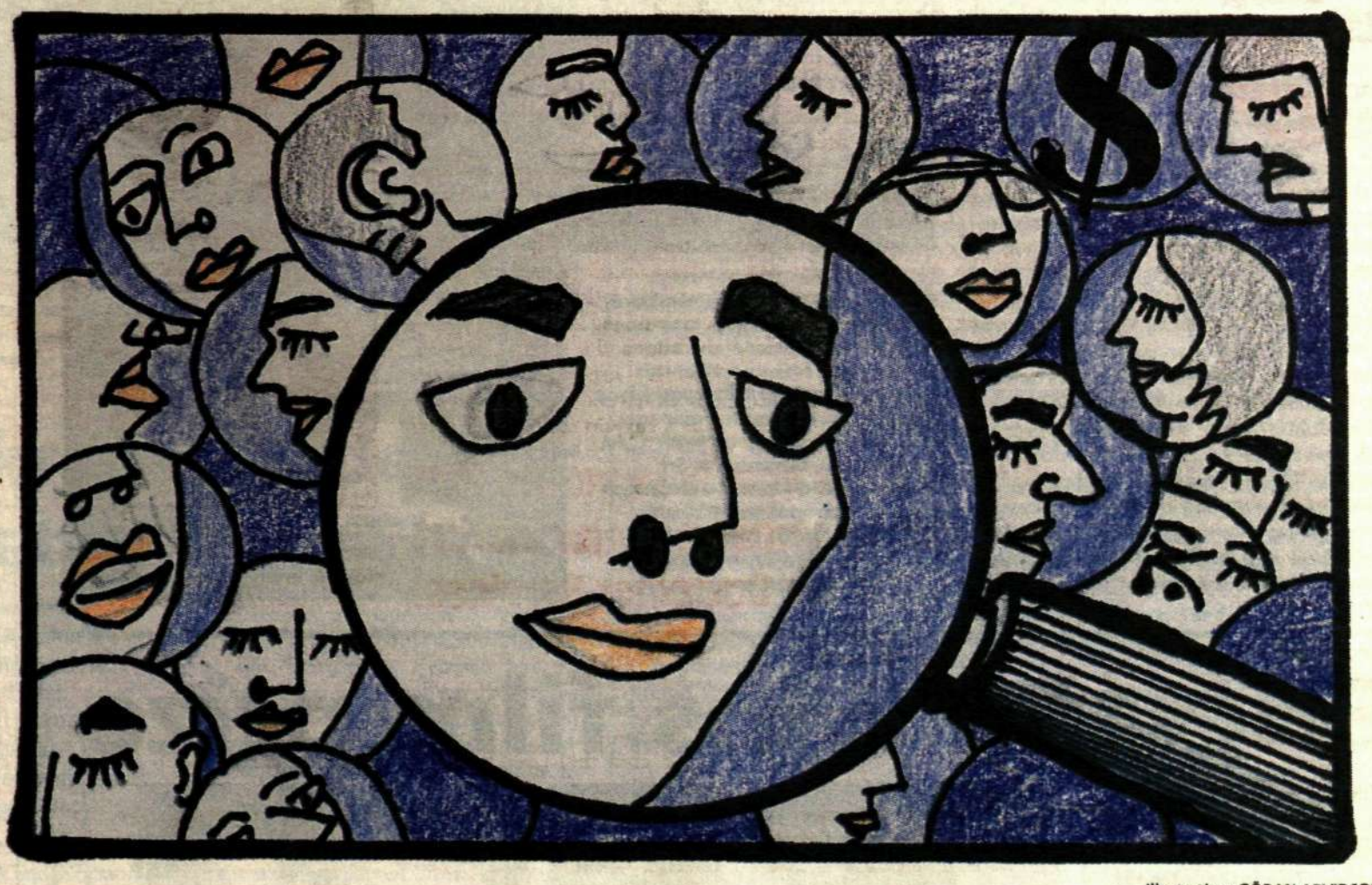


Illustration: GÖRAN ARVIDSON

Roughly 10 percent of Ericsson's employees are managers of one kind or another. This means that there are approximately 8,000 managers in the Ericsson Group. On average, managers change jobs every five years. So more than 1,500 executive positions have to be filled each year. Many of these jobs involve key positions – subsidiary managers and staff appointments for example.

Ericsson is setting up new subsidiaries and technical offices all over the world, often in countries and cultures which are new to us. There is a considerable demand for new managers.

"The Group needs to have highly efficient management recruitment," Anne Christine Carlsson says. Anne Christine is responsible for Management Planning at Corporate Human Resources and Organization.

Each year 1,500 managers are appointed - do you want to be one of the candidates?

Local responsibility

"Management Planning is currently working with more than 100 different subsidiaries in the Ericsson world. And the subsidiaries are directly responsible for the identification and development of candidates for management posts."

"It is crucial for subsidiaries to identify their potential managers at an early stage. These days, young people want to be able see that we are investing in their personal development. This applies all over the world. In other words, there are candidates at all levels in a subsidiary, ranging from young people who have not yet had their first managerial post to members of the subsidiary's management team. Corporate Human Resources only participates in recruitment for the top jobs – subsidiary managers and similar posts. Management recruitment is primarily a local matter."

"Our long-term goal is to ensure that the number of candidates and the number of management posts is about the same. Now that approximately 3,000 candidates have been identified, we are now well on the way to achieving this objective. Four hundred candidates have been identified for the real key jobs at Ericsson. In this case, we have met our target of one candidate for every executive position."

Take the opportunity

"Being identified as a candidate does not necessarily mean that someone has spotted you. I would like to urge everyone who feels that they can handle a managerial assignment to discuss this mattter with their immediate superior. On the whole, a great deal more personal initiative is required in this context," Anne Christine stresses.

"This is why we have now started to advertise vacancies for subsidiary managers at the in-house level."

"I think it is important to advertise vacancies, and this also applies to the somewhat more senior posts. We haven't publicized subsidiary manager vacancies in the past, but we are starting to advertise now, to encourage personal initiatives, both on the part of candidates who have already been identified and people who have not yet been picked up by the 'network'."

New focus

In the past few years, Corporate Management Planning has inevitably focused on quantity. It has been a question of spotting out the candidates required to safeguard our recruitment process. But now that the number of candidates is beginning to match our needs, Anne Christine and her colleagues in the business areas can change their focus.

"Now we are going to concentrate on quality and, as a result, we will be developing the instruments we use to select future managers and improving our follow-up process for candidates who have been identified. We really must safeguard the development of skills and competence needed in a managerial career. And we must improve the support we give to people who we believe are going to become Ericsson's managers of the future.

LARS-GÖRAN HEDIN

contact Publication for Ericsson employees worldwide
Publisher: Lars A. Stålberg, phone: +46 8 719 31 62 **Editor:** Lars-Göran Hedin, phone: +46 8 719 98 68, fax +46 8 719 98 68, memo: LMELGH **Editorial assistant:** Pia Rehnberg, phone +46 8719 78 69, memo: LMEPRG
Address: Telefonaktiebolaget LM Ericsson, HF/LME/I, S-126 25 Stockholm **Distribution:** Inger Bergman, phone: +48 8 719 00 69, memo: LMEBING. **Layout:** Pages Media i Stockholm AB, phone +8 46 665 80 72
Printed at Adargo Press AB, Gothenburg, 1996. **Advertising:** Information and booking: Display AB phone +46 90 17 79 50

New office in Sri Lanka

Ericsson's operations in Sri Lanka have met with major success. The 130 employees at Ericsson Telecommunications Lanka Ltd are fully engaged in carrying out two major network construction projects for the country's Telecom Administration. Recently, a new office building was inaugurated in the capital city, Colombo.

Sri Lanka does not have more than 1.1 telephones per 100 inhabitants. Today, Sri Lanka Telecom has 220,000 lines in a fixed telecommunications network. Two mobile operators provide an additional 60,000 telecom connections. As a result of newly implemented deregulation in this market, two private licenses have been distributed for fixed telecommunications with radio-based access to the network. Sweden's Telia is a stakeholder in one of the new operator companies.

Jointly with the two private operators, Sri Lanka Telecom is planning to expand the existing telecommunications network through the addition of half a million lines during the period up to the turn of the century. Ericsson has secured the contract to supply Sri Lanka Telecom with 140,000 lines. Other projects are also in progress.

Within the space of two years, Ericsson has become the largest supplier of telecommunications equipment in the country, with more than a 30-percent market share. The other two main suppliers are Alcatel and NEC.

On May 29, Sri Lanka's Minister of Postal Services and Telecommunications, Mangala Samaraweera, inaugurated Ericsson's new office building. The company's sales organization, administration and network construction operations are all housed within the building. There is also space to accommodate customer support and training functions. A comprehensive training program is currently in progress within the company, which has grown strongly during recent years.

Sri Lanka's Minister of Postal Services and Telecommunications, Mangala Samaraweera, inaugurated Ericsson Telecommunications Lanka's new offices earlier this year. Participating in the ceremony were Ericsson company manager, Lars Silfverling, second from right, Sweden's Ambassador to Sri Lanka, Torvald Åkesson, and president of Metropolitan, Dinesh Ambani, far right. Metropolitan has represented Ericsson in Sri Lanka for many years.

Ericsson wins film prize

Ericsson was awarded a Silver Lion at the international film festival in Cannes. The international commercial film festival, that is!

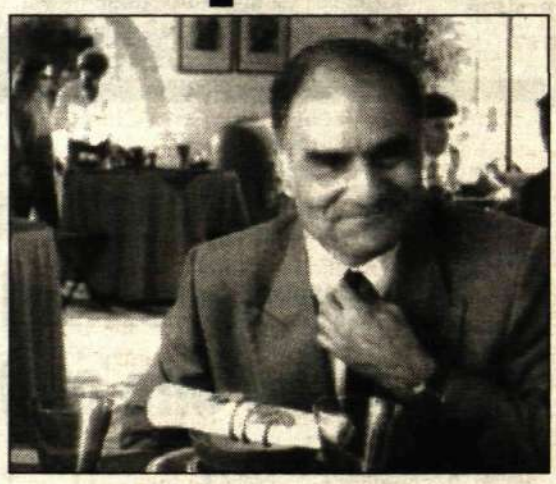
This prestigious second prize was awarded to an advertising film produced in India for mobile telephones. Filmed in a restaurant setting, the commercial is based on a humorous misunderstanding involving an Ericsson pocket telephone, male ego – and a cup of coffee!

A man in a restaurant thinks that the beautiful woman at an adjacent table is speaking to him. When the man, encouraged by the woman's seductive tones, tries to approach her, it turns out that her long flowing hair has concealed the fact that she is speaking to someone else using an Ericsson mobile phone. She misunderstands the man's overtures and, believing him to be a waiter, orders a cup of coffee.

The film is intelligent, well-made and relatively simple. One setting with a few skillful cuts.

Major success

The film was first screened during the recent world cricket championships in India some time ago and was very well received. It turned Ericsson into a major topic of discussion during the championships.



Appeals to all

It was planned and produced in India, the film world's most productive country, by film producers Nexus Equity in Mumbai. Responsible at Ericsson for the production was Rajeev Kapoor at Ericsson in New Delhi.

Since the restaurant setting is universal and the actors do not have any typical ethnic links, the film has universal appeal and could be used in various markets.

PATRIK LINDÉN

news briefs

Thailand buys more AXE

■ Ericsson has sold AXE equipment to the Thailand operator, TT&T, for approximately SEK 400 M. In addition to AXE equipment, the order included power equipment, installation work and training. The customer intends to use the equipment to improve telecommunications services in the provinces surrounding Bangkok.

Ericsson has delivered AXE to Thailand and TT&T since 1994. Today, there are more than one million AXE lines in Thailand. The local Ericsson company has 900 employees and annual revenues of approximately SEK 1.8 billion.

First order from Hong Kong for the DCS 1800

■ Ericsson has sold a DCS 1800 system worth SEK 260 M to the operator, People's Telephone company (PTC), in Hong Kong. The network is scheduled to be placed in operation in January next year.

It is intended that the DCS network will initially cover central Hong Kong and subsequently the entire region. The DCS 1800, which is based on the GSM standard, will be at the disposal of six operators in Hong Kong.

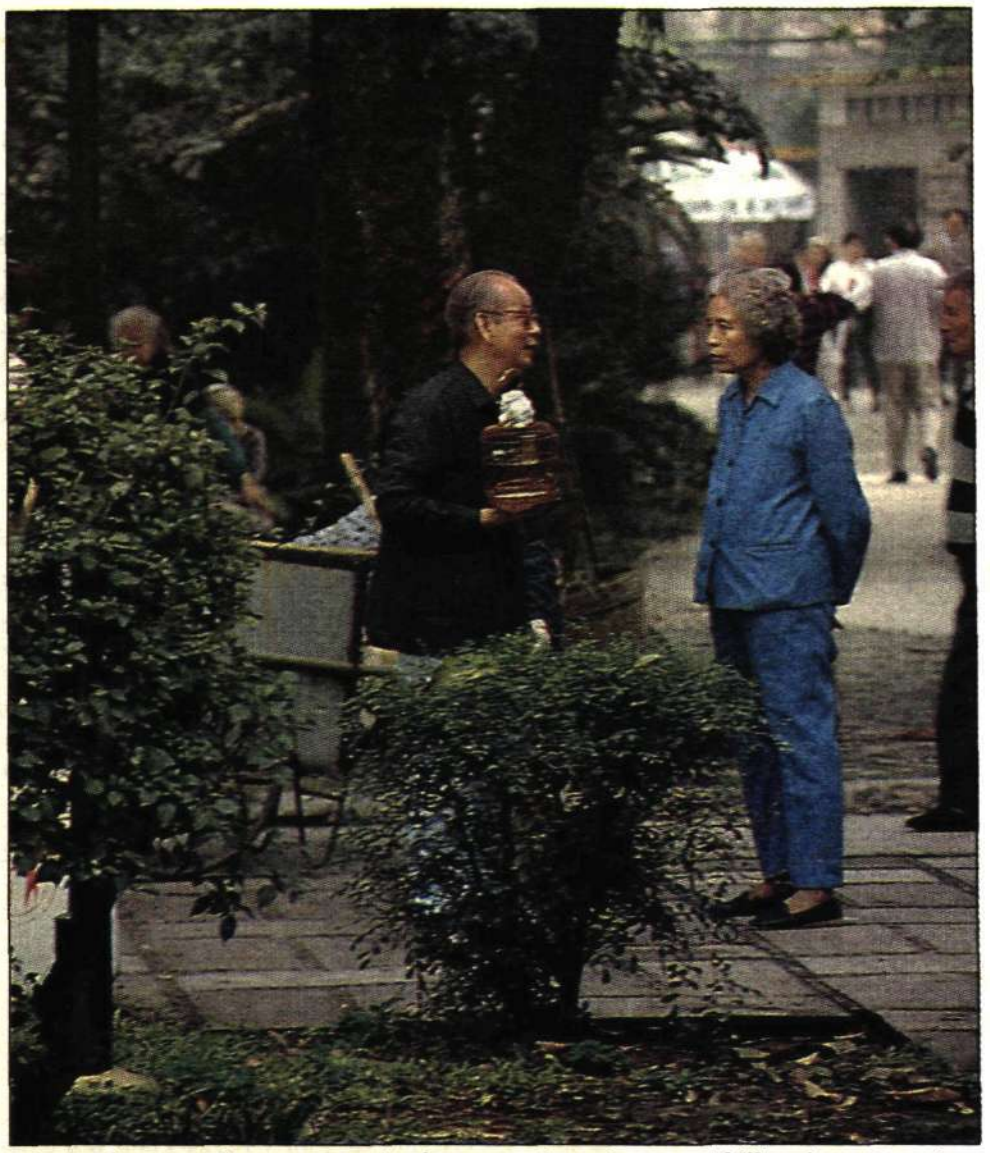
Intelligent network for Morocco

■ Moroccan operator, ONPT, will be the 59th customer to purchase an intelligent network from Ericsson, with Morocco itself becoming the 29th country where such a service is available.

Installation work is being commenced in Casablanca. It is planned that the network will be placed in commercial operation next year.

Wireless at Volvo

■ The world's most extensive Dect-standard wireless telephone system is installed at Volvo's Torslanda plant in Gothenburg, where a total of 5,000 Freeset telephones are in use. Some 2,000 of these are integrated in a system that covers the entire five-square-kilometer area of the Torslanda plant, which makes it one of Sweden's largest industrial complexes. The other 3,000 telephones will be gradually integrated into the system, using Ericsson's highly successful new Mobility Server product.



Ericsson has signed a contract valued at approximately SEK 1.2 billion (USD 175 m.) with the Post and Telecommunications Administration (GPTA) in China. The order covers delivery of equipment for the fixed-wire public telecommunications network in Guangdon Province. Photo: EVA SÖDERBERG

Billion-kronor order for fixed network in China

Ericsson has received a contract worth approximately SEK 1.2 billion (USD 175 m.) from the Guangdong Post and Telecommunications Administration (GPTA) in China covering the supply of equipment for the fixed-wire public telecommunications network in Guangdong Province.

"With this contract, GPTA and Ericsson will begin to build the telecommunications network of the future. with network intelligence and broadband technology," says Anders Igel, Manager of the Public Telecommunications Business Area.

The contract covers all products in Public Telecommunications' portfolio. It represents a continuation of a framework agreement signed earlier that is now being expanded to cover the period up to 1999. The contract, which involves projects in completely new product areas, marks a strengthening of the cooperation between GPTA and Ericsson in Guangdong. Up to now, Ericsson has supplied mainly AXE exchanges. The new contract comprises ISDN equipment, systems for intelligent networks and products for broadband communications.

New product areas

"Being able to break into new product areas is a very positive factor for us," says Anders Larsson, who is responsible for Public Telecommunications' interests in southern China. "It is creating good opportunities for an after-sales market in the region in the form of service. We are also pleased to have gained a foothold in new cities, and this is further strengthening our position in the province."

The long-term cooperation between GPTA and Ericsson began more than ten years ago. Since then, Ericsson has installed equipment serving more than three million lines of fixed-wire equipment in Guangdong Province including a number of the largest and most influential cities, in some of which Ericsson's share of the market is as high as 100 percent.

Guangdong, with 67 million inhabitants, is in the southern part of China. It is one of the country's most "expansive" provinces, with a rapidly growing economy and a favorable location next to Hongkong. Approximately 10 million of China's nearly 80 million installed fixed-wire telephone lines are in Guangdon. The province is thus among those with the highest telephone density in the country. The proximity to Hongkong affects the culture in the area in a number of ways. The province is fully modern in its attitude toward the installation of new technology, for example.

Up to now Ericsson has held a leading position as a supplier of telecommunications technology and service, but the competition is becoming tougher. The principal competitors are Alcatel and NEC, with Lucent Technology as well as Siemens and NorTel also coming on strong.

"These suppliers are working very aggressively and are quick to introduce new technology," Anders Larsson says.

"In order to maintain our position in China we will devote more effort to break into new provinces," he says. "Fujian – which is also in the southern region, directly across from Taiwan – is one such province. But it takes time to break into a new province, as much time as it takes to break into a completely new country."

LENA WIDEGREN

news briefs

Contract for DECT system in Indonesia

■ Ericsson has received a contract from the Indonesian telecom operator, PT Mitra Global Telekomunikasi Indonesia, covering delivery of radio access equipment for 50,000 lines based on Ericsson's DECT DRA 1900 system.

The DRA 1900 system, introduced in 1995, is a digital system for cordless connection in the public network and is already is service in a number of locations in Indonesia. Earlier this year the Indonesian operator was granted a 15-year concession for joint operation of the telecommunications network in central Java and 400,000 telephone lines will be placed in service there within the next three years.

Mobile telephone exchanges for Russia

■ Russia's largest telecom, Multiregional Transit Telecom (MTT) has signed a framework agreement whereby Ericsson will deliver ten mobile telephone exchanges based on the NMT 450i standard. The value of the order for this equipment, which will be used in ten different regions, is approximately SEK 100 m.

The order represents a major step in the expansion of a federal mobile telephone network in Russia which, over time, will cover the entire country. Ericsson has earlier received contracts for 22 NMT 450i systems in Russia.

MTT's principal task involves coordinating trunk traffic between mobile telephone operating companies and guaranteeing long-distance and international communications.

Japanese mobile network expansion

■ Ericsson and Digital Tuka Hokkaido, a Japanese operator, have concluded an agreement covering expansion of the operator's mobile telephone system. The order comprises equipment for AXE exchanges and radio base stations based on the Japanese PDC standard for mobile telephony.

The contract is estimated to be worth SEK 160 m. and subscribers will be able to use the increased capacity early in 1997.

Japan currently has slightly more than 13 million mobile telephone subscribers. It is estimated that there will be 50 million mobile telephone users in the country by the end of the century. Six operators in Japan have chosen Ericsson as a supplier.

Swedes are knowledgeable users of mobile telephones

■ Ericsson recently commissioned a survey in several countries to determine how subscribers use their mobile telephones and the functions they select. The survey showed that Swedes have the greatest interest in having access to many functions. Nine out of ten Swedish users of mobile phones knew that there were such functions as abbreviated dialing, but only five out of ten British users were aware of this. The survey was also conducted in Germany and Hong Kong. Briefly stated, the Swedish market may be said to be the most knowledgeable.

To make things easier for those who are thinking about buying a mobile telephone, Ericsson has produced a small guide for confused shoppers. It is designed to help them select the "right" instrument, depending on their needs and wishes. Basic technical terms are also explained.

Strategic agreements with Telia

■ Telia and Ericsson have signed three strategic agreements that will initially involve orders totaling approximately SEK 200 m. for Ericsson.

Ericsson has been selected as the main supplier of exchange equipment for Telia's growing "home market" in the Nordic countries. Ericsson will also take care of Telia's supply of spare parts for exchange equipment and will upgrade 40 AXE exchanges with new functions, including the capacity for intelligent network services.

Italian ministry to use Eripax system

■ Ericsson has received a contract from the Italian Ministry of the Interior to supply a communications system and services for expansion of a multimedia network. Ericsson will deliver approximately 130 nodes of its Eripax system, which is used for communications in large data networks.

Deliveries, which are beginning during the autumn, include a network monitoring center. This center will administer a system covering more than 100 locations throughout Italy.

Ericsson joint venture with Ipsilon Networks

■ Ericsson and Ipsilon Networks Inc. have announced signing of a letter of intent covering cooperation in developing Internet protocol (IP) systems for networks. So-called IP technology constitutes the foundation for the Internet and various intranets. The cooperation calls for Ericsson to license Ipsilon's software for integration with Ericsson's exchange equipment as part of a "total supply" of IP systems. Ipsilon Networks and Ericsson will jointly develop the next generation of IP networks.

Ipsilon Networks, which was formed in 1994, is a world leader in the field of high-performance IP exchange equipment.

Blazes new trails for Ericsson

The Corporate Markets function shall create a suitable climate for Ericsson's business

Without having a highly developed, global contact network with governments, authorities and customers, Ericsson would never have become a world's leader in its field. Maintaining a network and ensuring that all its components are working toward the same end are crucial central tasks within Ericsson. Corporate Markets, headed by Bengt Forssberg, acts in this capacity.

Within Ericsson's central Corporate Markets function, there has been radical change in its role, and the tasks assigned, in recent years. Development in the market, with deregulation of telecommunications in more and more countries are the factors most actively forcing change. Ericsson's need of a central overview and inter-corporate market activities has increased dramatically, with market after market becoming increasingly more complex in nature and its customers more numerous.

For Corporate Markets, this has meant growth in staffing and the inflow of new, exciting work assignments. When in 1991 Ericsson introduced a more market-oriented organization, this meant an enhanced need for central support, with the important task of giving Ericsson the image of being a single company.

Wishes to broaden recruiting

"The 'One Company Approach' is one of our most important tasks," Bengt Forssberg relates. Since the beginning of the year, Bengt has been the corporate markets director and head of this corporate function. His background within Ericsson is typical for someone holding this position – several years foreign service in various markets, many of which as a company head.

"Within Corporate Markets, we have traditionally taken charge of company managers desiring to return home after many years abroad. Their knowledge of the markets they have cultivated is, of course, invaluable in this type of operation, and the language skills they have acquired are important for our direct contacts with governments, authorities and customers in many countries."

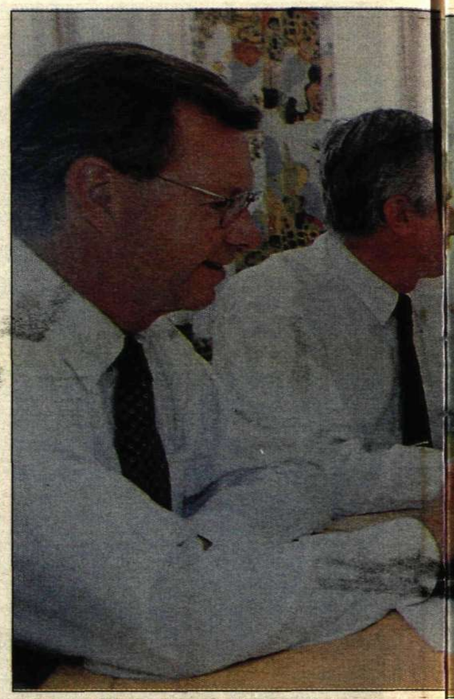
"Although we will continue to utilize repatriated company managers, we also wish to broaden recruiting into the function," Bengt continues. "We also want younger talent in the age 35 to 40 range who have worked in sales or other customer-service functions within our business areas. This enables them to broaden their Ericsson know-how before possibly being posted abroad in some top job in one of the subsidiaries."

A rolling stone

"Our task is to establish networks and to maintain contacts with Ericsson's markets worldwide. We are organized in accordance with the various market regions. This means that Ericsson employees assume responsibility for a number of countries, and their task becomes to establish and manage Ericsson's market know-how in these countries. In practice, this naturally involves a great deal of travel, as well as contacts and cooperation with various external knowledge sources."

"In eastern Europe, for example, we have obtained assistance from the Östekonomiska Institut. In other situations, we accumulate and disseminate knowledge through seminars and market forums at which experts on various markets are guests. We recently conducted such a forum on India, which was well-attended and favorably received."

"Extensive discussions are also conducted with external consultants. In addition, we cooperate closely with the business areas and have access to their knowledge and market analyses."



Most of the Ericsson Corporate Markets unit was gathered around the conference table. From left, Dan Ekman, Olof Haag, Bengt Linder, Bengt Forssberg, Kjell Forsén, Birgitta Feldt, Alfred Svensson, Cecilia Seaton, Göran Ollén, Aino Moltkeson, Kaj Helander, Tuula Fager, Göran Uvner, and Yvonne Silén. Torbjörn Andersson, Uldis Zervens, Christina Herrman and Anders Töpffer were absent at time of photo session.

Photo: KURT JOHANSSON

Positive business environment

Ultimately, Corporate Markets strives to create a positive business environment for Ericsson in all the markets which are of interest from a corporate standpoint.

"When Ericsson decides to penetrate a new market, it shall be our task establish political contacts and to develop know-how and contacts with telecom operators and other potential customers. Parallel with these efforts, we arrange for the establishment of companies or other local Ericsson representation. We are also responsible, jointly with the business areas, for the establishment of boards of directors and CEOs for these companies," Bengt explains.

The market function – as with other corporate functions – is an overall Ericsson resource. It is intended to assist the business areas in the conduct of business in foreign markets and to ensure that Ericsson acts correctly in all situations.

Regional overview

"Since we alone have a total overview of various market regions, it is natural that when the business areas intend to penetrate a new country, they discuss the matter with us."

Bengt Forssberg means that the regional aspect in particular is a key development approach for his function.

"Ericsson presently has special resources for market overview in two regions. Bosse Landin – my predecessor as markets director – monitors Asia from Hong Kong, and Leif Källén, who formerly headed Ericsson's U.S. operations – watches Latin America from Washington."

"In my opinion, a future expansion of this type of regional presence will be needed."

"We must become even better at accumulating customer and market know-how, and then we must come closer to them."

Spearhead

In recent years, Ericsson has begun operating in many new markets, with political developments affecting the market situation. The market function has played a key role in determining Ericsson's actions.

"We have been the spearhead which ensures that Ericsson rapidly establishes a foothold where new possibilities have emerged. Vietnam is a prime example. Ericsson's business has accelerated following a rapid establishment of representation there. Other Asian countries being successfully cultivated are Laos and Cambodia. In eastern Europe, we have established now fewer than 14 new market companies in recent years."

"It is exciting being part of blazing the Ericsson trail in new markets. It is also indescribably stimulating when seeing that our efforts have borne fruit, as in Vietnam, and most recently in India," Bengt Forssberg maintains.

LARS-GÖRAN HEDIN

Corporate Markets:

Manager: Bengt Forssberg
Secreterary: Cecilia Seaton
Administration, financial control: Göran Ollén, Christina Herrmann

MARKET REGIONS:

Western and Central Europe: Torbjörn Andersson
Secr: Birgitta Feldt

Eastern Europe: Kjell Forsén, Göran Uvner
Secr: Birgitta Feldt

U.S., Canada and Oceania: Bengt Forssberg
Secr: Cecilia Seaton

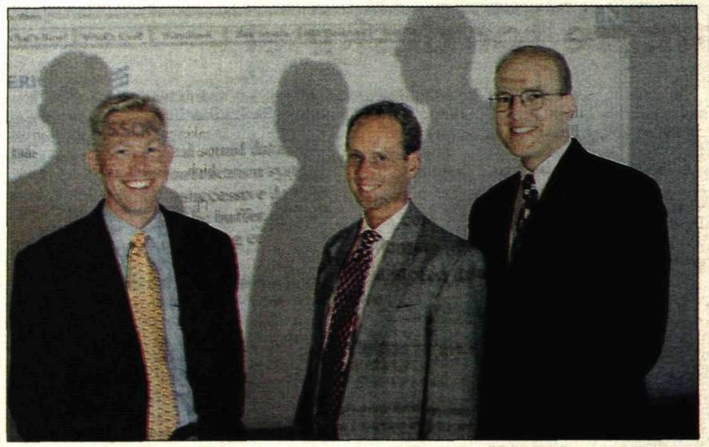
Latin America: Alfred Svensson, Kaj Helander
Secr: Aino Moltkeson

South and Southeast Asia: Bengt Linder, Olof Haag
Secr: Cecilia Seaton, Yvonne Silén

East Asia: Uldis Zervens, Per-Olof Björk
Sekr: Yvonne Silén

Africa: Dan Ekman

Middle East: Anders Töpffer



The men behind the new www database for patent information: from left, Per Wendin from Public Telecom, Ulrich Lindgren from Radio's purchasing department, and project leader Per Gustafsson from Radio's patent department. Absent was Per Broussard who has technical responsibility for the database.

Photo: Anders Anjou

Patent information on the Web – a gold-mine for designers

Ericsson has now gathered all patent information of interest within the telecom area in a separate server in its own www database. Easily accessible information pertaining to patents is becoming an increasingly key resource for designers, project leaders, product managers, the monitoring of competition, etc.

It is estimated that 30 percent of all R&D work is superfluous since the inventions already exist, and in Europe, some USD 20 billion is expended for duplicated effort. Every year. It therefore goes without saying that whoever can devise a easy-to-use system for monitoring developments within an area can reap enormous savings.

The reading of patent documents is a means of obtaining and effective overview since this is where most of the technical documentation is to be found, and it is also transcribed clearly and easily comprehended.

With correct, up-to-date patent information, duplicated effort and encroachment into others' patents are avoided. Moreover, it may also yield clues to technical solutions, indicate what others are concentrating on, serve as a source of inspiration, etc.

For all employees

"This database is for all Ericsson employees, including the subsidiaries and our joint-venture companies," Per Gustafsson (Radio) and Per Wendin (Public Telecom) relate.

The database is on Ericsson's Web sides, and all that is needed is access to Internet. Its use is then free of charge.

"Considerable effort has been devoted to devising as user-friendly an interface as possible," says Per Gustafsson. "Our designers are to have the capability of accessing exactly the right information with the absolute minimum of inconvenience. Our 'goal' is for all Ericsson engineers who are involved with development and design to make use of the database at least once. But the ideal would be to make it a routine to fetch both general and specialized information in this manner.

The database address is: http://patent-search.ericsson.se
Other information regarding Ericsson's intangible rights can be obtained at address http://patent.ericsson.se.
For additional information, contact: Per Gustafsson tel +46 8 40 421 44 with WWW-address http://patent.ericsson.se/webmast/per g.htm and Per Wendin tel +46 8 719 7595

Simplified search

One difficulty with information searching is accuracy of location. Accordingly, operations are at two levels in the search formula: there is a simple approach whereby the user inputs which information is being sought in plaintext (e.g. handheld mobile telephone), and a more advanced approach for the more experienced user.

The database has been devised at the initiative of the RCUR research unit within Business Area Radio Communications, which is also accountable for its ongoing operation. Development has been in cooperation with British Derwent Information Limited, which specializes in patent information.

For each newly published patent application, Derwent is responsible for reproducing a short English-language summary, complete with a photo, and for grouping each of the applications within the appropriate technological family to facilitate the search process. Derwent has also developed a proprietary classification system which, in many respects, is more up to date than the equivalent international system, and supplements it.

The database is to cover patents since 1975, with weekly updating.

At present, more than 1.5 million "records" are stored in the system, with each record consisting of one or more patents, which soon will be available in full format.

"Hopefully, this will make it easier for the technical organization to build on Ericsson's protected solutions and to simplify checking whether someone is attempting to infringe an Ericsson patent," says Per Gustafsson.

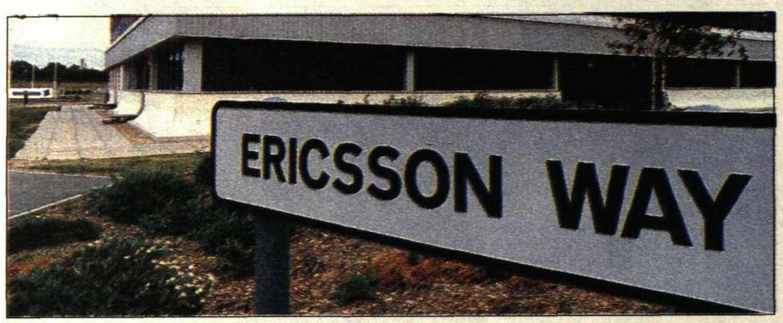
All Ericsson employees

As mentioned earlier, access to the database is open to all Ericsson employees, which is substantially different from previous practice when mainly patent engineers obtained online information via modem. "We have calculated that the breakeven for our solution is seven to eight users per day, which we will exceed by a wide margin," says Per Wendin.

The immediate task is to disseminate information and know-how regarding the new database and, through courses, to instruct users in the most basic uses of the patent information. Courses in patent knowledge are frequently arranged at Business Area Radio Communications, with the Patent Support unit having employed Lena Hagström to instruct engineers in patent knowledge, and Public Telecom arranging a seminar in September to which all patent-responsible employees of the subsidiaries are invited to attend.

LARS CEDERQUIST

What is Consono, and how should it be used in Ericsson's marketing? A training program is being introduced, directed initially at Ericsson's sales personnel. First to take part will be the U.K. local company, Ericsson Ltd. (ETL), where all the sales staff in the Business Networks division will go back to school for a broadly based course. The training program will also get under way in the near future at other major local companies worldwide. Every participant in the course assumes clear responsibility for learning what Consono is and also being able to explain the system to others.



Follow the Ericsson Way to ETL's head office in Burgess Hill, near Brighton, where Consono training is given.

Consono advances on a broad front

Pleased expressions on the faces of the group behind the introduction of Consono in the U.K. From left:

Stephen Jarvis, Justin Chamberlain, Ross Silver, Richard M. McLeod, Cecilia Anneroth, Nils Grimsmo (head of ETL and an avid supporter of the program), Paul R. Tuton and Jos van Riel.
Photo: THORD ANDERSSON

Let us establish once and for all that *Consono is not a new product.* Consono is a concept for selling total solutions in the business communications segment.

Consono could be termed a "brand-name platform" for Ericsson's "solution portfolio" of fully integrated systems for voice, data, images and video.

Expressed simply, it would be fair to say that with Consono Ericsson is bidding farewell to product-based sales. It is not products themselves that attract today's customers. Instead, they seek total communications solutions that meet all their needs. And the answer lies with Consono.

The team behind the program

The training program was developed by Cecilia Anneroth (project leader) and Jos van Riel (training manager) of Business Communciations, together with the British company Ericsson Ltd's marketing manager for Business Networks, Richard McLeod, marketing manager, Stephen Jarvis, head of "solution sales," and independent consultants Paul R. Tuton and Ross Silver.

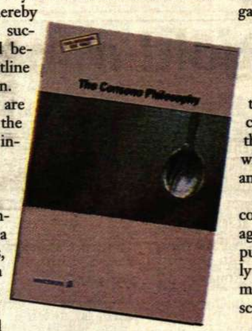
The first group of "students," comprising some 15 sales and marketing personnel from the London area, participated in the launch of the training program in Burgess Hill south of London at the beginning of July. The first day was devoted entirely to the philosophy behind Consono.

A prerequisite for following the lectures is the Ericsson publication, "The Consono Philosophy" .

Course participants are expected to have familiarized themselves with this booklet. But explaining the philosophy is only the first stage. Participants subsequently delve more deeply into all the different areas that make up Consono. The entire course package lasts 10 days.

It is certainly not by chance that training begins in the U.K. Ericsson's Business Networks division there has taken the lead over the past few years in its total commitment to sales of solutions, thereby achieving major market successes. Richard McLeod began by giving a broad outline of today's market situation.

"Sales and marketing are key competencies in the chaotic world we now inhabit," he emphasized.



Here is the booklet describing the Consono philosophy. Read it!

Deregulation

Previously, Ericsson conducted sales primarily via the major telecoms, which meant obtaining a large volume of business from a small number of customers. Ericsson had little knowledge of the end user. Everything has been changed at one stroke by the expansion of the IT world, and the arrival of many new operators, against the background of deregulation.

In the U.K. alone, where deregulation began as early as 1983, there are now more than 150 authorized new operators.

With more players in the market, the spotlight falls increasingly on the end customers, who thus acquire more power.

The trends are clear. Data, telecommunications and consumer electronics are converging. Deregulation is gaining pace, and Ericsson is working increasingly with open solutions. An increasing number of standard components are used, and the technology in use is shared to an increasing extent with competitors.

The products naturally continue to be highly important, but customers mainly demand total solutions that cover all their communications needs. Ericsson can meet these needs by understanding better than anyone else what the customers want and how best to offer reliable and cost-effective solutions.

McLeod singled out as an example the closely related computer industry, in which he used to work five years ago, prior to joining Ericsson. Of ten globally based computer companies, headed by IBM, active in the 1980s, only three had survived until 1992, again headed by IBM. In many markets, the telecom sector has witnessed a similar scenario, albeit with a less dramatic impact thus far.

Added value

The need to focus on value-added services as well as products is clear from a study of margin trends in the hardware segment. As late as 1993, the segment had margins of 50 percent on sales of hardware. By 1995, this figure had decreased to 45 percent, and it is estimated that this figure could plunge to 20 percent as early as 1998. How is Ericsson to survive, when the competition comes not only from within its own industry but also from many related areas?

The answer: by understanding better than anyone else what the customers want and need and concentrating on what the company is really best at. What Ericsson is not best at it will purchase from someone else.

Combined with the strength of the Ericsson name, Consono is an entry ticket to the market. Expressed simply, the customer purchases a close relationship with Ericsson, placing total reliance in the solutions offered and trusting that the company has the resources to implement them. In the U.K., Ericsson currently controls between 25 and 30 percent of the segment of the PBX market for systems with 200 or more connections. Now Ericsson is focusing even more intensively on this area of the market and the entire total-solution concept. Consono as a concept is an essential tool. Ultimately, it is a question of changing our entire philosophy, a process which, according to McLeod, can take several years to be fully implemented.

Absorbed course participants apply themselves enthusiastically to interactive training.

Rapid changes

When Paul R. Tuton begins to speak, he becomes the focus of everyone's attention. He has the gift of captivating his listeners and interacting with them. Questions and answers are exchanged constantly. At breakneck speed he describes the incredible developments that have occurred during the past few years. Here is an example. In which year were there workgroup applications for PC users that could just about handle sharing of printers and hard disks? At the time, there were only 700,000 Windows users worldwide, the version in question being 3.0, and the Internet had 100,000 users (the figure at the time of writing being more than 20 million, and growing constantly). "Well, which year are we referring to?" asks Tuton. To the amazement of many, the answer is 1990. Such has been the pace of development, and this is still only the beginning.

The integration between telephony and data applications (CTI) can best be handled by developing solutions that are attractive to the market. The most important thing for Ericsson is to clarify unequivocally which market niche it is most competent in.

Simple concept – complex technology

To date, we still mainly have separate networks for voice, data, images and video, but development is proceeding rapidly towards increasingly integrated solutions which combine all the different forms of communication. While the technology is increasingly complex, the actual concept is simple – it is a matter of handling the customer's total communication needs in the best possible way, which is where Ericsson comes into the picture as a problem-solver.

One of the special features of the Consono concept is that it should be as simple to explain the benefits of our communications solutions to a company's management personnel, who may lack detailed technical knowledge but possess business know-how, as to technicians, system administrators and end users in the company's overall organization. Regardless of who the contacts are at the company, the Consono concept places the focus on the functionality, not the technology. Because functionality is what Ericsson is selling.

There are five areas in which Ericsson is particularly strong, and where the Consono concept comes into its own: network solutions (including MD 110, Eripax and routers), system supervision and network support (covering all the variants of Dynamic Network Administration or DNA), queuing systems (Call Center applications), user Applications (Personal Applications) and mobility (for example, Freeset and Mobility Server).

Infrastructures are designed in conjunction with network solutions, while DNA ensures operational reliability. Using queuing systems, user applications and mobility, effective work groups can be created, within which individuals can enjoy creative freedom and thus be more productive. And this is true regardless of location; creative work can continue in the office, in the car, at home or during trips. Consono gives its users total freedom. And there is a Consono solution for every customer.

THORD ANDERSSON

The telecom market in Colombia is growing in leaps and bounds. Current trends are progressing toward a highly deregulated and expansive market. New conglomerations of operators are being formed constantly, and the presence of international telecom companies is very obvious. In the past five years alone, Colombian investments in telecom equipment and services have surpassed one billion U.S. dollars.

Ericsson celebrates 100 years in Colombia

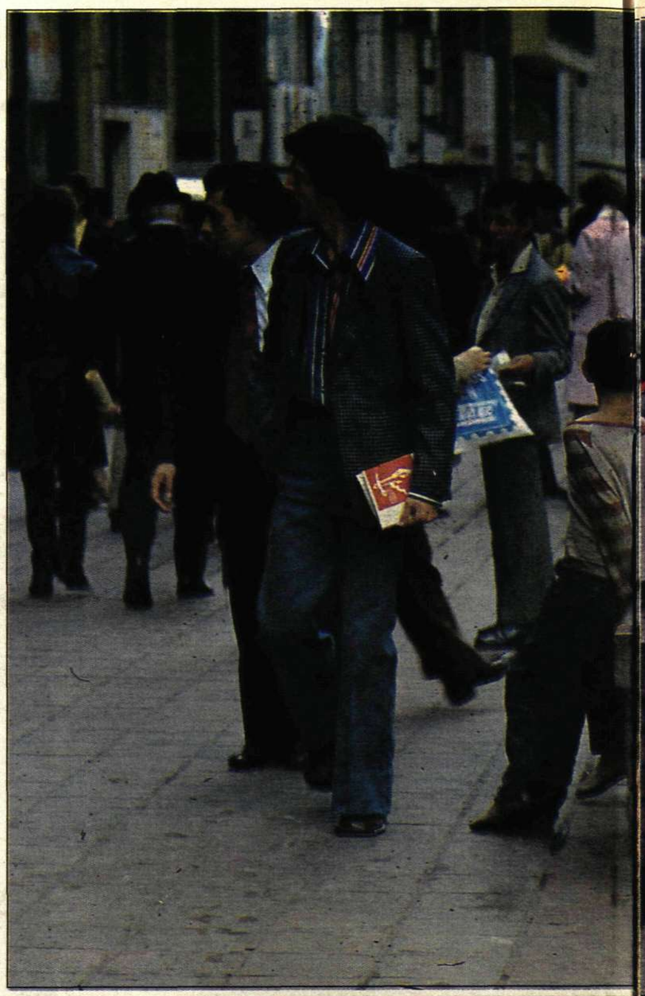


Photo: PRESSENS BILD

Ericsson defends its market position admirably in the volatile and expansive Colombian telecom market. In fact, Ericsson has rich and long traditions in the South American nation. This year, 1996, marks the 100th anniversary of the first order ever booked by Ericsson in Colombia, an order for 50 telephones. Today, Ericsson delivers 500,000 AXE lines annually to Colombia, which also lays claim to the most rapidly expansive mobile telephony market in all of Latin America.

"The fact that Ericsson has conducted business in Colombia for such a long time helps to convince customers that we are a reliable company with long-term interests. To many people in Colombia, Ericsson is synonymous with quality. Ericsson is also linked strongly with many families' first telephone," explains Angela de Behar, who is now working on a book to commemorate Ericsson's first 100 years in Colombia.

Ericsson Colombia has nearly 500 employees today, 99 percent of whom are Colombian, and annual sales of approximately USD 200 M. The company has grown during recent years, and now occupies cramped quarters at five different locations in Bogotá. Negotiations are underway to acquire new premises and concentrate all resources under one roof. The exchange of information with other Ericsson companies in South America, and Sweden, is an integral part of operations. With its many skilled engineers and technicians, Colombian technology has a solid reputation throughout the world.

Fragmented market

Colombia has 25 local telecom operators for wired telephony today, as well as a national long-distance operator and six mobile operators. Several new operators have also been licensed recently to begin telecom activities.

The fragmented nature of the Colombian market is attributable to its traditions and prevailing legislature. Every city and town has its own telecom company, structured in the same way as power companies, refuse collection and other community services. Aggressive and liberal telecom legislature has now paved the way for sweeping changes. During the years immediately ahead, many acquisitions will be made in parallel with a host of mergers and the emergence of new companies. As a supplier, it will be highly important to invest in the "right players."

"It won't be easy for Ericsson to organize its operations in such a manner that will satisfy the needs of all these operators. The market is characterized by various corporate cultures and changing negotiating techniques between different telecom companies. It is impossible for us to sit in the middle and handle everything. It is essential that we establish a market presence in all areas," explains Björn Magnusson, president of Ericsson Colombia.

Large risks – high margins

A shortage of foreign capital, coupled with an excess of ambitions and well-developed technical know-how, has created a new mode of business operations in Colombia, especially in the telecom industry. Joint ventures and risk distribution transactions are becoming increasingly commonplace. Suppliers are getting more involved, taking greater risks and reaping higher profits. This new wave has eliminated the need for telecom operators to raise hard currency abroad, but still enables them to invest in the very latest technology from Ericsson and other companies. The emerging trend is not unique to the Colombian market, but it has emerged more clearly and progressed farther than in Colombia than many other countries.

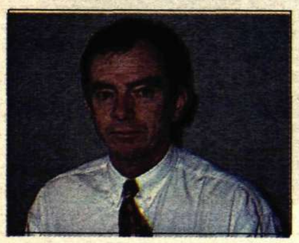
"As a result, Ericsson is forced to find new sources of risk capital and minimize our own exposure. We are seeing the future today and, in time, it will present a means of increasing our margins, since higher risks also generate greater financial rewards. It offers a way to climb higher in the value chain," explains Björn Magnusson.

One of the more recent examples is a joint venture between Ericsson and Bogotá's operator, which ordered 550,000 lines and awarded Ericsson one-fifth of the lines in one of the more profitable sections of the city in competition with all major suppliers. The contract, in brief, awarded Ericsson 110,000 lines, of which 10,000 will have radio access (DRA 1900).

"Business operations in the field of public telecommunications in Colombia have increased tenfold for Ericsson in the past three years alone. The market began to really take off in 1994," says Janos Fugedi, who is in charge of public telecom at Ericsson Colombia.

"We submit three-five bids every week and constantly have jobs valued at USD 150 M on offer, resulting in more than 40 contracts every year. The way things are today, we are forced to turn down some business due to lack of time. And there is no end in sight. Based on our present order backlog, we've got enough work to last through year-end 1998," he continues.

Telephone density in Colombia corresponds to about 12 lines per 1,000 inhabitants, but the figure jumps to about 30 lines per 1,000 inhabitants in large metropolitan areas. Compared with Europe, the figures are extremely low and the country offers enormous potential, although the number of poverty stricken people in Colombia is a restricting factor. During the next few years, public telecommunications will comprise the dominant part of Ericsson's business activities in Colombia. Today, about 55% of all lines now in service in the Colombian market were supplied by Ericsson.



"Ericsson's business operations in the field of public telecommunications in Colombia have increased tenfold in the past three years."

Björn Magnusson, Ericsson Colombia

Young but mature mobile market

Colombia's mobile telephone market has not developed totally along the lines Ericsson might have wished. Of the market's six mobile telephone operators, Ericsson supplies only two, neither of which is situated in the important Bogotá area. Mobile telephony is still in its infancy in Colombia, however, with only two years of operations and a great deal can happen during the next few years when the exclusive rights licenses of present operators expire. Ericsson's wireless network intelligence has already achieved considerable success and may provide the ticket to a bright future in the mobile market.

"Ericsson has about 25percent of the system market today and perhaps 30 percent of the market for actual telephones," says Erasmo Rojas, manager of Ericsson Radio in Colombia.

Different customer groups

In a matter of only two years, market penetration has reached about one percent, which is considered very rapid. Customer groups in Colombia are different compared with other countries. The Colombian market started as a mass market, and focus was shifted to businessmen and women only recently. Security aspects, which may have greater significance in Colombia than in many other countries, have also contributed to mobile telephony's rapid development.

"Today, a major priority of all operators is to increase the average call time of their subscribers. Licenses cost more in Colombia than most other countries, and nobody wants to lose money on subsidized new subscriptions before they reach the break-even point," says Erasmo Rojas. "The operators are trapped. They don't dare increase prices at the risk of losing subscribers and they can't afford to reduce rates."

Colombia divided into three regions

Colombian telecommunication authorities divided the country into three regions and awarded two licenses in each. One license per region was already assigned to a publicly owned operator. Thirteen consortiums submitted bids for the remaining three licenses. Obviously, full competition was the rule from "Day One" of mobile telephony in Colombia. The licenses were granted for 10-year periods, with exclusive rights for the first five years. Even now, new operators are making preparations to enter the market.

Because of its late emergence in the Colombian market, mobile telephony in this South American nation has been spared the growing pains experienced in many other countries. The market has matured quickly and customers are highly receptive to new technologies. Cocelco, the operator in the Cali region, for example, has recorded significant success with its so-called intelligent mobile network from Ericsson. The investments and network build-up originally planned by Cocelco during its initial five years of operations were completed during its first year on the market.

Better than its reputation

Somewhat undeservedly, Colombia has gained a reputation as a dangerous place for foreigners, a place where drug lords and guerrillas rule the roost. The truth is a different story.

The largest drug lords are behind bars and parts of the international drug traffic network have left Colombia. However, with the country's relatively widespread poverty, it is difficult to put an end to lucrative drug trafficking altogether. Colombia's economy reflects an upward curve, and the Government is implementing various social welfare programs to improve the plight of its most needy citizens. The country is politically stable and there is widespread agreement over its programs of market liberalization.

Generally safe

President Samper has fallen out of grace with the U.S. government, due to allegations that he accepted money from drug cartels to finance his election campaign. The American market is undoubtedly vital for Colombian exports, and these allegations could eventually unseat President Samper, but Colombia's political system would not be jeopardized.

Foreigners should be careful and not challenge fate unnecessarily. However, it is generally safe to live in Colombia or visit the country on business. Bogotá is no worse or better than most of the world's other large metropolitan areas.

Ericsson Colombia receives foreign visitors on a daily basis and conducts business operations in all parts of the country without ever having been the victim of any major misfortune.

PATRIK LINDÉN

Colombian orden

"For 25 years of honorable contributions to Colombia and for the support of good business relations between Scandinavia and Colombia, in particular within telecommunication". This is part of the motivation why Alfred Svensson, Ericsson Corporate Markets, received a Colombian orden last spring.

On this picture we can see Alfred (right) after he received the orden from president Samper (middle). Björn Magnusson (left), president of Ericsson Colombia, also participated in the ceremony.

Colombia a shifting landscape

■ Colombia is about two and half times the size of Sweden (1.1 million square meters). The country's landscape shifts from its long coastlines along the Pacific Ocean and the Caribbean Sea to three mountain ranges that reach as high as 5,000 meters above sea level. Colombia's shifting landscape yields a variety of climate conditions, depending on altitude, while some regions maintain constant conditions due to their proximity to the Equator. Colombia has a wealth of flora and fauna, encompassing large jungle areas.

■ Colombia has a population of about 36 million, of whom 6.5 million live in and around the capital city of Bogotá. It is a republic and the second oldest democracy in South America. Despite problems with poverty, drug trafficking and other crime, Colombia is politically stable by most standards and its economy shows promise, with only modest inflation.

■ Inflation has declined for the past several years and is expected to level off at about 17 percent in 1996, which is considered acceptable by Latin American standards. Growth calculated in GNP in 1996 is estimated at slightly more than 4 percent, following three years of more than 5 percent. Over the past 20 years, economic growth in Colombia has exceeded corresponding growth in all other Latin American countries.

■ The Colombian economy is also diversified, reducing the country's dependence on one single export product. Its largest export products are oil (18%), coffee (15%) and coal (8%), with the remainder distributed among a large number of goods and services.

■ Accurate statistics showing the actual number of unemployed and how many Colombians are engaged in drug trafficking are not available, of course. Clearly, however, a not insignificant percentage of Colombia's economy is attributable to the informal sector.

Precision. Michella De Vries at Ericsson's plant in the Netherlands mounts components in Teletracer on-site paging devices manufactured for Ascom.

During the past year, the Ericsson plant in Emmen, in northwest Netherlands, has been engaged in a change program for fulfilling the requirements for becoming a so-called model plant within Radio Communications.

Production has for many years included on-site paging devices, with emphasis now being placed on wide-area pagers.

Emmen focuses on radio

Head of Ericsson's operations in Emmen. **From left, Peter Steen, development manager for wide-area paging devices, Gerrit Koning, president, Roel Zwiers, plant manager, Gradus Bruins, controller and Herman Kattenbeld, who heads production of wide-area paging devices.**

Among the goals of the model-plant concept is that all plants within Radio Communications shall work in accordance with standardized manufacturing processes, utilize specially selected production equipment and computers, and to test and measure quality in a corresponding manner. This applies to all plants worldwide.

The advantages are manifold. Above all, this removes the necessity for plants to reinvest the wheel time and time again and can, instead, benefit from others' experience. This simplifies relocating production from one plant to another. It reduces the cost of buying equipment since purchases can be coordinated and Ericsson thus becomes a more important customer.

Relocated radio modem

Emmen is located about two hours by car northeast of Amsterdam, and is one of the latest in a succession of Ericsson plants that has been subject to a change project and become a so-called approved "Radio plant."

"In connection with the change project, we also relocated a product – radio modem for mobile data (Mobitex) – from the Kumla plant to Emmen, thereby enabling the changes to be tested in practice," relates plant manager Roel Zwiers.

The Emmen plant also produce cordless office phones and systems (DECT) but the main product is personal pagers for on-site systems. These are produced for Ascom Tateco, an Ascom-Ericsson joint venture.

Manufactured to order

"Although many plants' production is based on forecasts, we produce only when an order has been received. In this way, we reduce inventory costs and, since in most cases, we produce a range of variants in small volumes, it is better and provides greater flexibility to maintain descrete components in inventory," he continues.

Otherwise, there is unusually ample premises for the approximately 220 employees. When Contact pays them a visit, most of the workforce is still on vacation, but Michella De Vries is present and mounting components in a Teletracer personal pager. In fact, nine out of ten assemblers are women.

Next door to research

But adjacent to the factory premises, quite a few more men are working. Here, hundreds of persons are engaged mainly in research and development within personal paging systems and management systems for Ericsson Radio Systems BV, which is a unit within the Radio Messaging business unit.

"Late last year, we formed a cooperation with Ascom with regard to personal on-site pagers, although production and R&D are to remain here, at least until 1998," says Gerrit Koning, who is president.

"We have always maintained a close cooperation among the development, production and market units, this also applies to our development of the new personal pager for wide area paging, WAP"

New personal pager

The new personal pager will be unveiled some time next year and will be produced here in Emmen, where Ericsson is the fourth largest employer.

"Expectations are of course high and it is important being able to influence your own future through development and production of own products," Koning says.

LARS ERIKSSON

Ready to branch out

The Gothenburg suburb of Västra Frölunda is the home of Ericsson Emergency Control Systems AB, specialists is the development of programs for critical systems, those that are never allowed to crash. To date, customers have been SOS, the police and similar organizations, but now the company is seeking to branch out into other areas within Ericsson.

In early June this year, Ines Uusmann, Sweden's Minister of Communications was in Gothenburg to inaugurate a hypermodern SOS Alarm Center housed in a

For Ericsson Emergency Control the future is allready here

spacious building in the center of the city. The SOS Center handles all "112" calls and connects them to the police, fire department and other emergency services.

Ericsson, more exactly Ericsson Emergency Control Systems AB, was responsible for the software and the control systems.

Company of the future

With some 100 employees, the engineer-packed company has its roots in Volvo and Swedish Telecom prior to being transferred to Ericsson a few years ago in conjunction with the acquisition of Teli, a Swedish Telecom subsidiary. The company is now part of the Radio Communications Business Area.

Ericsson Emergency Control is an expert in developing programs for so-called critical systems, that is. extremely reliable systems which are not permitted to fail. These include such community service systems as those used by the police, ambulance service and fire department. Of course, this is a very small niche, but the company is one of the most competent in this niche in the world.

It could be said that Ericsson Emergency Control represents the future to the extent that it is already what all of Ericsson is gradually becoming – a qualified software supplier that develops optimal, integrated solutions in cooperation with the customer, based on standard components.

Striving for general products

There is expertise in the company which is considered very important to Ericsson in the future.

Ericsson Emergency Control Systems AB specializes in developing extremely secure systems in close cooperation with its customers. The executive team of the company is gathered outside the entrance at the company headquarters in Västra Frölunda, Gothenburg – from left to right: CG Carlebom, marketing; Lilian Lund, economy and finance; Micael Caiman, technology; Lennart Nilsson, president; Maria Zetterlund, human resources and Claes Hellström, who was project leader for the new Coord Com system.

"Previously, we customized solutions for our customers. Now we are striving to shift toward more general products with a basic platform from which we can develop customized solutions, " says Lennart Nilsson, president of the company.

"This is a prerequisite in order to also develop and sell our products abroad."

Behind this swing toward a more entrepreneurial approach, is a stern reality. Competitors are banging on doors. The time has past when someone, such as Swedish Telecom, could invest vast sums in establishing a national emergency number system. No one can afford such an investment any longer. In order to sell the system, Ericsson Emergency Control must break it down into components and sub-amounts which meet specific requirements.

Difficult to sell internally

Another, equally important, objective in order to become a natural part of Ericsson's business operations is to develop internally within Ericsson. However, this has proven to be more easily said than done.

"We have probably invested just as much energy and time to become known within Ericsson as we have on cultivating customers," comments CG Carlebom, marketing manager.

Obviously it is not easy for a new company to break into the various development projects despite having qualifications which should be attractive.

"Agreed, we lack traditional telephony and AXE know-how," says Micail Caiman, technical director. "But, in return we have years of experience in developing systems with extremely high demands on performance and reliability and with total solutions in cooperation with the customer. This know-how should be valuable within Ericsson, for example, if we were involved in the early stages of a prototype project involving customer trials. Another area would be support systems for mobile telephony and radio systems."

Supporting Ericsson

"We want to identify projects in which we can support Ericsson's business activities," says Lennart Nilsson.

Currently, mobile data is a primary area (in which the company actually pioneered an automatic system for taxis in the late 1970s) and Mobitex with data communications and applications. By extension, other areas include the EDACS private radio system and the MD110 PBX business subscriber exchange. Accordingly, Ericsson Emergency Control will participate this autumn in a development project for the future international standard for private radio.

"An attractive area for Mobitex is communications between ambulances and the emergency hospital, through sending EKGs from the ambulance," adds CG Carlebom. "Image transmission is also being discussed, but this is for the future."

More visual applications

Micael Caiman foresees a trend of a general shift toward more visual rather than text applications. For example, multimedia, mapping support systems or mobile video cameras. For SOS Centers this could involve the transfer of images from the emergency site or accident scene by telephony or radio to the Alarm Center.

TEXT AND PHOTO: LARS CEDERQUIST

Ines Uusmann, Sweden's Minister of Communications was in Gothenburg to inaugurate a hyper-modern SOS Alarm Center in the City. The Center is using Ericsson's CoordCom-system, developed by Ericsson Emergency Control.

Several interesting products

■ The flagship among Ericsson Emergency Control Systems AB's products is CoordCom, a very reliable alarm and control system which is a decision support for operators and which integrates telecom, data and radio communications in a comprehensive and logical manner in a single terminal workstation. A specially designed oversized keyboard helps the operator save precious seconds through simple pushing of buttons.

In contrast to centralized, CoordCom is a distributed system with computer power at each workstation. The system was developed for SOS Alarm Centers, but is also specially adapted for security companies, such as SecuriCom for the Securitas firm, which opens up good opportunities for export, CoordCom has mainly been concentrated in Sweden, but there are currently several systems in Spain.

In Sweden, CoordCom has been used in 16 of the country's 20 SOS Centers, The systems is now available in a third, faster, more flexible and powerful generation CoordCom G3, for Sweden's major cities – Stockholm, Gothenburg and Malmö. The new SOS Center in Malmö was inaugurated this spring. The center in Gothenburg opened in June and the new facility in Stockholm is scheduled to be opened early next year.

■ Another interesting product is "Field Companion," which is a valuable PC-based aid for ambulance personnel and the police. The tool, which was developed by EGS as an application for mobile data, makes it possible for ambulance personnel to integrate with the ambulance center and the emergency hospital, with apparent benefits.

For the police, the Field Companion means that most reporting and administrative work can be performed on-site, in the car, with substantially easier administration based on standard forms and in which all information is stored in a memory card, PCMCIA card.

Ericsson has conducted operations in Peru for 50 years, but sales did not really take off until 1995. The workforce increased tenfold in a year and it is estimated that approximately 400,000 new lines will be delivered in 1996, the same as 1995. This is in a country where penetration was just over three lines per hundred inhabitants two years ago. In other words, the growth potential is excellent.

Ericsson reaches new heights in Peru

This year, we're focusing on structuring the enormous growth we have enjoyed since 1994. Our workforce has risen from 16 to 160 people in a year. This creates something of a pioneer spirit," says Román de los Mártires, president of Ericsson's Peruvian company.

Peru was previously a small market for Ericsson, but the recent growth has made it an interesting country.

The reason for Ericsson's success is found in Spain, where Ericsson has been a supplier to the operator Telefónica for many years. When Telefónica International started its South American venture a few years ago, it was natural that Ericsson followed suit.

"The solid cooperation we enjoyed in Spain was quite simply transferred to Peru," says Román de los Mártires, who himself relocated from Ericsson's Spanish company. "The customer can now speak to the same person here in Lima as he did in Madrid. As a result, getting operations moving over here has been a very rapid process. The fact that materials approved and tested in Spain can be installed directly in Peru also saves time."

The expression "one face to the customer" has thus be expanded to apply across geographical borders and not just in business areas.

Formerly, Ericsson's Italian company was responsible for Peru.

"The Italians did a good job and cleared the ground for today's expansion. It's important to show that Ericsson has a long-term focus and is prepared to pursue its investments, even during less successful times. But when Telefónica came to Peru, it was natural that we moved people here from the Spanish company," says Román de los Mártires.

An open and free telecom market

The background to Spanish Telefónica's large-scale venture in Peru was a decision by the country's president, Fujimori, to open the country to foreign capital and privatize the national telecom company. In 1994, the Spanish company acquired 35% of Peru's state-owned telecom company, Telefónica del Peru. Today, the government owns only 5%, and it will probably also sell this interest. The sale has generated slightly more than USD 3 billion of well-needed funds for Peru.

The country's basic telecom services will be opened up completely in 1999, by which time Telefónica del Peru intends to have made all the rationalization measures and investments required for it to maintain a large proportion of the market. By 1999, Telefónica will have invested USD 2 billion. To date, the workforce has been reduced by nearly 50% and additional rationalization measures are expected.

Mobile telephony has already been completely demonopolized.

"We will experience strong growth for at least the next three to four years, with Ericsson as our main supplier," says Manuel Amado Sepera, who was appointed by Spanish Telefónica to manage Telefónica del Peru.

Healthy climate of cooperation

"The synergistic potential is substantial since Spanish Telefónica has investments in large parts of Latin America. Today, Telefónica International is active in Argentina, Chile, Venezuela, Colombia, Puerto Rico and Mexico," says Manuel Amado Sepera. Spanish Telefónica's ability to expand so strongly in Latin America is mainly attributable to the shared language and cultural and historical bonds between Spain and Latin America. However, it would not have been possible if Ericsson had not been established in all these markets.

"Ericsson and the Spanish Telefónica units in South America have become a team that works towards common goals. Sometimes we don't even think about our parent companies in Europe. This illustrates how well our cooperation is progressing," says Manuel Amado Sepera.

According to current forecasts, telephone density in Peru will amount to slightly more than 11% at the turn of the century. The reason why a higher figure is unlikely is the widespread poverty in the country. In view of the fact that 67% of the population live below the limit for critical poverty (approximately SEK 2,000, or USD 300, per month), it is not surprising that buying a telephone is not at the top of people's lists of priorities.

Despite the poverty, the country's economy is beginning to take shape and gain momentum. In 1990, the rate of inflation was an incredible 7,650%. By 1995, it had been reduced to a manageable 10.2%, the lowest rate in Peru for 23 years. In terms of growth, Peru can show figures that would make any government envious. The 13% growth rate attained in 1994 was the best in the world that year. The growth rate in 1995 was approximately 7%. It appears that 1996 will be a year of consolidation, while the forecasts for 1997 and 1998 are very bright.

"Peru is beginning to become respectable in an international economic context. Foreign confidence in Peru was aptly demonstrated by the substantial funds generated from the various privatizations," says Lars Schönander, Sweden's Ambassador in Peru. "Naturally, the embassy is eager to provide all the support it can to Swedish export companies active here in Peru. But less and less support is required. Now that the effects of market economy are becoming increasingly tangible, it is seldom that bureaucracy or politics cause any problems."

With respect to fixed telephony, Ericsson has a strong position with a market share of 65%. However, the company has to compete with both Lucent and Alcatel.

Due to the uneven distribution of incomes in Peru, three different segments of the telephone market are clearly distinguishable. Firstly, the installation of public telephones in impoverished areas, mainly with the help of international development funding. Secondly, ensuring that the middle class have telephones, which was previously inhibited by long waiting periods. And thirdly, investing in international telephony for large companies.

Late mobile market

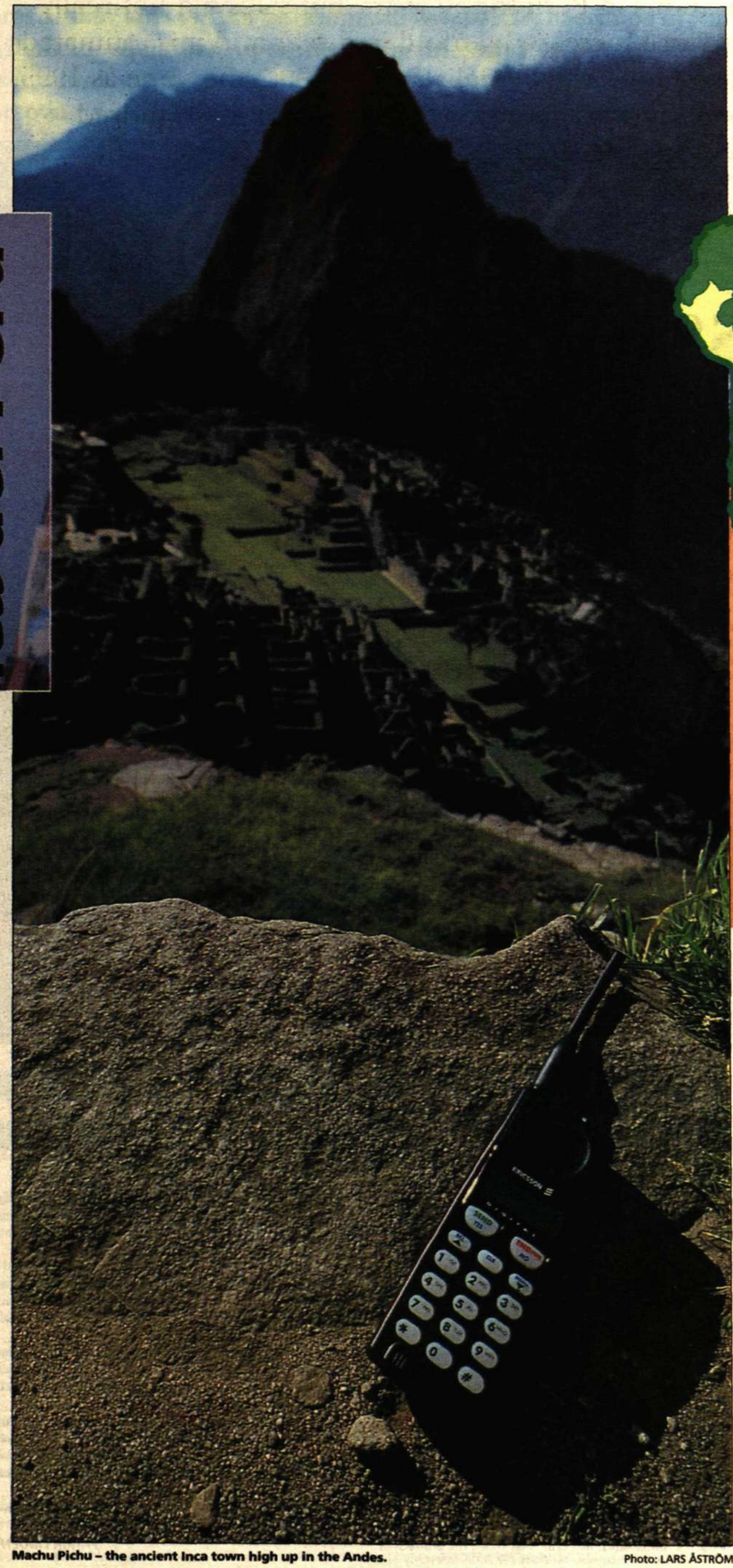
The mobile telecommunication market has still not gained any real momentum in Peru, which has two small analog AMPS networks and a trial CDMA network in the pipeline. However, the market is waiting for America to choose between TDMA and CDMA. To date, Ericsson has no position at all in the Peruvian mobile telephone market.

After 50 years in Peru, sales are beginning to gain momentum

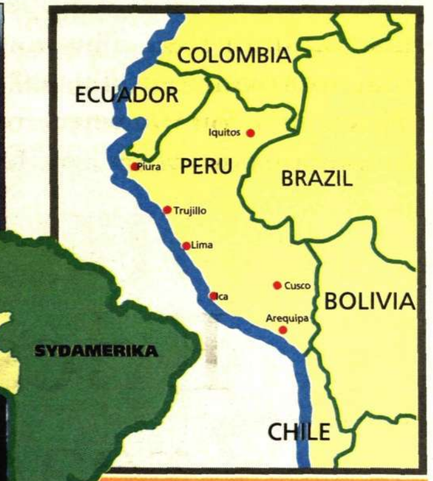
"Ericsson's principal goal for 1996 is to penetrate the mobile market," Román de los Mártires explains. "The product we will offer is TDMA. But we also want to make a break-through in the cable TV market, which is still in its infancy, and invest more heavily in sales of transport networks."

Due to Peru's undulating geography, network expansion is a time-consuming and costly process. This factor, combined with the country's poverty, are the reasons why it has taken time for the mobile market to get started.

PATRIK LINDÉN



Machu Pichu – the ancient Inca town high up in the Andes. Photo: LARS ÅSTRÖM



Peru is three times as big as Sweden

■ Peru has approximately 24 million inhabitants, of whom 7 million live in the capital Lima, which is situated on the Pacific coast, just south of the equator. With a land area of 1.3 million share kilometers, Peru is three times larger than Sweden. Peru has a low-lying coastal strip facing the Pacific Ocean and several inland mountain chains, the highest of which reaches 6,768 meters above sea level. The northeast is a forest-covered lowland area, facing Colombia and Brazil.

■ President Alberto Fujimori was elected to power in 1990 and implemented a so-called personal coup d'etats in 1992, when he replaced congress and announced a new round of elections. Since then, the country has had two presidential elections and one congressional election, so Fujimori is regarded as a democratically elected leader.

■ Peru has long been affected by terrorism, mainly by the fraction known as Sendero Luminoso. Since 1992, however, when the leader of this fraction was imprisoned, there has been at least a temporary abatement in terrorism.

Román de los Mártires, president of Ericsson's Peruvian company, (left) works very closely with principal customer Telefónica. Here together with it's president, Manuel Amado Sepera who was brought to Colombia from Spanish Telefónica.

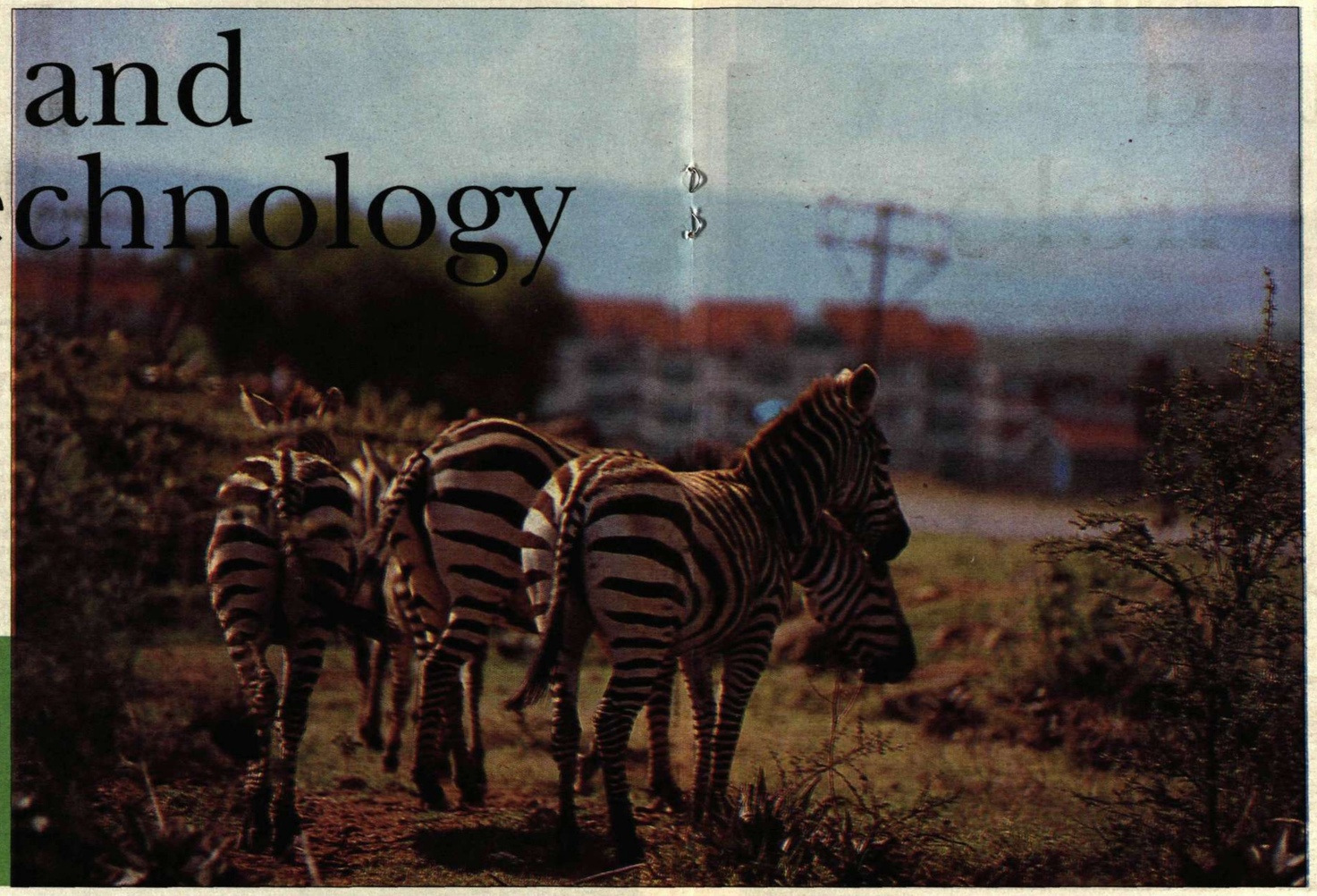
Photo: PATRIK LINDÉN

Ericsson's Training and Support Center in Lima. When the market exploded in 1995, the need for training was substantial. This applied to both Ericsson's own personnel and its customer. The first action when new premises for training was bought,r was to paint them in the apt color of Ericsson blue. Photo: PATRIK LINDÉN

Ericsson's first AXE assembly plant in southern Africa was inaugurated earlier this year in Gilgil, Kenya. Two worlds meet here – symbols of the old and the new, providing proof that modern and traditional can indeed coexist.

We are just a few kilometers from Ericsson's factory in the Kenyan city of Gilgil when two zebras suddenly dash across the road in front of us. Mayank Amin, an employee of Technical Engineering, Ericsson's agent in Kenya, slows down and, when we ask to get out to take a closer a look at the animals, he says: "Be careful, zebras can be dangerous when they are protecting their young."

Zebras and high technology



Expansion in Kenya
An ETACS network has been in operation in Kenya for several years. A new GSM network will be ready to begin operations in early autumn 1996, providing 5,000 new lines with added capacity to expand to 20,000.

The AXE plant in Gilgil is a giant step forward for Kenya and all of eastern Africa

Zebras and high technology! For Kenya, and all of eastern Africa, the AXE assembly plant in Gilgil represents a giant step forward. The plant is not only the most technologically advanced factory in the region, it is also a symbol of progress in an area plagued by many years of economic decline and political instability.

GTI (Gilgil Telecom Industries) is a telephone manufacturing company owned by KPTC, the Kenyan telecom administration. In the past, GTI also produced manual telephone exchanges under license from Ericsson.

Ericsson-GTI has a 10-year agreement with KPTC to deliver 100,000 telephone lines annually. The equipment will be produced in Gilgil. The fact that the plant's main customer will now also be an owner does not eliminate any pressure on performance expectations.

"AXE switches produced here simply may not cost more than exchanges sold by Ericsson in other parts of the world. We are under continuous pressure to prove our ability to compete. Our main objective is to achieve profitability, and we have no restrictions that prevent us from selling products to companies that compete with our owners," says J.K. Masonik, president of Ericsson-GTI.

22,000 new lines

The first lines to be delivered this autumn were built mainly in Sweden, but before year-end, the Gilgil plant is expected to begin assembling complete AXE switches. Eventually, there is also capacity to make cabinets.

"By year-end 1996, we will produce 22,000 lines. We also have the capacity to produce more if demand increases. We hope our presence here will attract other engineering companies to Gilgil and, in time, we have the potential to become a high-tech zone in eastern Africa. We are already attracting visits by presidents and other political leaders who have visited Kenya," continues J.K. Masonik.

Initially, Ericsson-GTI plans to concentrate on operations in Kenya and other countries in eastern Africa. Eventually, however, the company has potential to expand farther afield. Close proximity to the market provides important advantages. If a customer in Uganda needs an additional 2,000 lines, the Gilgil plant can supply the lines in a matter of just a few weeks.

The telecom network in Kenya consists of a variety of equipment, ranging from manual switches to Ericsson AXE switches.

There is a general suspicion throughout Africa that countries in the West often "dump" their surplus products on African nations. For this reason, Mr. Masonik emphasizes, especially for customers and other visitors, that his company sells only the very best and most modern products.

"We receive all the updates just as quickly as all other plants. Since we started operations, we have already reached very high quality levels. Our company is an excellent example of the technology transfers that so many companies say they want to achieve. The fact that AXE switches are made here in Kenya will eventually encourage neighboring countries to choose our products over goods imported from countries outside Africa."

Keen competition over jobs

The assembly plant in Gilgil is possibly the cleanest building in Kenya, or at least that's the feeling we got as we removed our shoes and entered the plant. Although GTI has nearly 500 employees, only about 30 persons now work at the AXE assembly plant.

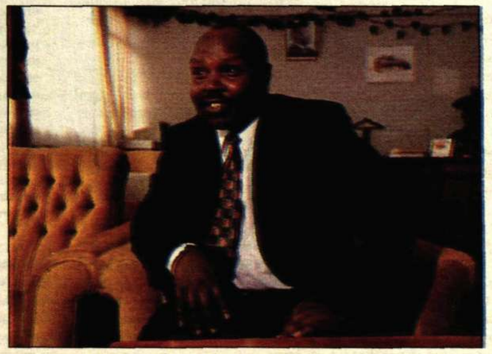
"The competition for jobs in Kenya is extremely tough. As a result, our labor force is very well-trained and highly motivated," explains Naah Ochanda, an engineer at the plant and one of the supervisors in charge of operations.

Eusila Baraiywo was employed by GTI for three years before she was offered the opportunity to join the new company. She produces cables, and her job performance standards are such that the Gilgil plant has already reached quality demand levels prescribed by Ericsson.

"Basic conditions here are the same as in other parts of the world, so there is no reason why we cannot make products as good as the products made in Europe," says Naah Ochanda, with a sense of pride in his voice.

Technical Engineering has represented Ericsson in Kenya since the mid-1970s. The company booked its first order for telephone exchanges in 1982 and, in 1986, GTI started to assemble manual exchanges in Kenya. Today, company representatives are naturally satisfied with their progress.

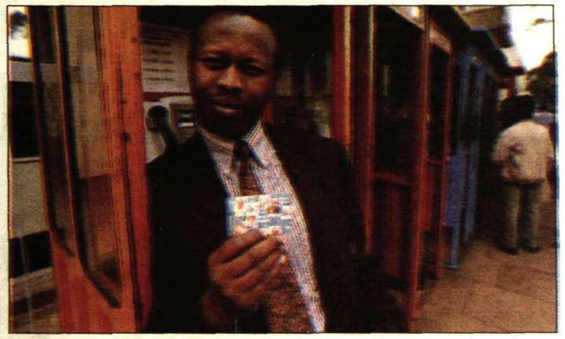
"In 1989, we started to discuss the possibility of making AXE switches here in Kenya in cooperation with KPTC and, by 1994, we had progressed to the point whereby we felt justified in establishing a jointly owned company," says S.N. Amin, president of Technical Engineering, who would also like to see Ericsson invest in mobile telephony in eastern Africa.



"Our main objective is to achieve profitability, and we have no restrictions that prevent us from selling products to companies that compete with our owners," says J.K. Masonik, president of Ericsson-GTI.

"Mobile telephony is another market that will grow rapidly during the next few years," says Mr. Amin.

DAVID ISAKSSON
PHOTO: VICTOR BROTT



"Economic conditions in Kenya are showing signs of improvements, and growing numbers of people can now afford telephone service," says Nelson K. Ronoh, acting director general of KPTC, Kenya's telecom administration.

Invest in Africa!

Jan Hartzell is the marketing manager of Ericsson's Africa Department, with responsibility for Kenya. In his opinion, Kenya exemplifies the development and progress now being made in several regions of the African continent.

"In the past, Africa was not a major market for Ericsson, but we are seeing signs of growing demand in several regions, with interesting potential in a number of African nations. It is important, therefore, that we invest the resources needed to develop this emerging potential," says Jan Hartzell.

Early this autumn, the first locally produced AXE switch will be installed in the community of Lanet. According to present plans, seven more AXE switches will be completed before year-end 1996.

Lanet is an agricultural community comprising many large farms that now lack direct telephone communications to other countries. The old exchange has been overloaded for years and communications breakdowns are frequent.

Telephone out of order

Accompanied by George Mugwe, operations manager in Lanet, we traveled throughout the area and soon were met by several of his customers. Sue Borissow manages a small company that sell machines and spare parts to farmers in the area. She has been without a telephone for three days.

"It's catastrophic for us to be without telephone service. Everything is connected to the same line, and we are totally dependent on that line for all communications with people outside the city," says Sue.

George Mugwe promises to resolve the problem as soon as possible, and describes the improvements that will be made soon. In the words of George Mugwe, this is not just a matter of installing a new telephone exchange. It's just as important to guarantee rapid service and spare parts that simply cannot take weeks to deliver.

"There is always a feeling of concern that the entire system will break down simply because one or two parts are missing. When the new switch from Gilgil is placed in service, however, we will know who to contact if and when something happens. That is very encouraging to all of us," Mr. Mugwe says.

Improved economy

"We have had a virtual monopoly until now but, with the ongoing program of liberalization, we anticipate a veritable explosion. Nobody has fully recognized the true extent of telephony requirements in the region. We also see improvements in Kenya's economy, and a growing number of people will now be to afford telephone service, even outside urban areas," says Nelson K. Ronoh, acting director general of KPTC, Kenya's telecom administration.

KPTC's present capacity is in the range of 300,000 lines, corresponding to approximately one telephone per 1,000 inhabitants, which is actually higher than average by African standards. "Our capacity of 300,00 lines is extremely low, far below present demand. Until now, financing has always been a problem, but the outlook today is much more promising. Local production in Gilgil also presents a number of advantages for KPTC," says Nelson K. Ronoh.

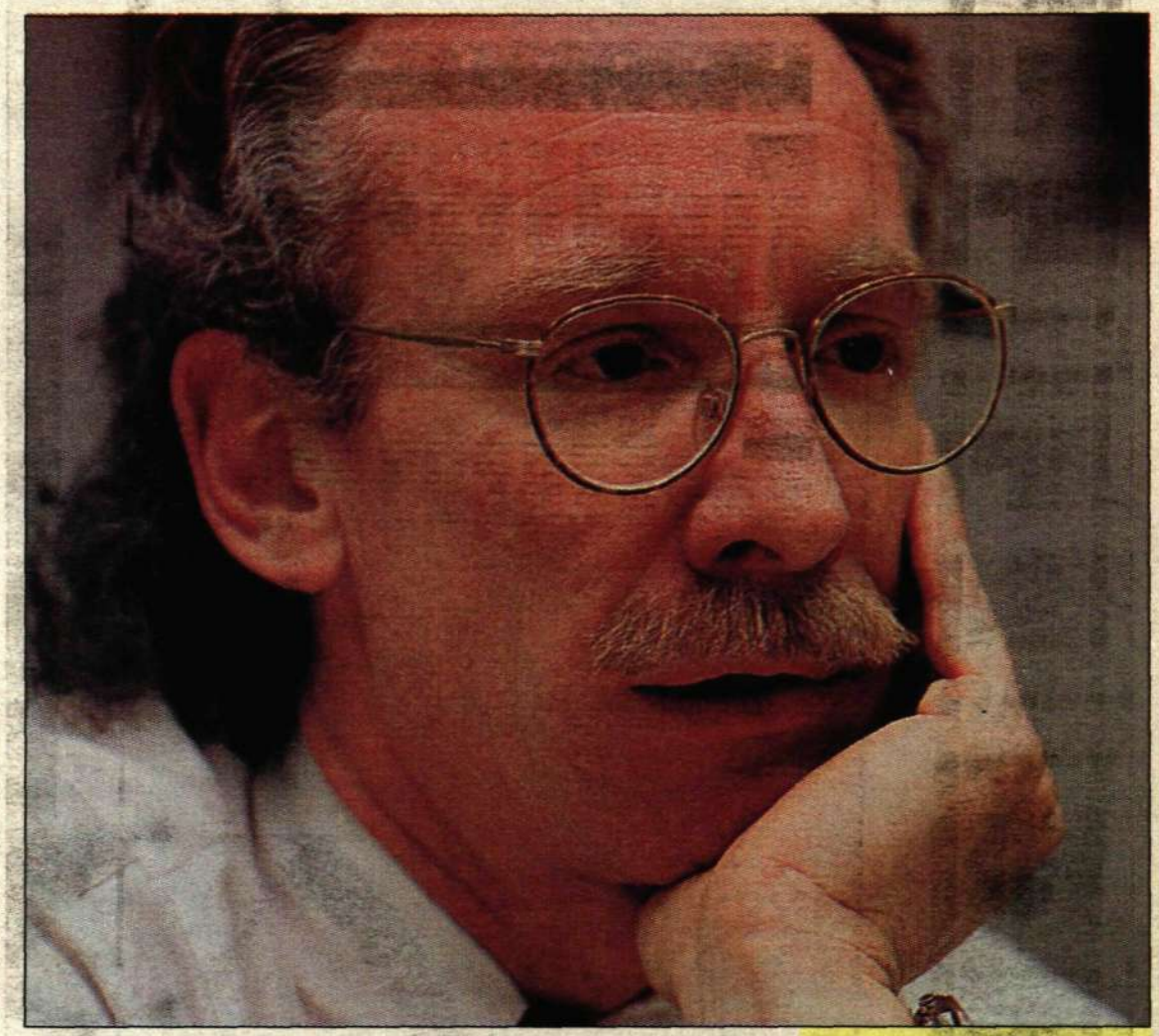
The Kenyan telecommunications network comprises a broad variety of old and new equipment, including virtually everything from completely manual exchanges to AXE switches from Ericsson. Other suppliers include Siemens, NEC and Fujitsu. One reason for Ericsson's good reputation in Kenya is the AXE switch that has served the country's international telecom traffic since 1984 without any problems.

Transfer of know-how

"We are very satisfied with our cooperation, especially since it will now provide us with domestic production of digital switches. The transfer of know-how and technology and the opportunity for technical support in our country is a valuable asset for us. Ericsson's investment is also an investment in the future of Kenya. Because wage scales in Kenya are much lower than European standards, we expect to be able to produce and export our products at highly competitive prices."

Messaging services increase network profitability

An hour's drive from Manhattan, or 45 minutes from Kennedy Airport outside New York, lies Woodbury, Long Island, almost a rural idyll despite its proximity to the metropolis. Woodbury is the home of Ericsson Messaging Systems Inc., which produces the MXE, Ericsson's solution for telecom operators who want to increase their profitability by introducing network-based messaging services.



Messaging service products have noted something of a breakthrough in 1996.

During the years when mobile telephony was growing up, the arguments used in competition for subscribers focused on the systems' superior coverage and lower subscription costs and call charges. Now when the technology has entered a mature phase of development, the range of services offered has become increasingly important in the battle for market shares. At the same time, the new services also mean increased – in some cases substantially higher – revenues for the operator.

Breakthrough contract from PacBell for Ericsson Messaging Systems

Attractive for all networks

The various forms of messaging services are attractive features in any telecom networks. An operator who, for example, is able to offer subscribers a voice mailbox attains a considerable increase in chargeable calls. Instead of a call not being completed because nobody replies at the other end, the other party now receives a message and can then leave his/her own message to the caller. This often generates one or more new calls. Fax services and SMS – short text messages via a mobile telephone – are other new services that increase the operator's revenues and improve service to subscribers.

Ericsson's product solution for messaging services is called MXE, which serves as a platform for several different types of messaging services. MXE is developed by Ericsson Messaging Systems, based on Long Island, outside New York.

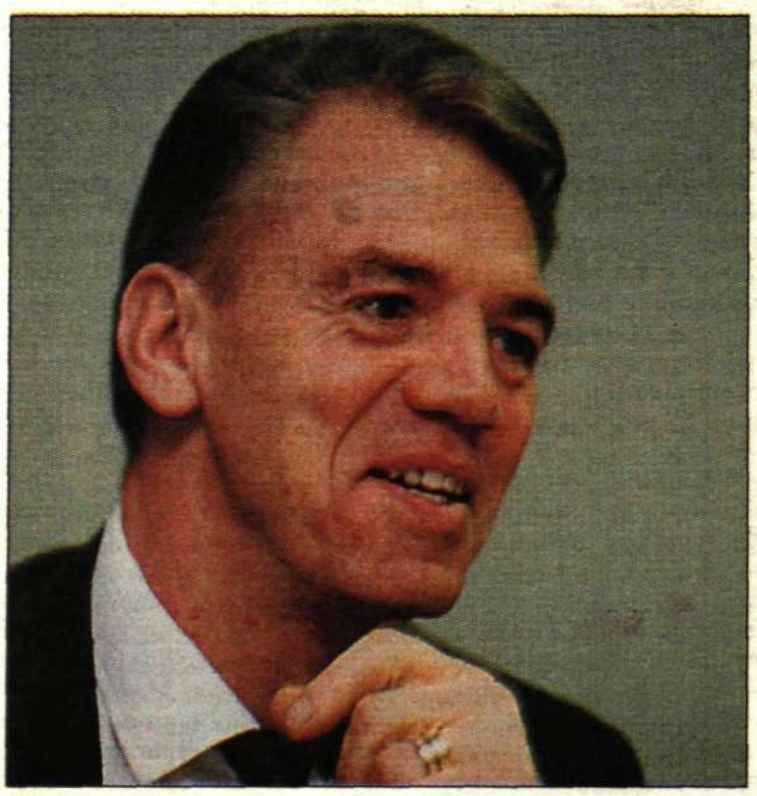
"Our vision is to become a world leader in messaging technology," says Leif Holm, the company's president. "We also want to be a model company, a roll model in terms of quality and innovativeness."

High capacity

The convergence of traditional telecommunications with data technology has virtually revolutionized the message handling arena. For this reason, Ericsson Messaging Systems is devoting intense efforts to a further development of MXE for new applications, such as those provided by Internet.

At the same time, a worldwide support organization is being built up, primarily to serve the farsighted customers who have already incorporated MXE into their networks.

"The first MXE applications enabled the operator to offer voice mail and SMS services. A single MXE can store and manage up to 250,000 messages ," Leif Holm explains. "A global customer, Vodafone, is using MXE together with their MLR (Message Location Register) to achieve a very advanced messaging network. An MLR is a function to keep track of the location of a message in large networks."



"Our vision is to become a world leader in messaging technology,"says Leif Holm, president of Ericsson Messaging Systems Inc. in Woodbury, U.S.

Successful year

"Today, MXE has been sold to 21 countries. The first markets we penetrated with our product were Asia and the Asia Pacific area. Now, we are also established in the U.S. and Europe. We achieved something of a breakthrough in 1996, perhaps highlighted by the prestigious contract we received from PacBell here in the U.S. This major mobile telephone operator is currently incorporating MXE i their U.S. networks.

"One major reason why we have started to get our sales moving is that we are now adressing the quality-related issues that we have encountered. MXE was launched three years ago, at a time when it was a product developed by a small company with limited resources. It was at this time that Ericsson attained a 100 percent interest in the company.

"We received increased resources and we quickly initiated the task of introducing Ericsson's methods in our development work. Today, we operate in a process-oriented manner with the help of Props, our different development processes have been well documented, we have substantially expanded our testing capacity and increased the number of development engineers," says Börje Lundvall, the company's development manager.

As a result of incereasing customer requirements, the company's workforce in Woodbury is nearly double the size of itsk original 100 employees .

Global customer support

"It's not just here in Woodbury that we have expanded," says Leif Gebelius, who is responsible for the global support organization for MXE built up by Ericsson Messaging Systems. "The support organization has also grown during the year. In May, a regional support office was opened at Ericsson Software Technology in Karlskrona, Sweden, and an office was opened in Kuala Lumpur in July. The third link in the worldwide network is found in Richardson, Texas.

Large source of revenues

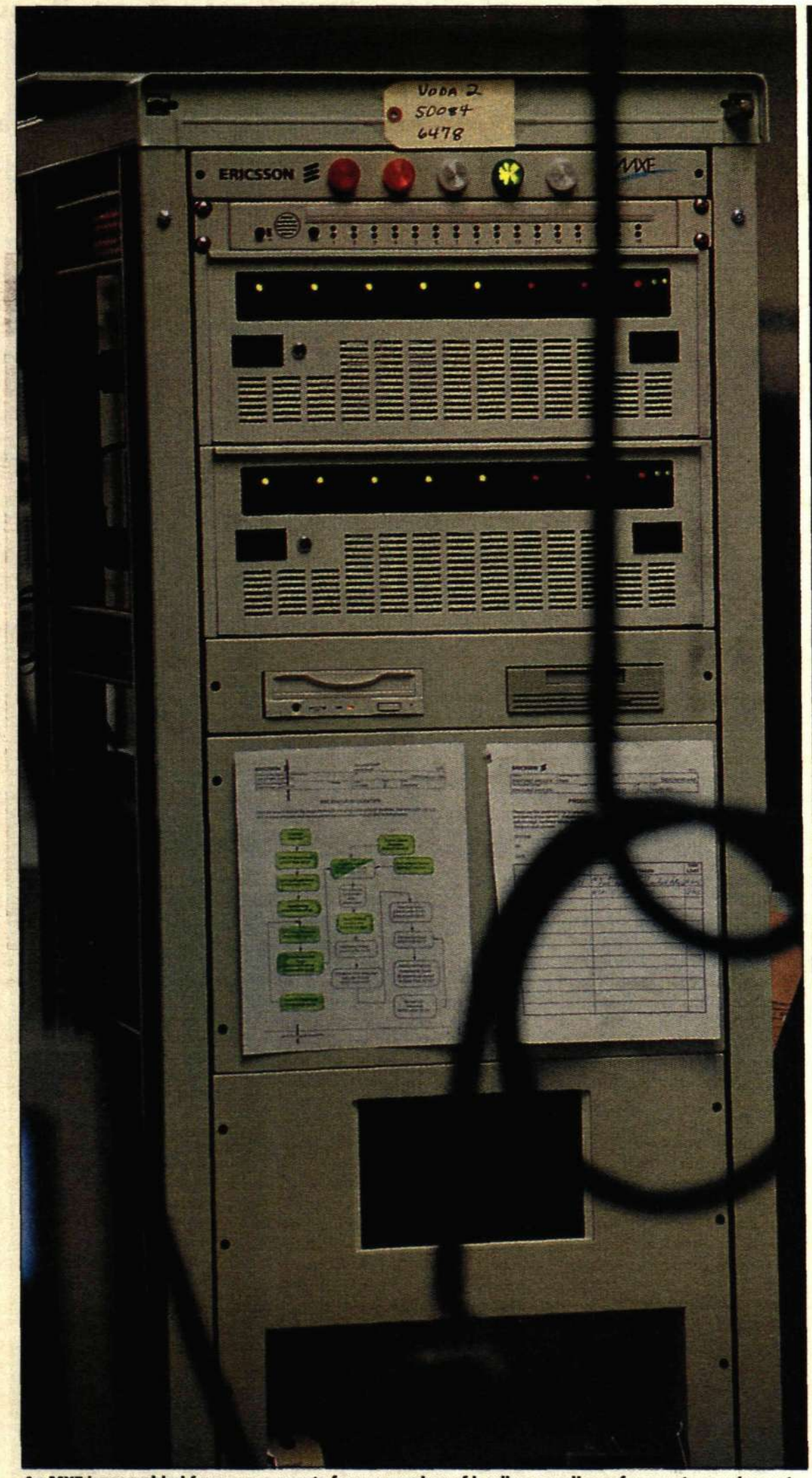
"Ultimately, we expect the customer support service to be an equally large source of revenues as the systems themselves. It is important that the customers are able to create their own new services. This is where the regional support offices enter the picture,. since they are positioned much closer to the customer than the development division in Woodbury. The support offices develop the tools customers need to produce their own new services, and then the customers themselves implement the services. This methodology is currently being tested in cooperation with Vodafone."

Own concept

"When MXE was launched, this involved the introduction of new thinking in the handling of mes-

The man behind MXE

Tom Gleason hatched the idea and led development of MXE. His original goal to design a messaging service for tele and data networks is stall a challenge for Ericsson as well as its competitors, but Tom is convinced that Ericsson will succeed in realizing his original concept. Currently, a new architecture is being developed for the MXE, in which the server is distributed among several different computers linked in a high-speed network. This increases performance, reliability and expansion potential, contends Tom. The customer could start at a smaller scale and then gradually grow through opening software licenses which increase access to functions and capacity which were built into the original product.



An MXE is assembled from components from a number of leading suppliers of computer equipment, while the software is developed by Ericsson Messaging Systems in cooperation with other Ericsson units.

saging. Our competitors were unable to offer a single platform for the many different types of services provided. One of the reasons for our being able to offer such versatility is that MXE was developed with the support of Ericsson's global expertise in several areas," Börje Lundvall explains.

Architects and assemblers

"Here in Woodbury, we really only find the architects and the assemblers. The hardware for an MXE is assembled from components from a number of well-known suppliers, such as Sun Microsystems. The application software, which is the most important part of such a system, is developed in-house. Software for other functions is developed by software specialists. All the software for SS7 signaling ispurchased from Ericsson Infocom Consultants, for example."

Open architecture

"MXE is built in accordance with an open-system architecture. The benefits of this include the fact that we can make use of the latest technology in the indutry in our product," says Börje.

Leif Holm explains that MXE is not only supplied to mobile telecom operators. The system can be used in all types of telecom networks.

"We have also supplied MXEs for fixed networks and for personal paging systems. But we are focusing mainly on mobile telephone networks."

LARS-GÖRAN HEDIN
PHOTO: LARS ÅSTRÖM

Now you can go shopping on intranet

Sweden's largest supplier of electronic components, Ericsson Electronic Distribution AB, has now taken the step into cyberspace by engaging in the distribution of a catalog of electronic components on-line via Ericsson's webs in Ericsson intranet. During the first two days in operation, no less than 8,559 accesses were noted.

The catalog distribution operation, Ericsson Electronic Services, has now been active in Ericsson's component warehouse premises in Upplands Väsby, outside Stockholm, for two years. Today, major distributors also want to reach small customers by selling smaller quantities. This provides them with greater market coverage and many satisfied small customers.

"Today, we have 28,000 names in our customer register and we are noting a monthly increase of 500 names. When we distributed the catalog on-line in the last few days of August, we noted 8,559 accesses in two days, despite the fact that the service was relatively unknown," says Lennart Stjernström, who is responsible for catalog distribution.

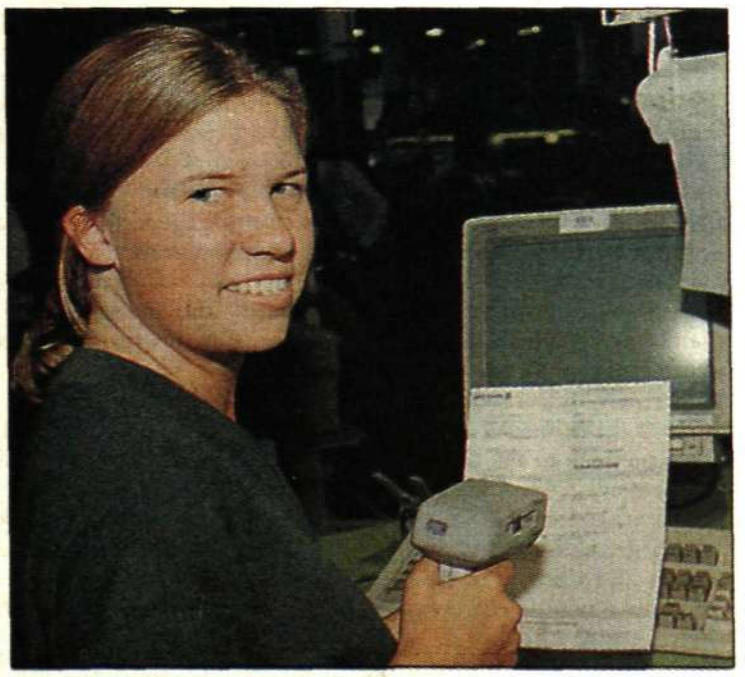
Faster deliveries

The electronic catalog found in the network provides a clear product overview and has simple procedures, which means it leads to even faster deliveries than before. Orders received before 4.30 p.m. are delivered the following day.

The web version is always up to date, since the information is generated actively from current databases.

"The operation maintains a very high degree of service – 98 percent, measured per order line. As a result of the strategic location close to the component warehouse by the E4 highway and close proximity to Arlanda Airport, combined with the fact that there are a handful of order receptionists with a technical background, the company is very efficient and maintains a high level of quality. In the event of highly technical questions, specialist expertise is available from the main company, Ericsson Electronic Distribution.

INGER BJÖRKLIND BENGTSSON



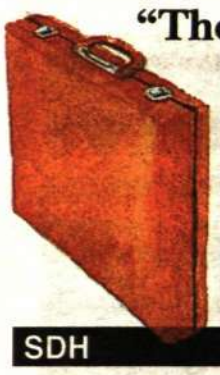
Katarina Holländer, processing an outgoing order using a bar-code scanner. Photo: ANDERS ANJOU

StaffTalk generates military interest

■ At the MILINF defense exhibition in Enköping, Ericsson displayed a broad spectrum of products and systems. Both the Swesite and AXT switchboards were on display, as well as StaffTalk, marketed by Ericsson Microwave Systems, which is attracting increasing attention. This is a mobile field system providing wireless communication within a limited area. The equipment is based on a BusinessPhone switchboard connected to a Freeset radio exchange (Dect standard) to provide wireless communication. The handsets are the recently launched special Freeset model for heavy-duty applications, which is both shockproof and explosion-proof.

This military equipment is now also generating interest from civilian customers, such as construction companies. At MILINF, Ericsson displayed the military version of StaffTalk, while Telia displayed the civilian version.

THORD ANDERSSON



product portfolio

SDH

"There's lots of potential business throughout the world and you haven't got a chance if you can't offer customers SDH!" This is the advice given by Lars Risby, who is responsible for SDH product management within the Broadband Network Systems business unit. In autumn 1995, Ericsson entered into a strategic cooperation agreement with the Italian company Marconi. Today, Ericsson has one of the most powerful SDH portfolios in the telecommunications world.

SDH ensures safe connecitions

SDH (Synchronous Digital Hierarchy) is a new transmission technology for transport networks that provides considerable benefits for operators.

However, it is also a technology that has given rise to many gray hairs among the world's telecom suppliers and has cost vast sums of money to develop.

"Product development in the SDH area has truly been a very difficult and painful process," says Lars Risby, who in the capacity of project leader participated in several of Ericsson's development projects in the SDH area during the first half of the 1990s.

Develop a complete portfolio

Ericsson was only partially successful in its aim of developing a complete portfolio of SDH products in-house. This is the reason why Ericsson signed a strategic cooperation agreement with the Italian company Marconi last year.

"Very few companies have been completely successful in their product development in the SDH field. This is mainly due to the complexity of the area. It's not easy to find another area of technology that has the same combination of hardware and software complexity as SDH. The most successful companies have been smaller-scale telecommunication suppliers, such as Marconi, Telettra, PKI from Germany, NKT from Denmark and ECI from Israel. That's why all the major global suppliers, such as Alcatel, Siemens, AT&T and Northern Telecom, are signing cooperation agreements or entering into alliances with partners," says Lars Risby.

Cooperation with the Italian company has developed very positively.

"We undertake product planning jointly and even if Marconi is responsible for designs, Ericsson representatives participate in design work. We have our own office across the road from Marconi's building".

SDH technology experienced a sluggish start. In many cases, the difficulties that characterized the development of SDH resulted in many operators deciding to defer large-scale investments in their fixed networks.

Discovered weaknesses

"Many customers went ahead with installation work and field tests at an early stage, but when they discovered the weaknesses in the equipment and systems, and encountered major problems, they elected to wait," says Lars Risby.

Today, SDH technology is so reliable that operators worldwide are definitely in the process of abandoning their indecisive stance. This is because SDH offers both operators and end subscribers substantial benefits compared with the older form of transmission technology, PDH (Plesiosynchronous Digital Hierarchy).

Lars Risby describes a few of the advantages:

"Since SDH enables the remote control of networks, fewer employees are required for operations and maintenance. Payroll costs are a heavy burden for many operators.

"Using SDH, an operator can significantly increase the capacity of existing networks, without having to install more cable. Since cable is expensive, increasing network capacity electronically is a much less expensive alternative. Naturally, increasing the operational load also means the operator increases his traffic revenues.

"SDH also increases a network's operational reliability. If, for example, a cable is dug up at any point in the network, the SDH system ensures that traffic is reconnected via other available routes. Since many companies depend on reliable telecommunication and computer links, and are also willing to pay for this, this gives SDH operators a competitive edge in the market."

Improves service to customers

With the help of SDH technology, operators can also improve their service in other ways. For example, the centrally controlled SDH network substantially increases the speed at which a new telecommunication or computer link can be opened for a customer. All that is required is to push a button, which means customers no longer have to wait several days for a new line to be opened."

In other words, by installing SDH in transport networks, operators can, on the one hand, reduce their costs for operations and maintenance and, on the other, increase their network revenues.An invincible profit-generating combination that no telecom operator in the world can afford to ignore. SDH investments in transport networks will amount to tens of billion Swedish kronor in the years ahead.

Demand is currently increasing, both from traditional telecom operators and the new operators that are competing in the increasingly deregulated telecommunication market.

"A large number of deals are already being made worldwide in which bidders have no chance of receiving a contract if they can't offer their customers SDH," says Lars Risby, who agrees that the ice around this market has now been broken.

"Using SDH, an operator can significantly increase the capacity of existing networks and increase network profitability"

Cooperation with Marconi, which has a well-developed range of SDH products, has undoubtedly strengthened Ericsson's competitiveness.

"We now have stable and reliable multiplexors and cross-connectors and an overall system for controlling the SDH features in the transport network. Our joint SDH portfolio is one of the most powerful in the market. We already have abut 60 customers in 40 countries, which is evidence of our strong market position," says Lars Risby.

Upgrading the SDH portfolio

Marconi and Ericsson are currently engaged in a further upgrading of the SDH portfolio.

"This is a product area that will never be fully developed. The next step in its development will include further increasing the SDH networks' transmission speed and capacity, through such measures as a switch to wavelength-multiplexed signals," concludes Lars Risby.

JOHAN LUNDBERG

SDH enhances flexibility, controllability and monitoring capacity

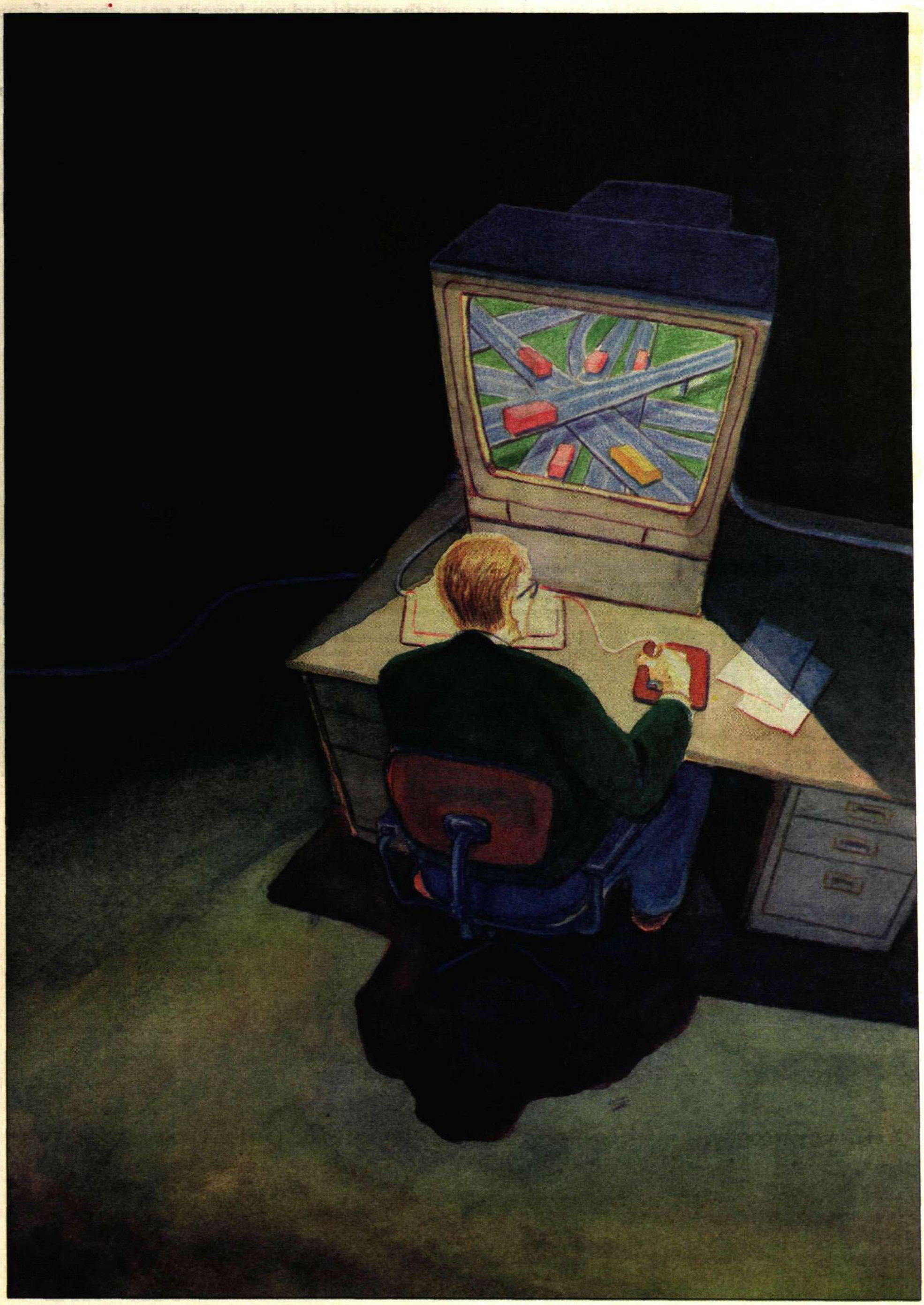
■ SDH (Synchronous Digital Hierarchy) is a transmission technology for transport networks, designed to enhance the flexibility, increase the controllability and monitoring capacity and improve the operational reliability of networks.

■ An SDH system consists of several different products that are installed in the nodes of transport networks (major telecom stations, local stations, amplifying huts, mobile stations, subscriber premises, etc.), which need such equipment for transmission purposes.

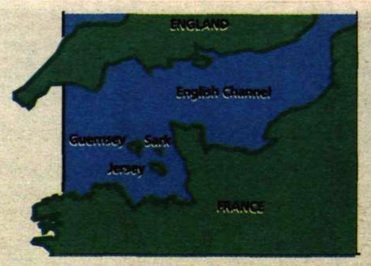
■ The three most widely used signals are STM-1, meaning 155 Mb/s, STM-4 (622 Mb/s) and STM-16 (2.5 Gb/s). STM-64 (10 Gb/s) will be added in the near future.

■ **Ericsson/Marconi's SDH portfolio includes:**

- TM – Terminal Multiplexors for point-to-point connections.
- ADM – Add Drop Multiplexors to create ring and bus structures in a network with easy access to signals.
- IR - Regenerators (amplifiers) that recreate signals in long-distance traffic.
- SDXC Cross Connect – State-of-the-art cross connec-



On the island of Sark in the English Channel, cars and motorcycles are banned. But when it comes to telephony, the situation is altogether different. Sark has one of the highest telephone per capita statistics in the world. And telephone density is now increasing following the arrival of GSM to the small island.



GSM finds its way to Island of Sark

Sheri Gill, manager of the telecom network on Sark, is a busy man these days. In his combined telephone shop/exchange, he services an average of two new digital telephone customers every day. The inhabitants of Sark are lining up for Ericsson's new Model GH 388.

Beyond the crest, it's all downhill

On an island that has banned motor vehicular traffic, naturally there is not an airport either. If you go to Sark, you go by boat. Once you reach the crest above the harbor, it's all downhill. For those who cannot make the 100-meter climb, transportation is available in a carriage pulled up the hill by a tractor. "The bus" is open on both sides and has no doors, but you do have a roof overhead. Baggage is transported in a separate tractor.

The buildings are sheltered from the sea on this granite cliff setting. To protect the island from weather, wind and its enemies, the city architects chose to construct a rather unusual seascape. The Island of Sark comprises only a few square kilometers, but its size notwithstanding, the main thoroughfare is called The Avenue. Its length is less than 100 meters, with stores and shops on either side and the post office, jail and school at one end. The jail has two cells and Sark employs two part-time police officers. The constables have other jobs in addition to their law enforcement duties. The village center features a church and a meeting hall used , for example, for concert pianists and town get-togethers. The island has electricity but no streetlights. It's important to bring your flashlight if you take a walk after dark. To tourists, Sark markets itself as "The island where time stands still."

Victor Hugo

Sark is situated closer to France than England. During the summer months, ferry boats also make the crossing to the Normandy coast. The climate is mild, and ivy walls embellish the constant green of the island setting. White, red and pink camellia bushes are in bloom year-round, reminding a Swede of hibiscus from home. A species of palm tree, although not coconut, is seen in some gardens. Victor Hugo, the famous French author perhaps best known for Les Miserables, lived in exile for years on both Guernsey and Jersey. He called the Channel Islands "pieces of France that fell into the sea and were picked up by England." Today, the Channel Islands comprise an independent union, The Bailiwick, and its constituent members cooperate with each other in such as areas as postal service and a common currency. There are both Guernsey and Jersey pounds, but British pound sterling is also negotiable here (but not conversely). Defense and foreign policy issues are managed from London, but the islands have remained outside EU, maintaining associate membership only.

Own Parliament

Sark is one of the smaller Channel Islands, and the French-Norman influence is obvious in its architecture as well as street and building names. Some of the older Sark islanders still speak Sercqais, a Norman-French dialect, but English is the official language. Although it has only 500 inhabitants, Sark has its own Parliament, Chief of Pleas, which convenes three times annually.

No taxes

The people of Sark do not file income tax returns and pay almost no taxes. The island's income is derived from vehicular tax on bicycles and taxes on boat ticket revenues. "Seigneur de Sercque," the Regent of Sark, governs the island based on feudal law that dates back to the days of William the Conqueror.

The first feudal lord of Sark was appointed by Queen Elizabeth I in 1550 in return for his promise that the island's 40 families would till the soil and provide one weapon each to defend the island. Today's Queen of England, Elizabeth II, only holds the title of "Duchess of Normandy," which surely evokes the reservations of many Frenchmen.

Ericsson has supplied the equipment for Guernsey Telecoms and Sheri Gill on Sark.

Photo: GUNILLA BERGMAN

Michael Beaumont, the present regent of what is surely the world's last feudal state, has held his present position for the past 20 years. If he should wish to exercise his "droit de signeur," he has the right to go to bed with the bride of any Sark man on their wedding night. Otherwise, he is virtually as powerless as the King of Sweden.

Poor shepherds

In the years before World War II, during which German forces occupied the island, most inhabitants of Sark lived as poor sheep farmers. Its telephone exchange was automated as recently as 1979 but, since it was replaced five years ago by AXE, telecom development and progress has been rapid.

People in a place like Sark are more dependent on their telephones than inhabitants of large metropolitan areas, where most services and amenities are readily available. Every permanent household on Sark, accordingly, has its own private telephone.

Off shore banking

The island's lenient tax regulations have also attracted "off-shore banking" operations that require modern telecom services. The number of telephones, telefax and telex machines per Sark inhabitant is higher than corresponding statistics for most of the world's other countries.

In mid-April 1996, a new digital mobile telephone system based on the GSM standard was inaugurated on Sark. The system was delivered by Ericsson to Guernsey Telecoms. Most of the islands 30 customers who already had analog telephones are now switching to digital.

"It means a lot of paperwork, so it takes time to extend the service to everyone," says a very busy Sheri Gill.

Fifty customers

"It took a while for the inhabitants of Sark to appreciate mobile telephony," he continues. Two years ago, he had less than a handful of customers, compared with more than 30 today. Fishermen, contractors and drivers of tractors and horse-drawn carriages have now realized the advantages of mobile telephony.

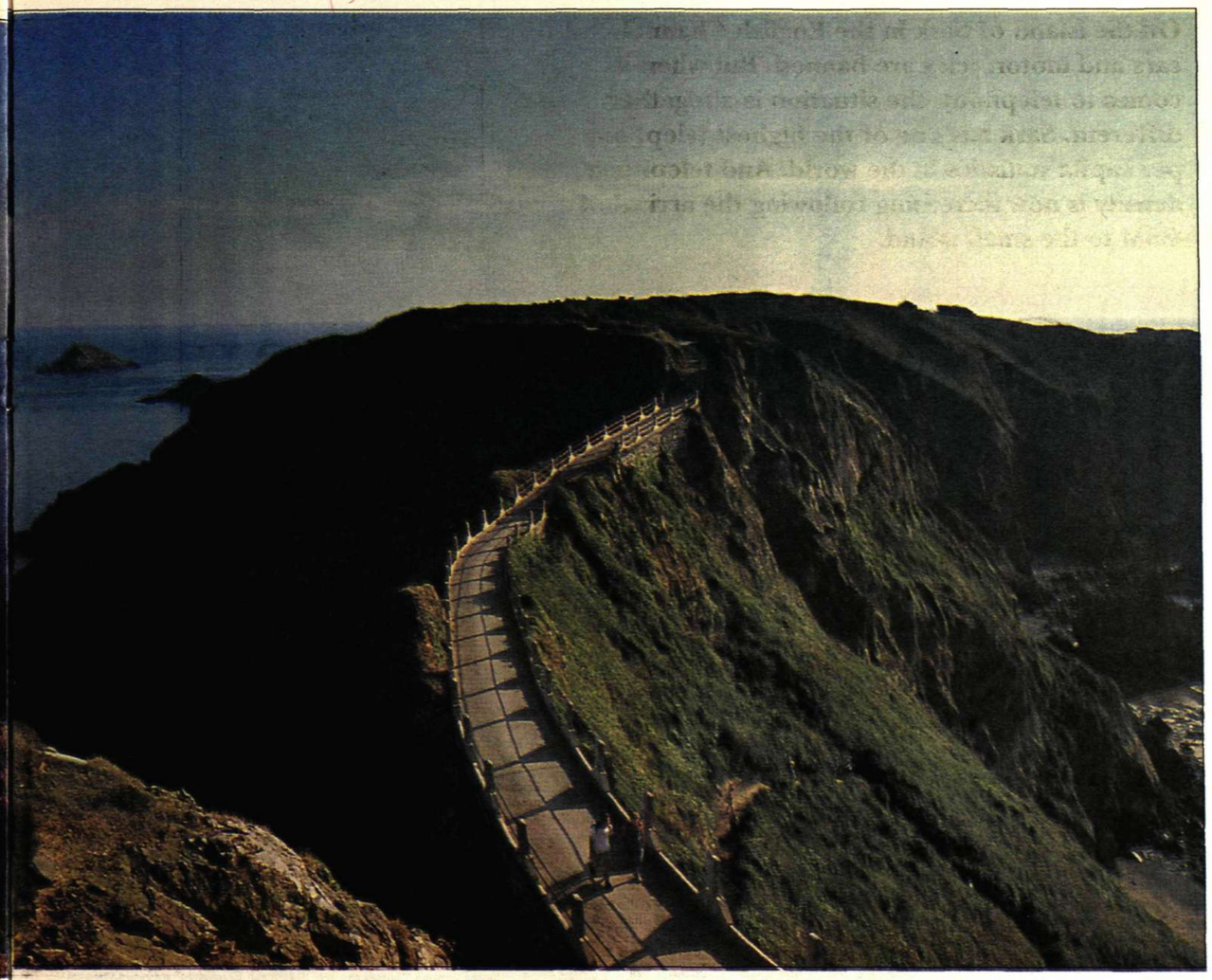
"A fisherman can contact his restaurant while he is still at sea and tell the owner or chef know what will be on his menu that same night, be it lobster, crab or mussels," says Sheri Gill.

To attract a broader public, Guernsey Telecoms offer potential subscribers three different options. People who are interested only in telephone service on their own island and between the other Channel Islands can choose the "Islander" alternative, which offers special discounts.

Before year-end 1996, Sheri Gill expects to have 50 customers, or about 10 percent of Sark's population.

GUNILLA BERGMAN

In April, Ericsson inaugurated a digital network on "The island where time stands still"



Unusual mobile subscribers require a stronger signal

High coverage capacity and the rapid pace of expansion are the distinguishing features of Guernsey Telecoms' GSM network in the Channel Islands. The network was supplied by Ericsson Ltd of the U.K.

The requirement for 100-percent coverage was given the highest priority when Guernsey Telecoms was planning a GSM network for the Bailiwick (the area including the islands of Guernsey, Alderney, Sark, Herm, Jetty and Brecque) in the English Channel.

Ericsson secured the order in the face of competition from Alcatel, Nokia, Motorola and other major companies. The contract was signed in spring 1995, and the system went into operation on April 12 this year.

Best system in the world

"Ericsson has supplied Guernsey Telecoms with the best system in the world in terms of coverage. It is also the fastest-growing network," notes Simon Everitt, program manager in the Public Systems Division at Ericsson Ltd in the U.K., which delivered the system.

The system comprises 14 radio base stations – one each on Sark and Alderney and 12 on Guernsey. Herm is covered from Guernsey.

Obtaining planning permission for the radio bases on Guernsey was sometimes anything but easy.

The unusual topographical conditions on the island have resulted in a singular grouping of antenna sites.

Antennas

"The inhabitants of Guernsey are very particular about their view," explains Simon Everitt.

"It took all our ingenuity to find solutions that offend as few people as possible. Our plan was to set up the antennas without anybody noticing."

The system was adapted to the special way the local people have of using mobile telephones. They do not make calls while on the move from place to place, like mobile telephone subscribers in Germany or Sweden.

"People on Guernsey use their telephones indoors for communication from one building to another," explains Simon. "So we equipped the system with a stronger signal than usual, explains Simon Everitt."

International profile

The project had a highly international profile. Some 50 Ericsson employees from various parts of the world participated, including representatives from Macao, Australia, Sweden and the U.K.

"Everyone involved in the project enjoyed their work and found the local population of the Bailiwick very hospitable and easy to cooperate with," relates Steve Beeson, project leader.

Now that the project has been completed, the installers are returning home, taking with them many experiences and memories.

Biggest truck ever

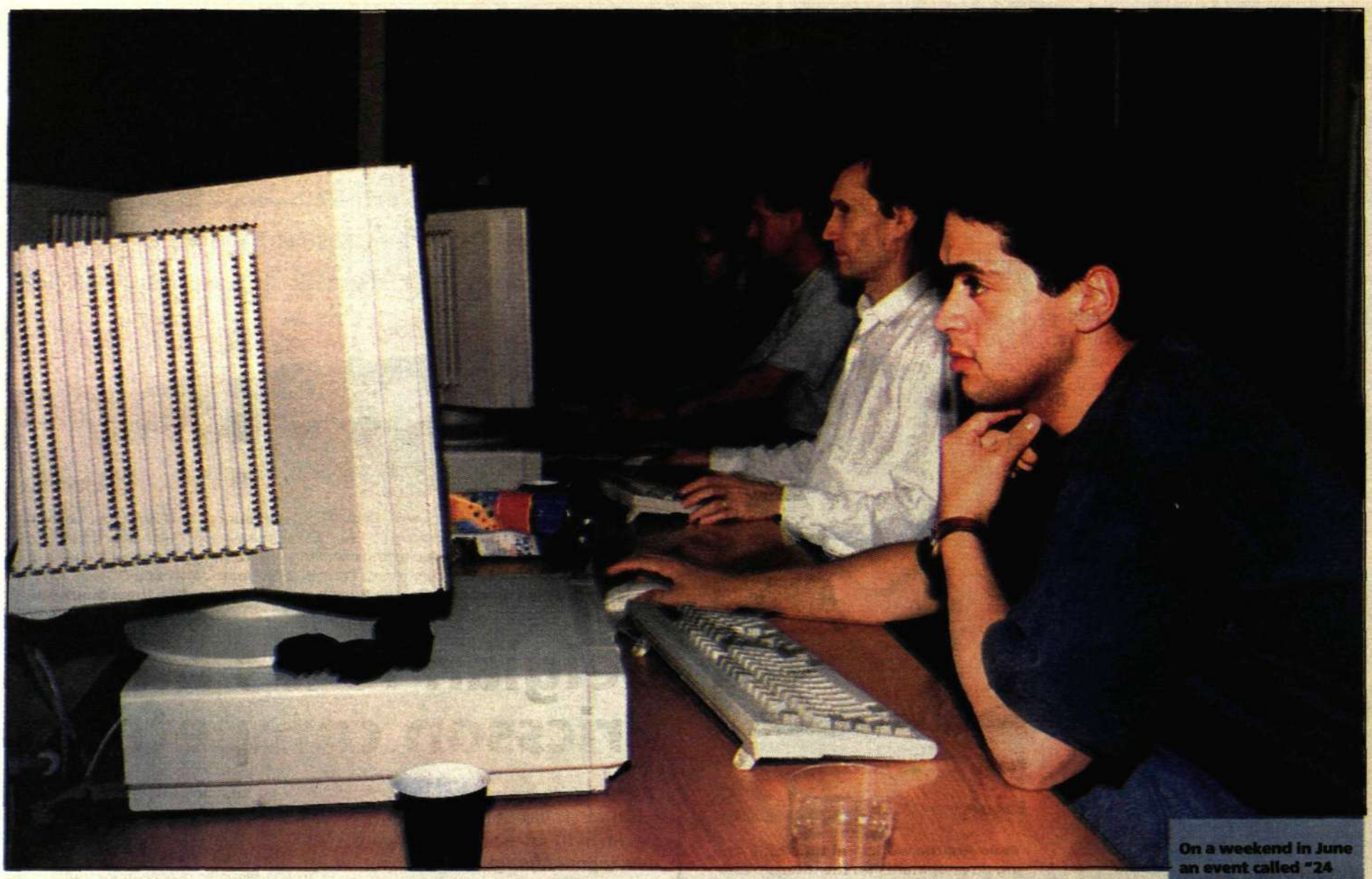
One incident which neither they nor the locals will soon forget was when a truck weighing 35 tons roared through the island's narrow roads carrying its first load of equipment from the U.K.

"The truck was as wide as the roads, so the police had to close off the roads to other traffic and escort the truck through," recalls Simon, who suspects that most of the islanders had never seen such a huge vehicle before.

Simon Everitt and Steve Beeson have just completed Ericsson's GSM project together with Guernsey Telecoms in the Channel Islands.

Following conclusion of the project, the cooperation between Ericsson and Guernsey Telecoms will continue as the system is expanded and upgraded during the next few years. The system has a theoretical capacity of up to 60,000 subscribers. Given the present pace of expansion, additional equipment will need to be installed in the exchanges even before the end of this year, while the radio base stations will be able to cope with the load for some time to come.

GB



On a weekend in June an event called "24 hours in cyberspace" was organized by the Ericsson Web Academy, an organization whose efforts include trying to compile suitable links and sites for market information from various countries. (Photo: Patrik Lindén)

Photo: PATRIK LINDÉN

Internet is a tool – not a toy

The business development unit at Ericsson's parent company is following with developments on and about the Internet. The net is growing extremely fast and will undoubtedly create many new business opportunities. Regardless of what the future may hold, the net is already too valuable a tool not to be used within Ericsson.

"There are still Ericsson managers who believe that the Internet is nothing but pornography and other rubbish. The restrict access because they believe that employees will stop working if the are able to access the Internet and the World-Wide Web," says Lennart Grabe, head of Corporate function business development.

"Such misconceptions can only be eliminated if by expanding Ericsson's network and developing skills so that Ericsson employees really know how to make intelligent use of the net. This is a pedagogical challenge of major proportions," states Lennar Grabe.

Three uses

Lennart sees three main uses for the Internet at Ericsson. The first is as a means of reaching customers and consumers and providing market information. A second use is as a means for Ericsson employees to gather information about competitors. The third use is for internal communications or as a means of compiling information on internal projects.

The Internet is a global computer network that an increasing number of users can access from their own desktops. An intranet is a company's internal network, which cannot be accessed by outsiders. For users within Ericsson, there is no visible difference between the two and in daily speech both are often called the Internet.

Internet and intranets

The graphic user interface provided by the World-Wide Web is a tool for presenting information over the Internet. Web pages are composed identically for both the Internet and the intranet.

"We really should distinguish graphically between what is internal and what is external," says Lennart Grabe. "It is important that everyone learns to distinguish between the Internet and the intranet. Information on the Internet is accessible to everyone, while information on our intranet is only accessible through Ericsson's own network."

Too slow

Many Ericsson users complain that the network is too slow and that this makes it impractical to use the web when connected to the Ericsson network. Lennart Grabe agrees and is also dissatisfied. The problem is due to the existing gateways between Ericsson's own internal networks and the Internet. This is where the bottlenecks occurs, but an expansion is progress. If an internal network is found to be too slow, this may be due to excessively heavy loads in general.

"We must quickly eliminate the bottlenecks and make sure that we have a powerful network of our own. This investment will quickly pay for itself."

PATRIK LINDÉN

Sorting out at-signs and megabits

■ Is it a home page or a web site? Should Internet be capitalized? The confusion about terminology, names and acronyms is a constant source of frustration in the computer world, not least for those of us who write about the subject. However, help is now available for Swedish terminology.

The Network for Swedish Computer Terminology has formulated recommendations for Swedish. Network organizers include the Swedish Language Academy and the Swedish Center of Technical Terminology, but there are also representatives from industry and academic institutions. The recommendations are available on the Internet (http://www.nada.kth.se/dataterm). The site will be updated continuously.

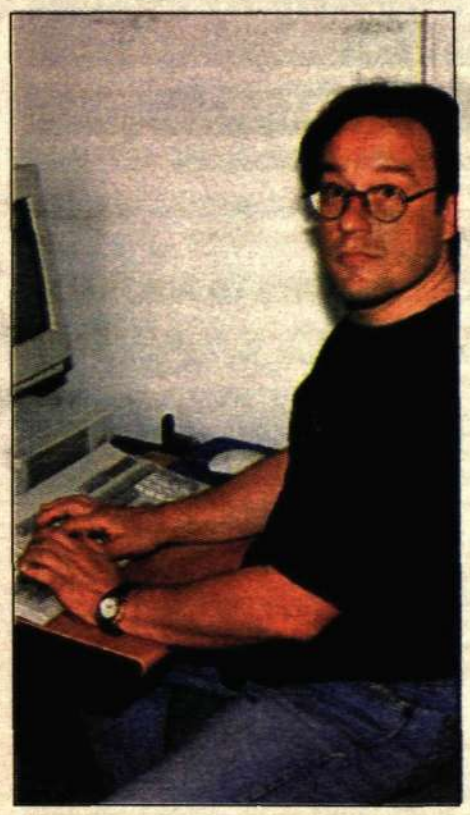
Ericsson addresses on the web

■ Ericsson's external web pages can be accessed at http://www.ericsson.se. Here you will find information about Ericsson that anyone can access.

At the address http://www.ericsson.inside.se you will find the menu page for Ericsson's internal intranet. These pages can only be accessed by persons connected to Ericsson's own data network. Information available here includes the Ericsson Web Academy and the "24 Hours in Cyberspace" event. Search under Corporate using the key *"Business Development."*

Tapio surfs all day

Tapio Anntila works with business development at Ericsson and devotes all of his time to following Internet developments. His primary interest is to study how the net will affect Ericsson's future business prospects so that Ericsson will be ready as new markets open.



Tapio Anntila works full time following developments on the Internet and evaluating their significance for Ericsson's business development. Among other activities, he heads the Ericsson Web Academy, which you can learn more about on Ericsson's own intranet.

Photo: PATRIK LINDÉN

"Many people think I'm surfing the net and playing around all day, but it is essential to follow developments on the net to be able to assess its commercial and strategic potential," relates Tapio.

"One relevant example is that fax traffic and voice mailboxes can now operate over the Internet using IP technology instead of using the telephone network. Ericsson must be prepared for such changes and have products ready in time," explains Tapio, who also points out that no one should need to surf the net privately during working hours.

One of the methods of compiling and distributing information about the net is the Ericsson Web Academy.

Virtual organization

"The Web Academy is a virtual organization consisting of about 15 persons at various locations throughout Ericsson. We have tried to find the most motivated and competent individuals," says Tapio, who heads the Academy.

"In a project intended to compile and distribute knowledge about the Internet, you must begin by realizing that it is impossible to predict the final result. The pace of development is so rapid that it is impossible to plan first and then to implement it and evaluate the results. Everything must be done in parallel.

The Academy is an attempt to gather expertise within Ericsson.

"For example, we want to compile relevant market information and put up a web page with all the links for various countries and markets. A prototype has been created.

24 hours in cyberspace

On a weekend in June an event called "24 hours in cyberspace" was organized by the Ericsson Web Academy. Some 50 persons spent 24 consecutive hours at Ericsson Telecom surfing among thousands of web sites.

"This was a concerted effort to define a base set of solid links. We divided the participants into smaller groups, which each searched for different types of information. Some looked at Ericsson's own web pages, while others searched for information from South America, for example," relates Tapio.

The event began at 12:00 noon on a Saturday and ended at noon the next day.

"There were several reasons for running 24 hours straight. One was that it is easier to bring people together when they are not involved in various projects. Another is that there is less traffic on the net during the weekend, and access is therefore faster. Then, of course, it was also a way to find the most motivated people. Many of the younger participants found nothing strange in running 24 hours straight over a weekend.

"What we want to do naturally cannot be accomplished in 24 hours, but it was a way of getting started and bringing everyone together," concludes Tapio.

PATRIK LINDÉN

No sex during working hours

■ One of Sweden's leading evening newspapers recently asserted that Ericsson employees were using the Internet during working hours to visit various sex-oriented sites and that these have now been block in an effort to increase employee productivity. The article, however, only told part of the truth.

"Ericsson's internal networks are becoming overloaded, so we decided to remove things that were not being used or were not necessary for work," explains Ingrid Udén-Mogensen, security manager at Ericsson. She adds: "With reference to the newspaper article, I would like to point out that we do not keep any record of what sites employees visit."

So the sex sites have been closed to improve productivity, but this is not a matter of censorship or "big-brother" mentality, as the newspaper article implied. Should the craving for cybersex become too strong, employees will simply have to sign-on privately with an Internet service provider.

PATRIK LINDÉN

"I am pleased to declare the new facility open!" announces Rolf Eriksson, beaming with pleasure as he cuts the ribbon to inaugurate the new Ericsson European Training Center. He is applauded enthusiastically by training personnel including, from left: Tariq Malik del Campo, Anne-Françoise Gobeaux, Nathalie D'Aout, Ulf Lundgren (training manager), Regine Buekenhoudt and Christine Vleeschouwers.

Photo: THORD ANDERSSON

Belgian focus on Ericsson competence

Within a few years, Brussels, with its strategic location, has become the focus of Ericsson's competence development program in Europe. Ericsson's Belgian local company has always been a leader in the training area. During last year, Ericsson European Training Center was established as an independent unit, with Ulf Lundgren as manager.

On June 14, the state-of-the-art new offices of Ericsson's competence center at Avenue Henri Matisse 14 were ceremonially inaugurated.

The European Training Center is one of Business Networks' four competence centers, the others being at Marievik in Stockholm, at Ericsson Austria in Vienna and at the Ericsson facility in Kuala Lumpur.

"Our main task is to provide training services throughout the European continent. We have seen how the need for training is growing constantly, particularly in the Business Communications area," commented Ulf Lundgren at the opening ceremony.

Competence adds value

The Brussels unit's ambitious business concept is to work jointly with customers, distributors and local companies to maintain and supply the highest conceivable competence in the telecom and datacom areas to all categories of customers and personnel, with the aim of ensuring that customers receive optimal value for their investments in both hardware and software.

The official opening of the center's new facilities was performed by Rolf Eriksson, vice president of Ericsson Business Networks, who came directly from a visit to Ericsson Austria in Vienna. The ceremonial ribbon-cutting took place in the presence of guests including Torbjörn Possne, president of Ericsson Belgium, training managers Jos van Riel from Marievik and Birgitta Wikström from Vienna, Parisian representatives and the entire Belgian training staff.

Torbjörn Possne, head of Ericsson SA/NV in Belgium, gave a brief presentation on the Belgian operations, noting that business was good, particularly in the key area of business communications, despite tough competition. He reported that growth was also proceeding rapidly in the radio area.

Taking training to the customer

The course offerings at the European Training Center cover the entire business communications area, with several focusing on the Consono MD110 area. The program addresses not only technology, but also administration and sales.

The fastest-growing area is taking training directly to the customer's own premises. From its home base in Brussels, the European Training Center supplies localized services to areas including the densely populated areas of western Germany and the Netherlands to the north, but the Center's services are in demand from many areas elsewhere in Europe, ad even from as far afield as Malaysia.

"We provide training both for Ericsson employees and directly to customers. We always have a certain number of training personnel out on the road," explains Lundgren.

Growth in Germany

"A company's main asset is the expertise of its employees, not just its products," asserts Jos van Riel, noting how important it is to increase the competence levels of all Ericsson employees regardless of which area they work in. He emphasizes, however, that this can only happen on the initiative of individual employees.

"The competence centers we have developed within the business area give our employees the best possible chance to learn to make the best use of their capabilities," says Rolf Eriksson.

Most of the training courses are conducted in English, but in multicultural Belgium, French and Flemish are also treated as "home languages." Training programs are also offered in Spanish and Italian. The development of German as a training language is currently receiving a high priority, since Ericsson's German subsidiary consumes one-fourth of training resources, with the proportion increasing rapidly.

vacancies AT ERICSSON

This is a selection of vacancies within the Ericsson corporation. They are published in the electronic News system, which is being updated once a week.

For further information about advertising here, send a memo to LME.LMEJOB.

Contact no. 6 1996 **Updated September 2**

International

Ericsson Eurolab Deutschland GmbH, located near Aachen, Germany

The Ericsson Eurolab is our young international research & development centre. In our Training department we have the vacancy for an

EXPERIENCED TRAINING ENGINEER,

product area AXE 10/CME20

● The Training Department EED/L/K is responsible for customer training and competence development within the MLC in Germany. As Training Engineer you are responsible for the preparation and presentation of training courses and technical information. It also entails course development and maintenance of such courses.

As a suitable candidate you have a good software und UNIX knowledge. Experience in training, very good AXE10 and/or CME20 knowledge is also required as well as good developed communication skills, especially in English.

You should also be open-minded and self-motivated and have the willingness to work in teams towards a common goal.

An expatriate or local contract is offered for this position.

Contact not later than, 1996-09-05: Stefan Reuther EED/L/KC via phone:+49-(0)211-534-1022, memo-id: EED.EEDSRR or Doerte Kaulard EED/H/R via phone:+49-(0)2407-575-163 memo-id: EED.EEDDKA

Ericsson Telecomunicazioni S.p.A., Rome

TROUBLE SHOOTER – MOBILE INTELEGENT NETWORK

Ericsson Telecomunicazioni S.p.A. in Italy is the major provider of cellular systems to the Italian market.

● We are looking for a senior trouble shooter experienced in Mobile Intelegent Network, to help us a.o. introduce MIN 2.1 in our customer's network.

The assignment period should start as soon as possible and continue for at least 6 Months. The location for the assignment is Rome at Ericsson Telecomunicazionis' premises.

Contact: TEI/CO Alessandro Cesaroni, memoid EITA.TEIALCE, +39 6 72584205

Ericsson Eurolab, Nürnberg The Research and DevelopmentCentre Nüremberg, Radio Communication is looking for a

DEPARTMENT MANAGER,

"Product Development Wideband Cellular Systems"

● The general responsibility of the department manager is to plan, lead and supervise the operations of the department product development Wideband Cellular Systems in EED/N. She/he has to guarantee that the required goals are fulfilled, the needs of the company are satisfied, the department is efficient and competitive. This position reports directly to Jürgen Schmidt, Vice President EED/N.

The main authorities and tasks are: Build up the competence in the area of Radio Base Stations for Wideband Cellular Systems.

LEADERSHIP: Perform appraisals, participate in recruitment and introduce new personnel. Build up the required staff. Competence development of the staff. Be an interface between BR/TR and EED/N.

RESPONSIBILITY: Plan, realise and control department's activities. Technical responsibility. Quality assurance.

As a suitable candidate, you are Ericsson employee and should have worked at least for five years in design, project- or line management. You should also have a minimum of a two years experience as a manager with personnel responsibility. Any experience as a team leader, manager, successor or deputy is a clear advantage.

It is desirable to have at least two years of GSM-working experience and CDMA-technology knowledge. The position requires organisational capability, talent to improvise, orientation on results, the ability to make decisions, also good communication and people orientation skills. You have to be flexible enough to interact with international cultures to motivate your team effective. It is important to create a positive influence on attitudes and working environment. The unit and Human Resources will give support for your individual development and all needed training.

Contact: Jürgen Schmidt, Vice President, Dial: 0911/5217-101, Memo: EED.EEDJUS and Mikael Hofverberg, Department Manager - Product Development Radio Base Stations, Dial: 0911/5217-122, Memo: EED.EEDMHO. Application: Norbert Lechner, Human Resources, Dial: 0911/5217-111, Memo: EED.EEDNLE.

Ericsson US, Engineering Department

RADIO NETWORK TECHNOLOGY ENGINEER

● Ericsson US, Engineering Department is searching for engineers with the following background and qualifications for CMS88 or CME20/CME40 systems: Radio Network/Cell Planning. Radio Verification. Radio Design, Antenna Design. Testing/Trouble shooting for BCS/AXE 10 platform. Air Interface Standardization.

+ 3 years of experience is required.

Contact: John Zee, Phone: (214) 705-7681, fax:(214)952-8788 or the manager of Wireless Technologies: Forouz Firoozi, Phone: (214) 952-0446, fax: (214)705-0944.

Ericsson AS, Oslo, Norway (ETO) ETO Network Management Systems(NMS) Competence Center

is responsible for network management solutions for the Norwegian market and for products developed by ETO. Further on we are a major design center for both EHPT and ETX/IBIN, with which we have close relationships.

SYSTEM DESIGNER / SOFTWARE ENGINEER

● You will be part of a team developing advanced network management solutions for our customers. Because of todays challenges in the telecommunication market the need for effective network management is increasing. This is our opportunity !! You are a positive person with initiative and creativity in finding the best solutions and with good skills in one or more of the following fields:

Network Management platforms and products (Ericsson TMOS, HP OpenView, etc.). Development, support or operation of telecom or datacom networks. System integration projects. Object-oriented analysis, design and programming (C++, Java). Standards and protocols (TMN, OSI, CMIP, TCP/IP, SNMP, HTML). Graphical user interfaces (Motif, Windows, NT, WWW).

You have an engineering degree in computer science or telecommunications and have good communication skills in english.

Contact: Håkon Jendal, +47 66 84 14 18, email: etohjeÉeto.ericsson.se, memo: eto.etohje Olav Kavli, +47 66 84 15 53, email: etoolkÉeto.ericsson.se, memo: eto.etoolk

---

Ericsson Radio Systems AB, Kista

CELL PLANNER TO INDIA

● We are looking for a cellplanner for a long term contract in Dehli, India. The Indian market is expanding rapidly and you will be a member of the Radio Network Design team at Ericsson in Dehli. The main part of the job is planning and tuning a GSM 900 network in Dehli together with market support for GSM 900 in other regions in India.

You should have experience from cellplanning, good knowledge of cellular system, good written and oral skills in English, ability to build and maintain good customer relations, ability to work independently.

Start of contract is September 1996

Contact: Nils Torstensson, phone +46 8 7572639, memoid: erac.eranit

---

Ericsson Radio Systems AB, Kista

CELL PLANNER TO AUSTRALIA

● We are looking for a cell planner for a long term contract in Melbourne. The main parts of the job are:

Support the build up of Radio Network Design competence at EPA, conducting formal training sessions and project participation. Planning and tuning of GSM 900 and DCS 1800 in the Asia Pacific region. Support marketing and tender activities.

You must have extensive experience of cell planning and tuning of cellular systems together with in depth knowledge of the cell planning processes within RMOG. Candidates need to possess excellent knowledge of cellular systems, ability to build and maintain good customer relations as well as ability to work independently.

Start of contract is September 1996.

Contact/Application: ERA/LN/SNC Nils Torstensson, ERA.ERANIT, +46 8 757 2639 or EPA/T/G Adrian Mapley, EPA.EPAAXM, +61 3 9301 1854

L M Ericsson Ltd, Ireland

PROJECT MANAGER

Network Intelligence Service Application Development

● A vacancy has arisen in the LMI SD&D Centre for a Project Manager of Service Application Development projects. As Project Manager, you will supervise software development and testing on the Ericsson Intelligent Network (IN) platform, using the latest IN technology. Currently, the wrok is focused largely on Information & Tollfree Services, where SD&D has full life-cycle responsibility in this area. This includes services for a global market, such as Advance Freephone, Universal Access Number, Televoting, and Virtual Call Centres. The SD&D also develops its own products - such as a fraudulent call detedtion system.

The position requires experience within project management, test management - or similar supervisory experience. The position is characterised by close customer contacts on an international level short but intensive projects, and management of multi-skilled project groups.

The operation is characterised by a high level of customer orientation, international communication, flexibility, and enthusiasm. It is essential that applicants be enthusiastic about contributing to the entire project life-cycle, from initial idea through to deployment and support.

We invite applications from personnel who believe they have acquired sufficient expertise in the relevant areas to undertake this task. As a screening process based on applications received will take place, it may not be necessary to interview all candidates.

Curriculum Vitae before Friday 13th September, 1996: Margaret Gaffney, Personnel Officer, LM Ericsson Limited, Beech Hill, Clonskeagh, Dublin 4. Memo ID LMIMGY.

LM Ericsson Ltd. Ireland

INTELLIGENCE NETWORK SERVICE APPLICATION DESIGNERS

● Vacancies have arisen in the LMI SD&D Centre for Service Application Designers at varying grade levels. As a Service Designer, you will work with software development on the Ericsson Intelligent Network (IN) platform, using the latest IN technology. Currently, the work is focused largely on Information & Tollfree Services, where SD&D has full life-cycle responsibility in this area.

The position requires a knowledge of telecommunication networks and software design. The evolution on IN Technology, moving from a pure AXE platform into General Purpose Computers, requires SD&D to broaden its design competence to meet these demands. As a designer, you will be involved in all phases of the development from requirement management and design, through implementation, function test, and network integration test.

The operation is characterised by a high level degree of customer orientation, international communication, flexibility, and enthusiasm. It is essential that applicants be enthusiastic about contributing to the entire project life-cycle, from initial idea through to deployment and support.

We invite applications from personnel who believe they have acquired sufficient expertise in the relevant areas to undertake this task. As a screening process based on applications received will take place, it may not be necessary to interview all candidates.

Curriculum Vitae before Friday 13th September, 1996: Margaret Gaffney, Personnel Officer, LM Ericsson Limited, Beech Hill, Clonskeagh, Dublin 4. Memo ID LMIMGY.

Ericsson (China) Company Ltd, Beijing.

GSM SYSTEM SUPPORT EXPERT

● Responsibilities: WE are looking for a person who can provide both technic al expertise as well as technical support to the Ericsson's customer and t he FSC. You would be required to negotiate with external customers on technical is sues. You would also arrange/ assist in technical presentations. Fault handling and emergency support are other vital aspects of the job. You would also assist in transfer of competence within the organisation.

Main tasks: To review, develope and improve the procedures in Field Support. To lead investigations and properly assess high level fault situations. To be able to explain highly technical issues to different levels within the organization. To be a part of the 24-hour emergency duty (rotation).

REQUIREMENTS: University degree in Electronic Engineering or equivalent. A minimum of 3 years working with the GSM system. Long technical experienceof working in AXE environment, preferably in a support organisation. Very good knowledge of English is a must. You are a quality consious person with some leadership skills.

Contact: Hiep Nguyen(ETC.ETCHIEP) or Peter Hadas(ETC.ETCHADA) CV: Ritu Malik,(ERA:ERARIMA). RMOG Resource Agency.

Ericsson (China) company ltd, Beijing, China

MANAGER, SYSTEM MANAGEMENT BX – CHINA

● ETC is looking for a technically skilled manager for our system management department for public switching.

You will, together with your small team of excellent support engineers, be responsible for all new SW releases for China's public AS's.

In late '96 we are introducing a new MAS based on 12.3 and in beginning TRANSGATE 3 will be introduced. Therefore, experience from IN/ISDN/BGS is a need for this position.

The successful candidate will have experience from the following area/s: ASM hansling incl. ASR's/Support/PLT. One of your most important tasks is transfer of knowledge to your local staff and to constantly improve work procedures/methods.

Production and quality tests are made in the test plants in Beijing. You will plan and take active part in the projects as well as manage the unit.

Contact: Lars Eriksson (ETC.ETCLSE), via phone: +86 10 6460 1122 or Brendan Meyler (ETC.ETCHBLM), via phone: +86 10 6460 1122

Ericsson Telecom AB, Stockholm, Sweden

PROCESS DEVELOPER, BX-MTP

Our department is responsible for manufacturing test technology within business area Public Telecommunications, BX. We develop technology, methods and applications for manufacturing test of BX hardware, from PBA level and upwards. We participate in most development projects in BX, with design of methods, programs and equipment for manufacturing test.

We are responsible for BX Manufacturing Test Process (BX-MTP), which is used throughout BX when developing or performing manufacturing test of BX hardware products.

● We are now searching for you that want to drive and perform further development of BX-MTP.

Your tasks will be to plan, lead and take part in development, documentation, release and informing about the process. The work is often done in groups, but being responsible, much of the work is placed on you, mainly in the areas of coordinating and performing the documentation work.

You have a technical degree, or similar, and working experience in the area of manufacturing test. You have initiative, flexibility, self-motivation and are able to take responsibility. You have good knowledge of the English language, both spoken and written. You know, and can apply, the company documentation rules. Knowledge and experience in process work, FrameMaker and Intranet is beneficial.

Contact: Fredrik Staaf, tel 08-7198781, memo ETXS.ETXFEST, email etxfestÉsta.ericsson.se, or John

Everingham, tel 08-7196227, ETXS.ETXJOEV, email etxjoev@sta.ericsson.se or point your web browser at http://sta.ericsson.se/bxmtp.

Ericsson Ltd, Guildford, Surrey, UK

PRODUCT MANAGER

We are a small group of product managers working closely with one of the most profitable and knowledgable operators in the world. Working with Vodafone is a challenge but also bery rewarding as they have advanced ideas and are very forward looking.

GSM switching is the main focus of our activities but we also get involved in TACS, transit, OPS, MXE and IN applications.

We receive and clarify customer requirements and represent the customer towards the strategic product management. When a release is ready to be offered, we define what should be delivered and participate in the offer preparation together with Marketing. After delivery we provide technical support to Vodafone and other parts of the organisation.

● We are looking for someone with a good knowledge of CME 20 switching who is interested in learning even more. Ability to learn new technical areas and good interpersonal skills are essential. In return you will develop your technical competence and get an understanding of commercial aspects as well.

Contact: Jonas Hermansson, Product Manager, Vodafone, ETL.ETLHERMor Louise Smith, Sector Personnel Manager, HR, ETL.ETLLESH

Ericsson Telecom AB, Switching and Network Systems

AREA MANAGER, CZECH REPUBLIC AND SLOVAKIA

● Marketing cntral Europe(ETX/X/FA) needs reinforcements. We have now a vacancy for the position as Area Manager with responsibility for customers in Czech Republic and Slovakia. This is an area in Europe with a fast growing economy and a telecom sector with huge needs undergoing rapid changes right now, which certainly means opportunities for us.

As Area Manager you will take full customer and profitability responsibility, which means you will get authorityto execute the marketing and sales activities as agreed upon in your market plan.

Your tasks will include to analyse the market; establish and maintain close customer relations, manage offer preparations and customer negotiations as well as to prepare and follow up budget and forecasts.

We need you, who is marketing and sales motivated person with a natural sense for establishing personal and business relations. As an Area Manager you are submitted to constant exposure within as well as outside Ericsson and must feel comfortable in this role. Knowledge of our products and services is of essence, although a strong technical support will be provided.

Contact: Torsten Pålsson, Manager, Business Development, tel 08-719 2150 memo ETX:ETXTP or Barbro Södergren, Manager, Human Resources, tel 08-719 5775 memo ETX.ETXBASO

Ericsson (China) Company Ltd. Guangzhou Branch

PROJECT MANAGER

● Responsibilities: To be our Customer Project Manager for the intelligent Network contract signed with Guangdong provice. This includes to lead several subprojects as well as to be overall responsible to ensure that our obligations are fulfilled in time and at customer satisfaction.

Requirements: Proven skills as Project Manager. International business knowledge. Good knowledge about AXE. Knowledge about Intelliget Network. Negotiation skills. Good knowledge in spoken and written English.

Contact: Thomas Skogh, memoid ETC.ETCJTSK, phone +86 20 855 388 68. Application Human Resources, Wendy Huang, memoid ETC. ETCWENH, phone +86 20 833 289 88 ext. 22312, fax +86 20 833 080 05.

PT Ericsson Indonesia, Jakarta, Indonesia

GSM O&M Engineer

● Ericsson in Indonesia needs an Operation and Maintenance assistance for our customer Excelcom. Excelcom is a new customer for Ericsson and they will start their network this fall with BSC's, BTS's and OSS from Ericsson.

We are looking for somebody with good experience and knowledge of GSM, specially BSS. The task for the O&M assistance is to train, help and assist the customer in how to handle the system. This means transfer of technicalknowledge as well as giving guidance in routines to follow and methods to use.

Appropriate experience and qualification is: minimum 2-3 years of AXE and GSM experience, suitable are installation testers and support engineers, good knowledge in English is a must and OSS knowledge is advantage.

Contact: Charlotte Johnson, Technical Support and O&M Manager, memoid: EID.EIDCJ, phone +62 21 718 9724. Application: CV to PT Ericsson Indonesia, Wisma Anugraha,Taman Kemang 32B,Jakarta 12730, Indonesia, Att. Victor Manoe, HR Manager, memoid: EID.EIDVIM, phone +62 21 718 9801.

Ericsson Limited, Burgess Hill, United Kingdom

SENIOR SOFTWARE PROCESS ENGINEER

● The Public Systems Divsion of ETL is continually seeking ways for business improvement and achieving a competitive edge. As part of it's improvement drive, we are seeking a highly motivated and experienced process engineer within the ETL/X Local Desing Centre (LDC). The placement will be within the Software Engineering Process Group (SEPG) as a Senior Process Engineer.

We are seeking an engineer to be the manager of an established process performance management system which encompasses the PAT and BX PCPM databases as well as local database developments. The engineer is expected to systemise regular feedback of process performance results to the LDC line managers. The work requies 'hands-on' management involvement in our ESSI program and the engineer is expected to make a major contribution towards it's success.

An important feature of the work is the long-term development of software process performance indicators that should ultimately lead to an LDC-wide Statistical process Control (SPC) systems in step with the growing maturity of our CMM based improvement program. A key task will be to seek opportunities for automating the collection of data thereby developing a more efficient system. The engineer is likely to be involved in the migration of the existing PC and IBM based systems towards an Unix environment.

Some line and project maangement experience is expected in addition to several years experience in an AXE10 Design or other software development environment. Competence in the use of MS Excel, MS Word and MS Access is a prerequisite as is experience with PQT, MHS and/or QMS. Statistical analysis experience would be advantageous.

It is expected that the engineer is very structured and methodical, has stong inter-personal skills, and is able to work without supervision. It is essential that the engineer has good presentation and facilitation skills as a significant amount of time will be spent in discussion and presenting results to other managers.

A good educational background with a Degree in an Engineering, Science, Statistics or a Computer discipline is required.

The position is likely to provide a lot of job satisfaction to a person who is interested in hands-on improvement work. There is scope for developing a focussed or a broad software engineering management knowledge within the SEPG. The skills and experience acquired will considerably enhance future career prospects.

Contact: ETL/XD/DZC Malcolm Thomas MEMO: ETL/ETLJOMS, email: etljoms@etlxdmx.ericsson.se or ETL/XD/DC Ivor Szkolar MEMO: ETL.ETLISKR

Ericsson Eurolab Deutschland GmbH, located near Aachen, Germany

The Ericsson Eurolab is our young international research & development centre. In our Training department we have the vacancy for an

EXPERIENCED TRAINING ENGINEER,

product area AXE 10/CME20

● The Training Department EED/L/K is responsible for customer training and competence development within the MLC in Germany. As Training Engineer you are responsible for the preparation and presentation of training courses and technical information. It also entails course development and maintenance of such courses.

As a suitable candidate you have a good software und UNIX knowledge. Experience in training, very good AXE10 and/or CME20 knowledge is also required as well as good developed communication skills, especially in English.

You should also be open-minded and self-motivated and have the willingness to work in teams towards a common goal. An expatriate or local contract is offered for this position.

Contact not later than, 1996-09-05: Stefan Reuther EED/L/KC via phone:+49-(0)211-534-1022, memo-id: EED.EEDSRR or Doerte Kaulard EED/H/R via phone:+49-(0)2407-575-163 memo-id: EED.EEDDKA

CME20/CMS40

Product Area Switching

● If you enjoy demanding work and can respond well to singnificant challenges and responsiblities, why not become a member of our team? Here at EED we have the overall Product Area Switching coordination responsibility for CME20 & CMS40 and we are looking for people to work in system management & operative product management. Please refer to the EED/X/D home page in the EED home page on the www for further information about the department's activities.

We are working with the following mobile applications & study areas: GSM systems, DCS1800 systems, PCS1900 systems, New satellite network applications, Studies about future MSC evolution.

Suitable candidates possess a relevent engineering degree (eg telecommunications, electrical, or software engineering) with a minimum of 4-5 years of AXE development or testing experience and preferabl y at least 2-3 years of experience in system-level technical development or testing. Experience with GSM or other mobile telephony development is advantageous, but not absolutely necessary. Good analytical skills are essential. Ability to meet LPMs and customers from time to time is advantageous.

Within the System & Product Management department we are looking for system engineers in the following areas:

SYSTEM MANAGEMENT

● System Management focuses on a range of system level tasks which are necess ary to ensure progressive and continuous development of Ericsson's CME20 & CMS40 switching nodes in an orderly and evolutionary manner. This work involves a broad range of activities including RS writing and system investigations.

We are particularly interested to talk to people who can provide significant competence in one or more of the following areas:

Data communications, ISDN development, IN development, Application Modularity development. Other assets would include good knowledge of the ETSI GSM/INAP or ITU-T ISDN specifications/recommendations or any other competence area which you think may be relevant for CME20 and CMS40 system management work within product area switching.

Contact: Leo Garon EED/X/DEC, via phone +49 2407 575 242, memo EED.EEDLEO or Doerte Kaulard EED/H/R via phone +49 2407 575 163, memo EED.EEDDKA

DIMENSIONING & PLATFORM MANAGEMENT

● Dimensioning & Platform Management has responsibility for system dimensioni ng and characteristics of CME20 & CMS40 MSC nodes, and for placing of platform requirements towards UAB for product area switching. This includes developi ng models for estimation of system capability and guidelines for dimensioning. It also includes defining performance strategies (together with SPM) for product area switching and coordinating activities to reach these goals.

We would especially like to hear from people who have experience in one or more of these areas: Capacity estimations/modelling, Dimensioning work, and AXE- 10 platform development, management or testing. However people with good technical experience in other AXE-10 areas would also be considered.

Contact: Pieter van Rijnsoever EED/X/DDC via phone +49 2407 575 172, memo EED.EEDPVR or Doerte Kaulard EED/H/R via phone +49 2407 575 163, memo EED.EEDDKA

OPERATIVE PRODUCT MANAGEMENT

● Operative Product Management has the following responsibilities and main tasks and in the area of product area switching: technical support to LPMs and SPM world-wide, RS writing and coordination, and active participation in ETSI GSM standardisation.

We are looking for people who have significant telecommunications experience in either development, testing, standardisation or product management. Experience in GSM, another mobile telephony area or ISDN is highly valued but not indispensible. IN competence would be especially appreciated.

Contact: Stefan Blomqvist EED/X/DOC via phone +49 2407 575 238, memo EED.EEDSTB or Doerte Kaulard EED/H/R via phone +49 2407 575 163, memo EED.EEDDKA

Our Mobile Core Department is looking for

METHODS COORDINATOR FOR THE AXE MOBILE CORE ORGANIZATION

● The general responsibility of this position is to set up and maintain the m ethods for the international AMC projects.

The main authorities and tasks are: supply the AMC projects with suitable processes to enhance the system and software design process, initiate the use of improved and/or new processes within the AMC design organization, take process measurements, support process audits, monitor and evaluate processes used in other organizations in order to identify potential process improvements.

We are looking for an engineer with a minimum of two years of software desi gn experience, preferably in the work area of AXE. Any previous experiences with methods, tools, processes, audits and project work is appreciated. L ast but not least you should have a high interest in methods work and see t his job as a challenge for you and the company.

Contact: Andreas Bleeke, EED/L/UQ via phone:+49 2407 575 394 EED.EEDANB or Doerte Kaulard, EED/H/R via phone:+49 2407 575 163 EED.EEDDKA

STRATEGIC PRODUCT MANAGER's AXE MOBILE CORE

● The AMC organization is responsible for the development of AXE 10 products commonly used by all Ericsson's digital mobile systems i.e. CME20 (GSM), CMS30 (PDC) , CMS40 (PCS) and CMS88 (D-AMPS). The general responsibility of this position is to work with the competitive ness and economical performance of products within the area's of AMC i.e. Traffi c Control, Intelligent Networks, Charging, Data Comunication, Network Signalling, ISDN Access and Network Operator Products . The main authorities and tasks are:

• packaging Assignment Specifications received at AMC from the mobile applcations to projects, participation in the AMC Project Steering Group, making sure that competitiveness and economical performance of pr oducts in the source system(s) are best possible over the life cycle of the products, to define the direction of development of products within AMC, creation of development plans for AMC, preparation of financial agreements, preparation of financial agreements on development and maintenance of products within AMC, representation of AMC in Tollgate meetings for projects financed by AMC, revision of financial agreements proposed by other business units, participation in AMC Change Control Board, writing and inspecting detailed Requirement Specifications, approving Functional Specifications THE SPM reports directly to EED/L/U/XC.

As a suitable candidate you have worked with front end activites and have a minimum of 3 years job experience. Both local and expat contracts will be offered. Experience from any of the areas above is a merit. In this positio n you will need initiative, good communication and cooperation skills and a good ability to work under time pressure.

Contact: Ulf Gustafsson-Hennel EED/L/U/XC via phone:+49 2407 575 256 EED.EEDUGH Doerte Kaulard EED/H/R via phone:+49 2407 575 163 EED.EEDDKA

AXE10 SYSTEM DESIGNER

● The AXE Mobile Core System Group is responsible for the system development of the core products used commonly by all Ericsson's digital mobile systems ie. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). In the coming project we will introduce the BX ISDN AM's into our AM based mobile system. Running PC-AXE 106 Mobile, PC-XSS 210 25 as well as overall technical coordination of the Projects in the AXE Mobile Core (AMC) are responsibility areas of the system group.

We are looking for an experienced system designer with more than 5 years of Ericsson experience in APT design to extend our technical expert team.

An Expatriate contract is offered for this position.

Contact: Hartmut Boehmer EED/U/SC via phone:+ 2407 575 231 EED.EEDHBO or Doerte Kaulard EED/H/R via phone:+ 2407 575 163 EED.EEDDKA

AXE10 SYSTEM DESIGNER (OMS)

● The AXE Mobile Core System Group is responsible for the system development of the core products used commonly by all Ericsson's digital mobile systems ie. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). In the coming project we will introduce the BX ISDN AM's into our AM based mobile system. Running PC-AXE 106 Mobile, PC-XSS 210 25 as well as overall technical coordination of the Projects in the AXE Mobile Core (AMC) are responsibility areas of the system group.

Traffic observation, supervision and statistics are a very important area to the mobile operators. In the Mobile and AM environment we want to enhance our competence on these areas to better satisfy our customers needs and future expectations. Participation in PC-XSS and general O&M support will be the mayor tasks. We are looking for an experienced system designers with more than 5 years of Ericsson experience and broad competence in the OMS area.

An Expatriate contract is offered for this position.

Contact: Hartmut Boehmer EED/U/SC via phone:+ 2407 575 231 EED.EEDHBO or Doerte Kaulard EED/H/R via phone:+ 2407 575 163 EED.EEDDKA

AXE10 SYSTEM DESIGNER (PC-XSS)

● The AXE Mobile Core System Group is responsible for the system development of the core products used commonly by all Ericsson's digital mobile systems ie. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). In the coming project we will introduce the BX ISDN AM's into our AM based mobile system. Running PC-AXE 106 Mobile, PC-XSS 210 25 as well as overall technical coordination of the Projects in the AXE Mobile Core (AMC) are responsibility areas of the system group.

To secure the long term responsibility of running PC-AXE 106 Mobile and PC-XSS 210 25 we are looking for a PC-Chairman "Trainee". The main tasks will be participation in all PC-XSS meetings and support of the current chairman and technical experts in this committee. This is to prepare yourself to take over the full responsibility for running PC-XSS in the near future.

We are looking for an experienced system designer with at least 3 years of Ericsson experience in mobile related APT developement.

A Local contract is offered for this position.

Contact: Hartmut Boehmer EED/U/SC via phone:+ 2407 575 231 EED.EEDHBO or Doerte Kaulard EED/H/R via phone:+ 2407 575 163 EED.EEDDKA

AXE10 SYSTEM DESIGNER (SS)

● The AXE Mobile Core System Group is responsible for the system development of the core products used commonly by all Ericsson's digital mobile systems ie. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). In the coming project we will introduce the BX ISDN AM's into our AM based mobile system. Running PC-AXE 106 Mobile, PC-XSS 210 25 as well as overall technical coordination of the Projects in the AXE Mobile Core (AMC) are responsibility areas of the system group.

To carry out our Source System Responsibility we need additional support for our Source System Design and CN-I Board activities. Designing AXE and APT level documents as well as supporting CN-I Board activities will be the main tasks in this position.

We are looking for a system designer with at least 2 years of Ericsson experience.

A Local contract is offered for this position.

Contact: Hartmut Boehmer EED/U/SC via phnoe:+ 2407 575 231 EED.EEDHBO or Doerte Kaulard EED/H/R via phone:+ 2407 575 163 EED.EEDDKA

TECHNICAL ADMINISTRATOR SOURCE SYSTEM

● The AXE Mobile Core System Group is responsible for the system development of the core products used commonly by all Ericsson's digital mobile systems ie. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). In the coming project we will introduce the BX ISDN AM's into our AM based mobile system. Running PC-AXE 106 Mobile, PC-XSS 210 25 as well as overall technical coordination of the Projects in the AXE Mobile Core (AMC) are responsibility areas of the system group.

To carry out our Source System Responsibility we need additional support for our Source System Design and CN-I Board activities. Supporting the Source System Design Engineers, handling of PRIM and MHS as well as preparing of and participation in our CN-I Board will be the main activities.

We are looking for a technically interrested person who may have administrative background. Knowledge of PRIM and MHS would make the start more easy, but are not prerequisites.

A Local contract is offered for this position.

Contact: Hartmut Boehmer EED/U/SC via phone:+ 2407 575 231 EED.EEDHBO or Doerte Kaulard EED/H/R via phone:+ 2407 575 163 EED.EEDDKA

Met S.A.- France

LOCAL PRODUCT MANAGER

MET is an MLC and is the principal interface to the French phone operators (1400 staff and over 300 million USD turnover). We design and manufacture hardware and software for AXE 10 and expand our sales on the radio side.

● Our Radio Department is now searching for a Local Product Manager who will be responsible for technical support on the BSS and RLL products for the sales team. You will be involved in local product strategy, sales support and mainly technical contacts with our customers.

This 18 - 24 month assignment will be ideal for a BSc or MSc engineer with a minimum of 5 years experience in this field. You also have a minimum first knowledge of French and are fluent in English.

Contact: Jean-Paul Durand + 33 1 64 47 52 87, memold MET.METJPDor Martine de Bouville + 33 1 64 475773, memold MET.METVME. Applications: MET/DRH, 19 avenue Carnot, 91348 MASSY CEDEX FRANCE

in sweden

Ericsson Radio Systems AB, Kista

MANAGER, PRODUCT SUPPORT – TECHNICAL SALES SUPPORT

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are expanding rapidly and many challenges await us.

The Technical Sales Support unit provides customers world wide with optimal technical sales support for our CMS 8800 Cellular products. Within this department, this position is responsible for system support to include the RMOA Marketing Manual, general presentations both internal and external on fixed cellular, PCS and cellular concepts. The group is also responsible to have a solid general knowledge on all network components of the CMS 8800 system.

● Your tasks will be to manage a group of personnel that provide technical presentations and participates in technical discussions with customers. Introduce new products to the Ericsson organization and our customers. Participate in the Customer/ Ericsson User Groups. Research technical information to provide answers to our customers. Assist the Sales and Marketing departments with the required technical competence for both new and existing customers.

The job also includes daily contact with customers, product presentations, hardware dimensioning, working with Statements of Compliance´s and the production of technical documentation for our marketing manual. The job also requires you to be able to travel to all parts of the world within Asia Pacific, North and South America, Europe and Ocenia.

The ideal candidate has a M.sc. or B.sc. in CS or EE and or equivalent experience. 6 to 10 years with cellular switching technology, preferably within the D-AMPS/AMPS field of cellular communication. Fluency in English is required, Spanish is a plus. The person we

are looking for is self-motivated, ambitious, outgoing and mature.

Contact: Håkan Olsson, phone +46 8 757 0159, memoid ERA.ERAHKO Application: Ericson Radio Systems AB, AH Göte Hedblom, 164 80 STOCKHOLM

Ericsson Radio Systems AB, Kista

MANAGER -IS/IT

The Cellular Systems American Standards business unit(RMOA) is part of Ericsson Radio Communications Business Area. The business unit has sales on all continents and operates in most of the over 100 countries in which Ericsson is operative.

● Within our expanding business unit, Information Technology, IS/IT is becoming increasingly important for our future success. We are therefore looking for a manager for this IS/IT function. The purpose for the function is to further develop and support our business unit with effective IS/IT systems and tools.

Responsibilities: Identify IS/IT needs. Eveluate existing systems. Develop and coordinate IS/IT for the business unit world wide. Implementation of new technologies.

We offer you an international environment and a challenging job, where your competence and experience will be most valuable for our future.

You have demonstrated experience in heading IS/IT within large and complex international organizations.

Contact: Hans Wigren, Operational Development, +46 8 757 3188 memoid:ERAHWI Application: Ericsson Radio Systems AB, Britt Bosrup AH, 164 80 STOCKHOLM

Ericsson Telecom AB

PRODUCT MANAGER: CUSTOMER SERVICES FOR TRANSPORT NETWORKS

The customer service area is growing rapidly. For that reason we need to strengthen our product management function.

● Your main tasks will be to define new services, order and follow up the development of services and to support marketing and sales activities.

We are looking for a business-oriented person with a technical interest that is open-minded, takes own initiatives as well as enjoys working together with other people. A suitable background could be 3-5 years of telecommunications experience including work as either a product manager, project manager or performing customer services.

Contact: Bengt Hellström, KX1/ETX/B/TS, 08-719 7057, memoid etx.etxbhe. Application: Thomas Åhberg, KX1/ETX/B/H, memoid etx.etxthg.

Ericsson Telecom, Business Unit Switching and Network Systems AXE Provisioning Product and Process Quality

SOFTWARE METRICS

● We are looking for a person to join the Metrics function. The main objective of the Metrics function is to convert data entered by our 20 LDC's into management information.

Primary tasks include analysis of TR and SW quality (reports and analysis). You are expected to have a Masters degree (or similar).

Knowledge in Statistics and/or quality practices is particulary appreciated.

AXE Provisioning is running a number of large SW development projects aimed at generating new versions of AXE SW for Public Telecom applications. Our aim is to be No 1 in SW development. The unit Product and Process Quality is, among other tasks, responsible for measurements of Product and Process quality (SW Metrics). We use the information to draw conclusions about where and how to focus improvement activities.

Contact: Göran Lindmark 719 69 98 (etxt.etxlima) or Arne Lindholm 681 35 46 (etxt.etxalih)

Ericsson Telecom, Business Unit Switching and Network Systems AXEProvisioning Product and Process Quality

QUALITY MANAGEMENT

● We are looking for persons to join the Quality Management (QM) function. The main objective of the QM function is to ensure that the highest quality standards are met within our big projects. You will be a part of a group of five persons working actively in projects and setting new and higher standards for the quality work.

Your tasks will be to: improve our current way of working, plan, manage and follow up quality activities in the project (preparation of Quality Plan and to conduct audits), based on measurements (PQT and others) prepare quality predictions, responsible for the Opportunity For Improvements (OFI) process within the project, plan and perform riscanalysis on the project.

You are expected to be a Master of Science (or similar), knowledge in Statistics and/or quality practices is particularly appreciated. Experience from project managing and Ericsson organisation is also appreciated.

AXE Provisioning is running a number of big multinational SW development projects aimed at generating new versions of AXE SW for Public Telecom applications. Our aim is to be No 1 in SW development. The unit Product and Process Quality is responsible for QM, Process Improvements and Software Metrics.

Contact: Göran Lindmark 719 69 98 (etxt.etxlima)

Ericsson Radio Systems AB, Kista

TECHNICAL SALES SUPPORT OSS

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are expanding rapidly and many challenges await us.

● The Technical Sales Support unit provides customers with optimal technical sales support for our products. Within this department, the group responsible for the Operations Support System, OSS is now looking for an enthusiastic, hard working person who is willing to take on a new challenge with us. Your tasks will be to have daily contacts with the customers, do product presentations, and demonstrations, write technical proposals, provide hardware dimensioning and configurations and produce technical documentation for our marketing manual. The job involves a great deal of travelling.

The ideal candidate has a M.Sc. or B.Sc. in CS or EE and telecom experience preferably from an operator. He or she should be familiar with operation and maintenance products, such as TMOS, and have a fairly good knowledge of UNIX.Fluency in English is required, Spanish is a plus. The person we are looking for is self-motivated, ambitious, out-going and mature.

Contact: Ann-Charlotte Eriksson, phone 08-404 4139 memoid ERAACHA Application: Ericsson Radio Systems AB, AH Göte Hedblom, 164 80 STOCKHOLM

Ericsson Radio Systems AB, Kista

TECHNICAL SALES SUPPORT – BASIC SYSTEM

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are expanding rapidly and many challenges await us.

● The Technical Sales Support unit provides customers with optimal technical sales support for our products. Within this department, the group responsible for Basic System AXE support is now looking for an enthusiastic, hard working person who is willing to take on a new challenge with us. Your tasks will be to have technical discussions with the customers, do product presentations, provide hardware dimensioning and configurations and produce technical documentation for our marketing manual. The job involves traveling within Asia Pacific, North and South America and Eastern Europe.

The ideal candidate has a M.Sc. or B.Sc. in CS or EE and experience with switching technology, especially in the field of cellular communication. He or she should be familiar with AXE products. Fluency in English is required, Spanish is a plus. The person we are looking for is self-motivated, ambitious, out-going and mature.

Contact: Tomas Dahlberg, phone +46 8 757 2546, memoid ERA.ERATODG Application: Ericsson Radio Systems AB, AH Göte Hedblom, 164 80 STOCKHOLM

Ericsson Telecom AB - Regional Marketing Unit for Europe, Africaand the Americas, Telefonplan

SENIOR PRICING ANALYST – GLOBAL OPERATORS

● Are you interested in learning about new and global customers and being on the leading edge of the ever changing Telecom market? Our marketing group is responsible for the development of business within this emerging and rapidly growing market segment.

You will work closely with our Global Account Managers and Controller; represent our team and manage the pricing information flow between the

GPLMs, RMUs, MMUs and other Ericsson units; and be responsible for maintaining our Universal Price List and Global Price Indices.

We are looking for an experienced individual with knowledge of the international Telecom market. You have strong marketing, financial analysis and business skills as well as good communication and interpersonal skills. You have good PC and Excel knowledge. It is essential that you work well independently in a fast paced environment and take initiative. Fluency in English is required.

Contact: Ingemar Brattgård, ETX.ETXINBR, +46 8 719 3745; Bengt Svensson, ETX.ETXBRIS, +46 8 719 0318 or Barbro Södergren (personel), ETX.ETXBASO, +46 8 719 5775.

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER

AXE Hardware platforms NMT & TACS.

The unit Business Development is responsible for the visions, the overall business directions and strategic planning for TACS and NMT within RMOG. The unit is also responsible for common products and product areas for NMT & TACS which include terminals, IN, customer services, co-ordination withother products and AXE Hardware platforms.

● The position as product manager AXE hardware platforms implies responibility for the requirements on HW development,the substitution process, quality, environmental requiremnets and pricing. The work will give you opportunity to explore the cellular market and gain a lot of knowledge.

The work includes consolidation of market requirements, often involing several systems GSM and PSTN. HW product strategies, business case, life-cycle management and customer presentations.

You have an academic degree, a general telecom background preferably from cellular and have worked with HW before. The work entails international contacts both with customers and Ericsson local companies.

You should enjoy working in a TEAM with other product managers sharing common goals and targets. You should be fluent in English both speaking and in writing. You should be interested in marketing and business result.

Contact. Christer Palmgren 08-757 3326. MEMO: ERAC.ERAPALN. Application: Ericsson Radio Systems AB, ERA/LHS Jaana Norén.

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER AXE

Business Unit Cellular Systems - American Standards (RMOA) offers products for cellular and PCS networks in the 800 and 1900 MHz frequency bands based on the digital D-AMPS standard. Our products are successfully being deployed in several countries in North and South America, Asia and Oceania.

● We have a position open as Product Manager for the AXE platform. As such, you will be responsible for Basic Systems products (eg, APZ, GSS) and APT devices.

As Product Manager you work with consolidation of market requirements, product strategies, business cases, life cycle management, and customer presentations.

You have an academic degree, a general telecom background and good AXE 10 knowledge. You should also have an interest to analyze opportunities from a business perspective. The work entails international contacts.

Contact: Magnus Isaksson, tel 08-757 2678 (ERA.ERAMIN). Application: Ericsson Radio Systems AB, AH Anette Spångberg, 164 80 Stockholm.

Ericsson Telecom AB, Switching and Network Systems, GPLM

BUSINESS MANAGEMENT

We are a very competent crowd of 8 people forming the link between the Ericsson marketing units and Product Management regarding our major AXE customers in western Europe and Australia.

Every day is really a major challenge, often with new issues and questions never even thought of before. We tackle this with our total sum of competence and a very good team spirit, and of course together with our extensive network in the different markets.

● Now we need to expand our team with someone who bascially has a very good knowledge of AXE-10 on a system level.

IF YOU: Can add new competence to our team. Like to work in a very international environment. Have a very good knowledge of AXE on the system level. Want to learn more in the area of product management, close to marketing. Give us a ring as soon as possible!

Contact: P-O Nyquist, Phone: +46 8 719 15 77, Memo: ETXT.ETXPONT or Personell: Kerstin Halén, Phone: + 46 8 719 20 54, Memo: ETXT.ETXKER.

Telefonaktiebolaget LM Ericsson, Corporate Core Unit IM/IT, LME/R

LME/R is taking the lead in the areas of Information Management, Information Technology, and Information Systems at Corporate level across the Ericsson organization. This implies converting defined Corporate requirements into policies, guidelines and directives, which are developed in close cooperation with representatives from the Business Areas, MLCs and LCs. In addition to the task of guiding the Ericsson organization in the right direction within the area of IM/IT, the unit has now been assigned the task of realizing the plans and visions from the IT ESP '96 - which will be an exciting and interesting challenge!

PROJECT ASSISTANT, INTRANET

● The area Information Management involves the responsibility for the support within the development of Ericsson's Product and Business information within the TTC-process (Time To Customer-process). This includes standards, information systems, support and implementation related to the IT ESP. An important area within IM is to create policies and guidelines for publishing and distribution of information using the web-technology.

To reach the goals according to the IT ESP, we are now looking for a person to join our team within the development project. The responsibility area covers support for development of internal Webs, administration and maintenance of the LME/R Web-site, supporting the LME/R team, participating in the project work, as well as being able to present the technology to user groups within Ericsson. We are looking for a person with marketing experience combined with an operational knowledge of the PI and BI areas as well as the TTC-process. You also have experience working with Web technology, being a motivated person who enjoys working in a team.

Contact: Roger Larsson, tel.: +46 8 719 87 26, Memo: LME.LMEROLA or Ove Gustavsson, tel.: +46 8 719 71 89 Memo: LME.LMEGSON. Application: Telefonaktiebolaget LM Ericsson, TV/LME/R AnneCathrine Krantz, 126 25 Stockholm, SWEDEN, Memo: LME.LMEACEK

Telecom AB, GPLM-NI Interactive Network Services,Stockholm

PRODUCT MANAGERS

About us: INS belongs to the BX Global Product Line Management for Network Intelligence with particular responsibilities for information services, virtual call centre services and audio services in the public network.

We are a young, hard working team located in Stockholm, working in close relationship with our key customers. For the right person, there will be a great opportunity to influence the total value chain for this product area from product strategy to the implementation of the products at the customer.

● About the job, First of all you understand the meaning of: Call Centres. Automatic Call Distribution Systems. Interactive Voice Response Systems. Telecom Service Applications. Client Server Applications.

Working with Product Management in these areas, you will be: - Responsible for parts of the INS product portfolio regarding profit, opportunity tracing, strategies, product plans and customer presentations. - Project sponsor responsible for product requirements and interface to our development organisation. - Interface towards subcontractors, partners world-wide and other product management organisations within Ericsson in order to effectively support necessary products and services

Contact: Jens Andersen ETXT.ETXJEAS (+46 8 719 6333) or Jeppe I.Hansen ETXT.ETXJEHN (+46 8 719 8467).

Ericsson Telecom AB, Switching and Network Systems AXE - FutureApplication Lab

LAB & PROTOTYPE ENGINEER

● It is time to bring AXE into the 21st century.

Do YOU want to shape the future of AXE and thus the future of Ericsson? Do YOU want to take YOUR ideas to a working prototype in a matter of weeks? Do YOU like to work closely in a team? Do YOU want to work with front end technology? Then, this is YOUR chance!

The work will start up now. The purpose is to prototype new technologies in AXE, such as: B-ISDN, Internet, programming languages, other lab's results, etc. we are looking for a few good women and men, who would like to work in teams, take own initiatives and to work in a creative environment.

You have experience in AXE, broadband, protocols, programming and/or testing.

Contact: +46 8 71 90860 TN/ETX/X/DS Peter Öhman ETXT.ETXHLP or, +46 8 71 95989 TN/ETX/X/DS Magnus Hallenstål ETXT.ETXCOKE.

Ericsson Mobile Communications AB, Lund

WIRELESS COMMUNICATIONS RESEARCH

The advanced studies group at Ericsson Mobile Communications AB in Lund performs research related to wireless technology. We focus on new algorithms, architectures and technologies for cost-efficient implementation of wireless terminals.

● You will be part of a team that develops new air-interfaces for future wireless products, as well as investigates and evaluates the technical implications of proposed changes to current wireless systems, e.g. GSM, D-AMPS, WLAN. We also develop new algorithms and architectures to improve current implementation of wireless handheld terminals.

We are seeking candidates with a Ph.D. or similar experience in wireless telecommunications with a special focus on areas related to the air-interface, e.g. modulation, channel coding, multiple access, protocols, etc. Applicants must have the ability to work independently and the strength to pursue problems to a solution that can be implemented in an efficient manner. We also require good verbal and written communication skills.

Contact: Kjell Gustafsson, phone 046-18 15 14. Application: Ericsson Mobile Communications AB, Lotta Sundahl, S-223 70 Lund

---

Ericsson Radio Systems AB, Kista

Do you need a challenge? Join our Radio Network Control organization!

● You will: work with advanced technologies for mobile communication, work within a new, growing organization, work with system architecture, design, implementation and test, work in a project with a challenging time schedule, have possibilities of fast personal development, work in a project with geographically distributed development with opportunities for international contacts.

Our department, Radio Network Control Design, is located in Kista and belongs to the new unit WIDEBAND BASE STATION SYSTEMS. This unit will provide system solutions and products for the evolution into wideband cellular.

SYSTEM DESIGN

● You will work with Radio Network algorithms, simulations, system architecture and design. **Contact:** Jan Häglund, 08-764 19 33, memoid ERA.ERAJAHA

RADIO NETWORK DESIGN

● You will work with design, implementation and test. For our work we use UNIX work stations, C, Plex and WWW. **Contact:** Leif Segerbäck, 08-404 58 20, memoid ERA.ERALFSK

RADIO SWITCHING DESIGN

● You will work with design, implementation and test. For our work we use UNIX work stations, C, Plex and WWW. **Contact:** Elisabeth Johansson, 08-404 25 24, memoid ERA.ERAEJON Application: Ericsson Radio Systems AB, BR/TR/H Mattias Eriksson, 164 80 STOCKHOLM, Memoid ERA.ERAERIM

Ericsson Radio Systems AB, Linköping

System Development & Verification for CME20/CMS40 BSC node

CONTRACT POSITIONS

ERA in Linkoping Sweden, is responsible for furthering the strong portfolio of GSM features supplied by the Base Station Controller node.

We undertake design from Prestudy participation, Feasibility study, product development & Verification to supply our customers with high quality products in both PLEX & C development environments.

● We are an experienced organization offering a wide range of opportunities. We are a department of 55 people involved in development with heavy committment to team work.

We are looking to further strengthen our team with System Designers, Designers & Testers. If you think that this is the challenge for you

Contact: LM/ERA/ZD/KC Steve Foster. Memo ERA.ERASJFR. Phone +46 13 287352, ECN 868 7352 Or LM/ERA/ZD/KLC Eva Senneryd. Memo ERA.ERAELIN. Phone +46 13 287360, ECN 868 7360 Application: LM/ERA/Z/MH Anna Fasth. Memo ERA.ERAFAST REF.NO 96-45

Ericsson Utvecklings AB, AXE Basic System

LOOKING FOR TROUBLE?

We are three teams at UAB that work close together with trouble shooting, technical support and Correction/CNI testing for APZ-CS world wide. The team members today have broad experience from design, testing and field support.

The TROUBLE SHOOTER TEAM work is to analyse trouble reports and to create solutions. Fault analyse is mainly done in our system test plant but also out in live exchanges.

The TECHNICAL SUPPORT TEAM handles problem via memo and phone. The support is during daytime. We work close together with the GRC Global Response Centres.

The AC and CNI VERIFICATION TEAM test all the fault corrections that have been created by the trouble shooters or by design.

● Now we need people in following areas: Two people for trouble shooting. Two people for technical support. One team leader for Correction/CNI verification. You should have at least 3 years AXE experience in one of following areas, design, testing or field support. Trouble shooting and APZ knowledge are considered as an additional. Today we are situated in Årsta, but in August we will move to the new buildings in Älvsjö. We are looking forward to your reply! Please feel free to ask any questions!

Contact: UAB/B/VZ Henrik Åhman, ETXT.ETXHNK or UAB/B/VZ Birgitta Ervik, ETXT.ETXGITT

Ericsson Radio Systems AB

RMOG - Application Unit Business Communication GSM operators world wide are starting to focus on solutions for the corporate user, a major part of the global GSM subscriber base. These users requires solutions that gives him transparency between the services he uses in the business environment, such as PBX and LAN, and the services that GSM provides. The Corporation on the other hand would like to control the corporate users cost, usage and seek favorable tariffs from the operator based on the combined usage of all employees using GSM.

PRODUCT MANAGERS AND PRODUCT MARKETERS

● As Product Manager you will: • Analyze business opportunities, customer requirements, subscriber trends, new technologies, competitors etc. to form product strategies. • Coordinate the product strategy with all other CME 20 and CMS 40 products to ensure a stable and competitive system offering. • Perform Business Cases to ensure product profitability and competitiveness. • Realize product strategies through initiation and coordination of system studies, prototyping and development. • Manage the product marketing including promotion, pricing and introduction.

As Product Marketer you will: • Market our product program • Through interaction with our customers and other market players be responsible for our business development • Support and drive the sales process against key customers through market operations and local companies.

To take this position you have a technical university degree. Your English is fluent in both speech and writing. Economical skills on university level would be a plus. You have at least worked with telecommunication in 3 years, preferably in a similar position. We will value experience from the business comm. area, international assignment and development.

Contact: Patrik Svensson +46 8 4049027 or Kjell-Gunnar Königsson +46 8 404 7906 Applications: Ericsson Radio Systems AB, LK/HS Mia Hjertén , 164 80 Stockholm

---

Ericsson Utvecklings AB, Älvsjö

TEAM LEADERS APZ

● We offer the opportunity for the right persons to join us as team leaders f or the teams described below. As team leader you will be expected to initiate and lead the work. You must be able to delegate responsibility to the team memb ers and represent Systems Management towards other parts of UAB and Business Un its.

APZ SYSTEM STUDIES

● This team performs technical studies of improvements of APZ, based on custo mer or system requirements.

Current work includes a new mechanism to do system upgrades without traffic disturbance and contributions to an early study for the next control system for AXE10.

AXE10 IN-SERVICE PERFORMANCE

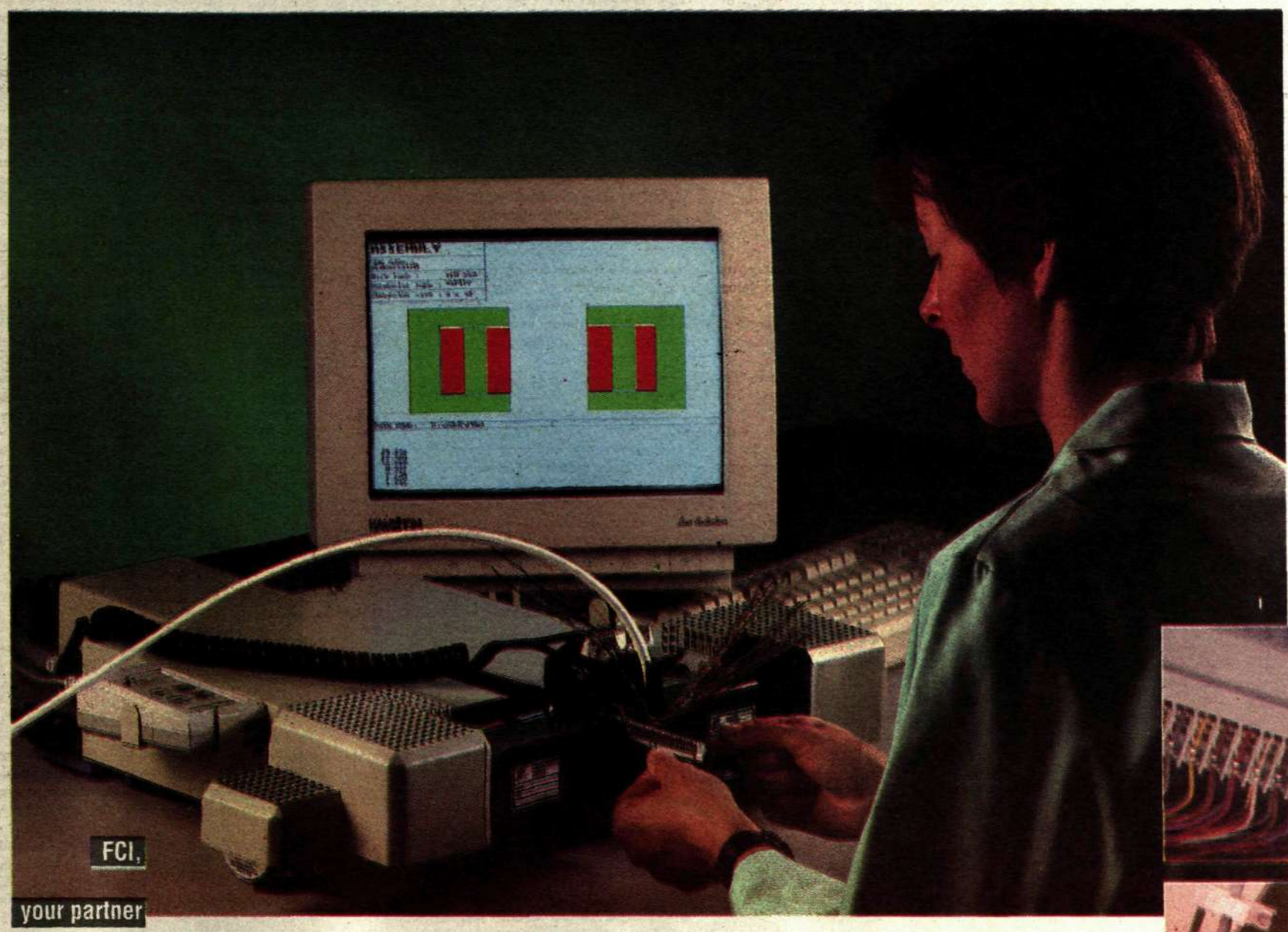
● This team collects ISP problems, investigates which ones should be prioritized and initiates prestudies for improved ISP, particularly for UAB products. This is done in close cooperation with business units.

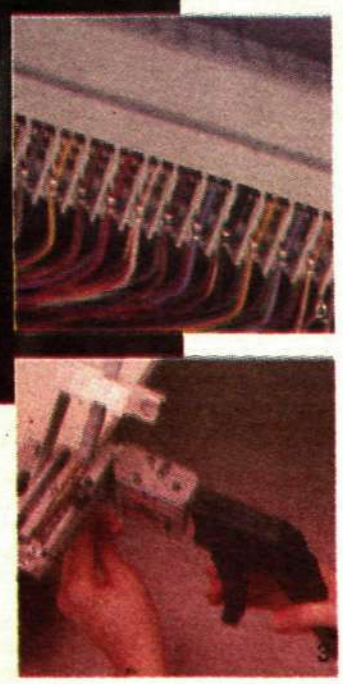
Current work includes prestudies for the AXE10 ISP Programme.

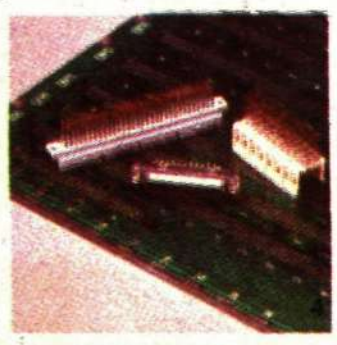
Qualifications: You have a masters degree in science or similar, with experience in computer science and telecommunications. Working experience in these or similar teams is also an advantage, as well as experience in commercial real time operative systems.

Contact: Björn Kihlblom on +46 8 727 2565 or e-mail: Bjorn.KihlblomÉuab.ericsson.se or MEMO: ETXT.ETXBJL. Application: Human Resource, ÅS/UAB/P Gunilla Edebor

FCI high performance tooling for connectors







FCI,
your partner
in connector
technology
and service.

1. FCI's Semi-automatic cable terminator is a high performing computer controlled machine that offers both the necessary accuracy of wire insertion into the IDC contact slot and the correct production speed needed to match particular production volume requirements.

2. IDC-connector technology used in conjunction with the correct tooling offers great cost advantages over wire-wrap.

3. IDC Hand pistol and hand tool for field installation and repair.

4. Press-fit connectors offer tremendous advantages compared to soldering when multilayer P.C. boards are used, where automated assembly is required or where large connectors are needed on SMT boards.

5. IMPRESS 2000™ is a high performance fully robotic machine with an integrated automated connector feeding system for insertion and testing of pre-assembled press-fit connectors. It offers unlimited programming possibilities including the automatic exchange of 20 different insertion heads.

6. IMPRESS 2000™ key features are automatic PCB tolerance adjustment, insertion force measurements and an average insertion speed of 14 connectors per minute.

IMPRESS 2000™ is a trademark of FCI or its affiliated companies.

FCI
FRAMATOME CONNECTORS INTERNATIONAL

Australia	*61 (2) 725 52 88*	*Germany*	*49 (211) 92 54 161*	*Japan*	*81 44 210 1612*	*Sweden*	*46 (8) 532 56330*
Belgium	*32 (2) 204 07 00*	*Great Britain*	*44-1-(582) 475757*	*Mexico*	*52 (5) 576 23 00*	*Switzerland*	*41 (41) 760 14 34*
Brasil	*55 (11) 5514 68 88*	*Hong Kong*	*852 (2) 510 8131*	*Netherlands*	*31 (10) 459 63 99*	*Taiwan*	*886 (2) 362 3580*
Canada	*1 (416) 757 87 61*	*India*	*91 (484) 313027*	*Singapore*	*65 749 1232*	*U.S.A.*	*1 (203) 838 44 44*
France	*33 (1) 39 49 21 83*	*Italy*	*39 (11) 451 96 11*	*Spain*	*34 (3) 771 40 12*		

contact

Ericsson, HF/LME/I, Room 811023, S-126 25 Stockholm

If he held an MBA and had the same position, the title on his business card would have been "Marketing Communications Manager." Instead his card reads simply "Anders Larsson, Ericsson Mobile Communications AB." His own description is "jack of all trades."

Title: troubleshooter, creator, ski waxer

He occupies a corner office on the six floor at Ericsson Mobile Communications in Kista. There is a seventh floor above for the management group, and if they did not know him better, company executives would be shocked upon entering Anders' office, which is spacious, chaotic and seemingly disordered. A psychologist might guess that the occupant was an inventor or perhaps a genius. Both guesses would be correct.

Anders Larsson, 58, is not a man who is interviewed but to whom one listens. He talks incessantly, and everything he says is both profound and interesting.

To quote Anders correctly, it is necessary to interrupt him and ask him to repeat. All the quotes in this affectionate portrait are correct, including his answer to the question of his working hours to which he quickly replies: "Damned if I know!"

What he does know is that the day before our meeting he rode his black Norton motorcycle home to his common law wife Inger in Frösunda north of Vallentuna at 9 p.m. Anders lives in the country, where the cows – not his own – graze in the pasture and badgers dig their lair just outside his door.

Troubleshooter, PR man, ski waxer...

What should Anders put on his business card? Completely accurate titles might be editor, graphic designer, business developer, general troubleshooter, PR man, creator or ski waxer. Who else but Anders could was the skis of Ericsson managers and major international customers before they set out on the grueling Vasaloppet ski race, which Anders himself completed in the days when contestants still wore wooden skis?

Contact's reporter took a quick survey in the corridors. The order went out, and an answer was demanded of everyone who is unlucky enough to be present, which happened to be a total of ten persons. The task: "Describe Anders Larsson in one word!" The ten answers were:

- Kind
- Mischievous
- Dedicated
- Immediate
- Pleasant
- Knowledgeable
- Wonderful
- Sly
- Networking
- Helpful

Shouldn't a man who is described in such terms be a manager? Anders is firm in his reply.

"No, it just wouldn't work. First of all, I'd go crazy. I'd also be fighting with everyone."

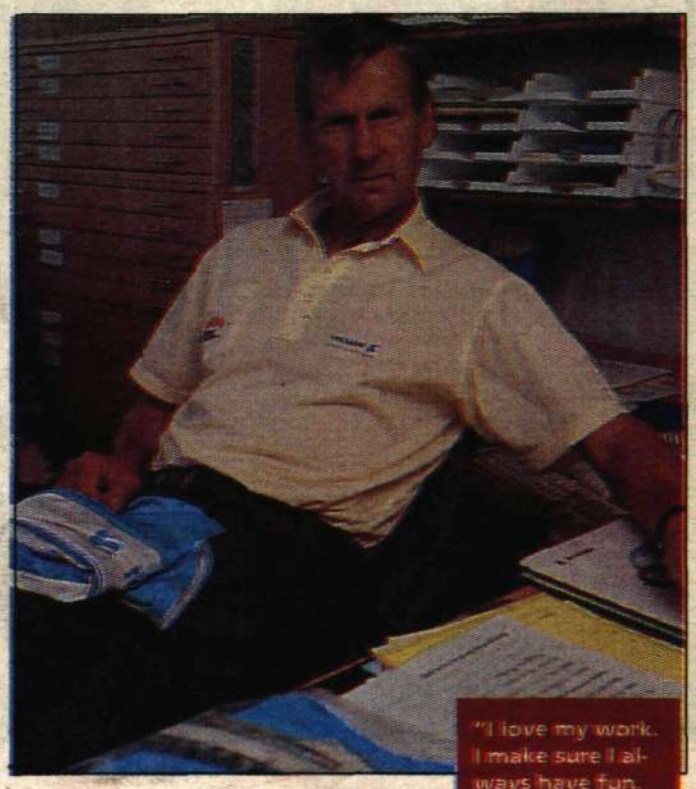
Then, of course, there is the most important question. What does this man do?

The easy answer is that he comes up with the ideas for some of Sweden's best advertising campaigns for mobile phones. This appraisal comes not from Anders himself but from the copy writer.

Take a moment to study one of the photos of an Ericsson phone together with a 20 krona note, a ten krona gold coin and a car key. Or the equally appealing photo of an Ericsson phone with three winner's flags in the background. Or a slogan such as "World champion in GSM."

Anders Larsson is one of Sweden's most skilled professionals in the difficult task of visualizing a product so that it becomes a concept. Not long ago, the product was called HotLine, but that brand name was already in use. After a protracted legal process, Ericsson was forced to pay damages. What to do?

Anders sat down at his old drafting table, amid the disorder



"I love my work. I make sure I always have fun. During my 30 years at Ericsson I have worked in many departments, but I have always worked with advertising and marketing. I like what I do."

of his office. Now it's not a mobile phone the customer is holding but an "Ericsson." The concept is as simple as it is ingenious.

At the same drafting table, Anders sketches with nimble fingers the basic outlines of next year's marketing campaign. He thinks in images, which he draws himself. Others then take over with cameras and computers.

The boy from Bromma who was content with a grade school examination and a few short courses in the 1950s has come a long way. In a company characterized by a high level of competence in all areas, he is the wonder boy who after 30 years in the company is equally comfortable at executive vice president Åke Lundquist's doctoral dinner as he is with the girls in the reception. His advertisements can be seen virtually all over the world.

First vacation week spent at work

When asked what is the secret of his success, Anders replies:

"When I was young, I could go out drinking and get into fights. But with age comes wisdom."

"Ericsson is my company. I don't own it, but it's still mine. It pains me when I see something that is not right in the company," says Anders.

He began his vacation the week after Midsummer but spent the first week in the office.

"What the hell," Anders shrugs. "That's just how it goes sometimes. In my department you always have to be ready to help out. Everyone has their assigned tasks, which are all important, but I have to take care of what's left over, whatever falls through the cracks."

Don't believe him! Anders Larsson belongs to a group of people who are vital to the company. He his a walking encyclopedia of the secrets of successful internal and external communication. One of the most precious secrets is ingenuity.

Are we being excessive? Anders will certainly think so but not those who have had the good sense to discover a unique talent that Anders has unselfishly devoted to Ericsson throughout 30 years. Seeing is believing.

SIGVARD LINDSTRÖM

end line

This is a magazine for all of Ericsson!

The other day I wrote a last page column for the Swedish version of Contact – Kontakten. It dealt with an issue that was very much local Stockholm. Still it felt worthwhile to take it up, since Ericsson is the biggest employer in Stockholm, with close to 20,000 people in the Swedish capitol. On the other hand, on the bus back to my home in Mariefred outside Stockholm, I realized that this column was nothing to read for all of you who are working outside Sweden. It occured to me, in that moment, what an international company Ericsson is – and how hard it is to cover all the exciting things happening in this huge corporation in Contact.

I sincerelly hope that as many as possible of you fellow Ericsson colleagues find this magazine worthwile reading, even though it is produced at the company headquarters. I can assure you that I myself and my staff of writers are doing our best to make Contact a reflection of the entire company.

Still, there are natural causes why most of what you see on these pages derive from Sweden. We have reasonable economical resources for travelling, but time is the narrow sector. The corporate editorial office, where we work, has grown and administratiive work takes more and more of my time.

Luckily, there are others who can fill in the gaps. Patrik Lindén, our own reporter, and the business area editors – Ingrid Björkling Bengtsson, Gunilla Tamm, Lena Widegren, Britt-Marie Wihdén and Thord Andersson – are all doing a great job in helping us to scan the Ericsson organization!

The result of their job, together with contributions from free-lancers, is that we are able to report from new exciting Ericsson countries in almost every issue. This gives us all a better idea of what a big and multi-facetted company Ericsson really is. And it gives the operations in different parts of the world an opportunity to present themselves to the entire company. But there is one thing we have not been so good at – to focus also on what it is to be an individual Ericsson employees in different parts of the world.

This is something I want to change. In this issue you can read about two girls working for Ericsson in two completely different cultural environments – Eusila in Kenya and Michella in the Netherlands. We will have more stories lake that in the future!

LARS-GÖRAN HEDIN