


contact

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Production cuts in Norrköping

3,000 new jobs available for the 1,400 employees affected

Approximately 1,400 employees of Ericsson's factory in Norrköping may be affected by measures in production which were made public week before easter. Among other things, SCI and Solectron, two American contract manufacturing companies, will take over production of business area Infocom System's circuit boards. Agreements reached between Ericsson and the two companies will affect production operations in several countries. About 400 employees affected by the change will be offered other jobs at Ericsson in the Norrköping area, mainly in the mobile telephone production plant in Linköping. In total, 3,000 new Swedish jobs will be created in the company this year. Co-determination negotiations with respect to the consequences of the agreements have been initiated.

Pages 4-5

Flamenco in Seville

Lars Ramqvist recently brought the Company's senior executives together for the third time in an Ericsson Management Forum. The meeting was held in Seville, in southwestern Spain. About 370 participants listened, learned and discussed how Ericsson plans to achieve its goals for the future.

Back page

Milestone in Japan

The AXE system is now in service in a public fixed-wire network in Japan. The installation represents a major breakthrough in a long-sought but difficult to penetrate market. Prior to the AXE installation, only Ericsson Radio has had major successes in the Japanese market.

Page 2



Success at CeBIT

Ericsson's participation at the world's largest data and telecom exhibition, CeBIT in Hanover, was a huge success. With its attractive and innovative exhibition stands, Ericsson presented a new image to the world's infocom industry.

Pages 11-13

On January 18, 1997, International Telecom Japan opened a new international exchange in Chiba, near Tokyo, for commercial traffic.

"With the new exchange, Ericsson has established a foothold in the Japanese market for public telephony," says Åke Andersson, Head of Public Networks in the business area Infocom Systems.

Milestone for AXE system in Japan

Ericsson has reached an important strategic milestone in Japan.

"Japan is the world's second largest telecommunications market, a market in which we have made considerable progress in the Mobile sector. Penetration of the public sector represents an important breakthrough," Åke Andersson continues. "It is also unusual for a Japanese company to choose a foreign supplier for a project of this size."

Extremely modern

Ericsson has installed a highly complex and modern network for the customer, International Telecom Japan (ITJ), comprising an international exchange with Intelligent Network (IN) services based on AXE and UNIX platforms.

"The project involved a customized, total solution for ITJ's specific needs. Eight different product areas were involved, traditional AXE was only one of many. In addition, ITJ demands that everything be adapted to its existing network," explains Claes Hagel, total project leader at Public Networks.

About 400 people from more than 10 countries worked on the project, which

was started in 1994. The actual contract was not finalized, however, until May 1995.

For technical purposes, the ITJ project has been an extremely valuable lesson for all Ericsson personnel involved. Design engineers from two separate worlds of products design, AXE and UNIX, met and worked together on the project.

No details overlooked

"The system's complexity forced us to think in network terms, rather than focus exclusively on AXE or UNIX," explains Claes Hagel.

"Working with ITJ has been demanding, but also extremely educational. They were very meticulous from the start, making sure not a single detail was overlooked. While our technicians preferred to start with broad strokes and make rough sketches of the system, the Japanese started by discussing details of the proposed system. They were adamant in insisting that we all agreed on the technical level."

The Japanese also seized every opportunity to learn more about Ericsson's products and processes. But they also willing to talk about themselves and their philosophies on the project, a factor highly appreciated by Ericsson personnel.

"The final acceptance test by the cus-



This is not a picture of Paris, as you might think at first glance. It's the Tokyo skyline, with its own RED Eiffel Tower.

tomer was extremely meticulous in its planning. Every detail was examined and, Claes Hagel says, ITJ identified several weaknesses buried in Ericsson systems for many years.

Time and quality

Time and quality were the project's bywords. At times, Ericsson was forced to employ unconventional methods in its design efforts. Development and testing was conducted in parallel, implemented in small phases to accelerate the overall development process.

The exchange was placed in operation on January 18 and February 3 in Chiba, not far from Tokyo.

Although the project involved a complex network in a new market, it represents a milestone for Ericsson. Thanks in large part to Ericsson's efforts to meet the



From left to right: Claes Hagel, total project leader for ITJ project; Stefan Larsson, who directed acceptance testing in Japan and Mikael Edström, assistant project leader.

customer's specific demands, but also because of ITJ's focused attention on all details throughout every phase of the project.

LOTTA MUTH



Back row (l-r): Anders Nivång, Richard Halvarsson, Birger Olofsson, Mike Clesluk, Bertil Lindqvist, Lennart Malmberg, Stefan Larsson, Olle Englund and Claes Helgesson. Front row (l-r): Mikael Edström, Claes Hagel, Juha Oikkonen, Håkan Florin, Vesa Heikkola, Robert Mellberg and Hellen Lindqvist.

Unique system for quality conscious customer

■ The system installed by Erisoft in Japan is unique.

The heart of the system is an international station based on AXE. The core functions are complemented with a number of national and international signal systems which facilitates communications by the international switch with the domestic switches just as with ITJ's remaining network.

The uniqueness of this specific switch is that each call is an IN call, handled either as an automatic IN call or via the telephone network.

The system contains services which

make it possible for subscribers to debit a third party. This makes it possible for companies who wish to pay for employees working at home.

There is also a service which facilitates billing of international calls using a pay card.

As a result of the major earthquake risk in Japan, there are special requirements for installations. All terminals are anchored to the ground. AXE equipment and the computers are placed on a spring-cushioned platform. All communication links are doubled and in some cases tripled.

"The U.S. is the biggest and the best. The same applies within telecommunications. And Ericsson. Which is the way it should be." Those words are spoken by **Bo Hedfors**. After two and a half years as head of Ericsson in the United States, his view of the world is crystal clear. "The U.S. is the leader in the telecom market, which is why it's so important for Ericsson that we have succeeded here and that this is our largest single market!"

'Vital that the U.S. is the largest market'

bo Hedfors promises that the entire U.S. organization, which today comprises 8,000 employees, will continue striving to maintain the prestigious position as Ericsson's largest market, as well as strengthen Ericsson's position in this, the largest single telecom market in the world.

Most new technical solutions and initiatives originate in the U.S., emphasizes Bo Hedfors. He illustrates with a few current examples, such as point-to-multipoint solutions for wireless access, systems for fiber access, and ADSL, the technology for increasing capacity in copper cables. Furthermore, since Internet was an American innovation from the beginning, many of the technologies and solutions being developed for IP-based (Internet Protocol) communication is of U.S.-origin.

"Now that Ericsson is focusing strongly on communication solutions for info-com, we have a central role to play here in the U.S. Several of the companies that Ericsson cooperates with in this sector are here, such as Cisco, Bay Networks and GDC, to name a few. And this is where Ericsson can increase its know-how in the field by finding new partners or through acquisitions of companies with expertise in, for example, routers," claims Bo Hedfors.

He continues, "We have to use our achievements and our know-how in telecommunications more to our advantage in order to create alliances with companies that are successful in the data communications field. Without the strong American presence Ericsson has today, it would have been very difficult for the company to compete in the info-com area, which could very well be the next large growth sector in the industry."

Strong in cellular systems

The largest growth area in American telecommunications at this time is cellular telephony. The growth rate increased in 1996, when a few of the PCS operators began operations on their networks. License auctions and technology debates have put a check on developments in the past, but now things are really starting to happen. There were 12 million new subscribers in the U.S. in 1996. This increased the coverage of cellular phones to 18 percent. By the end of the year, the U.S. had a total of 44 million subscribers.

"This is our greatest challenge right

now," explains Bo. "We must defend our strong market position in a situation where many of the cellular operators have chosen systems based on IS-95 CDMA, a standard Ericsson doesn't work with. Therefore, it's vital we ensure our TDMA systems for PCS get nationwide coverage, both in terms of the D-AMPS-based PCS 1800 and the GSM-based DCS 1900.

"I'm still convinced that TDMA has more to offer customers. I'll admit that IS-95 CDMA appears to function in the networks, but it doesn't offer the market anything that TDMA can't match – at a lower cost to the operators, no less," emphasizes Bo Hedfors.

Largest in digital terminals

The past year was a good one for Ericsson's cellular phones in the U.S. The Lynchburg plant produced more than two million phones and aims to double the amount this year.

"We will then have production volumes that will enable us to match the downward

pressure on prices in the market. Through major marketing investments, such as prize-winning advertising campaigns, we have been able to capture a leading position among manufacturers of digital cellular phones," says Bo Hedfors.

"Dataquest recently presented figures illustrating that we are not only largest in the digital cellular phone market; we're twice as large as our closest competitor – domestic Motorola! I think that's a true achievement of our cellular staff!"

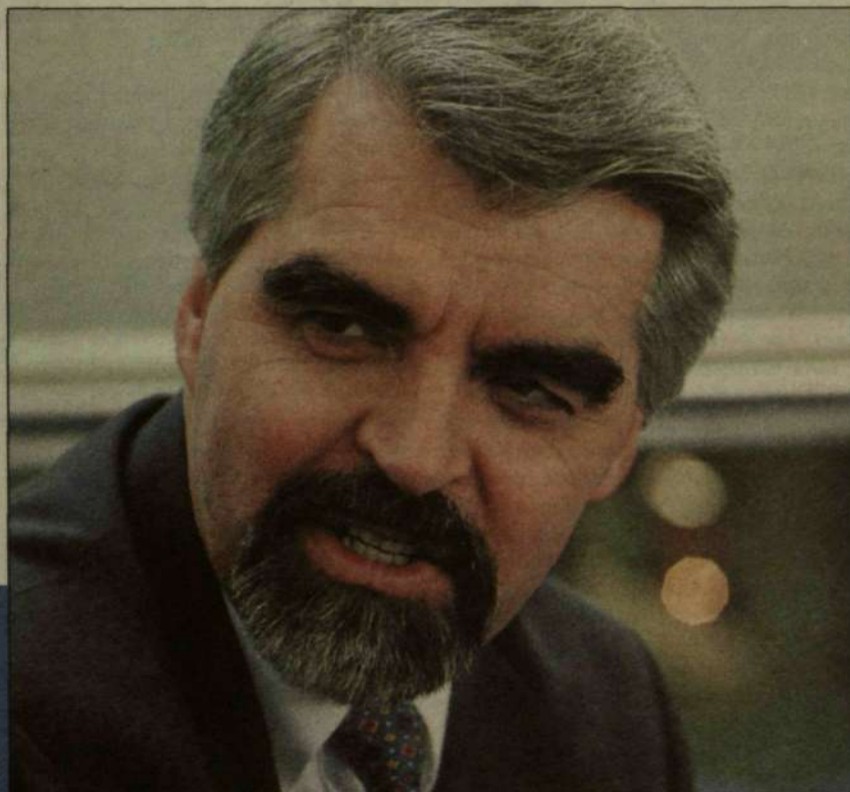
A stream of new products

A steady stream of new products flows forth from Raleigh, North Carolina, where Ericsson's development center for cellular phones is located. Bo Hedfors is very satisfied with what the product development staff has accomplished.

"We have a very strong product program today with the smallest PCS telephone on the market and several models within the 'hot' segment for dual mode and dual band phones, that is, telephones that work in several different standards or frequency areas," according to Bo.

Doing better across the board

Cellular systems and terminals are not the only areas in which Ericsson in the U.S. is doing well these days. Bo Hedfors says that the public telecommunications



Bo Hedfors has headed Ericsson in the United States for the past two and a half years.
Photo: LARS ÅSTRÖM

operation is also reporting good profitability and that major breakthroughs are in the works for business communications.

"We were the largest growth market for Consono MD 110. This is largely due to the wireless DECT solutions. Our goal is to further increase volumes using measures such as new alliances on the distribution side."

Bo Hedfors also states that Ericsson's component operations and energy systems are enjoying strong tailwinds right now. "It's also a challenge for us to increase external sales of components and power modules."

The land mobile radio operation was restructured during the year and new management was put into place. Bo Hedfors feels that Ericsson needs to grow in this area in the export markets, and not in the U.S.

Towards the year 2005

An area which Ericsson is further developing is relations with large customers. It is a part of Ericsson's strengthened marketing objectives to emphasize Global Account Management. In practice, this means that the companies in countries where large international customers have their home base are responsible for the relations with them.

"We have six of Ericsson's largest customers in the U.S. Together they account for 20 percent of Ericsson's total sales, so we feel responsible for developing and solidifying our relationships with them," says Bo. He is currently working to increase the focus of the U.S. operations on these large customers.

"Ericsson's common values – professionalism, respect and perseverance – form a solid ground on which to build customer relations. At Ericsson in the U.S., we also need to add two factors: a faster pace and a strong focus on teamwork, both internally and with the customer."

The fast pace is dictated by the speed with which everything is happening in the U.S. today. Bo Hedfors is convinced that Ericsson must become faster in developing new products and serving customers in order to have a chance in the cut-throat American market.

"And I also believe that speed will be of essence in European markets and other markets outside the U.S. This is why it's beneficial that Ericsson has large operations in the U.S. We are forced to learn a way of working that will be required worldwide within a few years. The year 2005 doesn't seem so far off when watching the world from Richardson, Texas!"

LARS-GÖRAN HEDIN

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Ericsson downsizes in

Business area Infocom Systems is continuing to rationalize its production and supply organization. On March 25, a memorandum of understanding was signed with the world's two largest contract electronic manufacturers (CEM). According to the agreement, a large part of Ericsson's production of printed circuits for AXE and access products will be taken over by the two companies, SCI and Solectron. This is part of the major changeover taking place in Ericsson.

Ericsson is continuing to evaluate its operations involving products and systems for fixed-wire telecommunications networks. Even though these operations have now become a part of the business area Infocom Systems, restructuring efforts have not subsided. Rather, the pace has quickened to reorganize technical development and production in order to create the necessary conditions for continued growth in a market with stiffening price competition.

On March 25, a memorandum of understanding was signed with two of the world's leading CEMs, SCI and Solectron. The purpose of the agreement is to ensure that Ericsson's future production will be of world-class quality. By allocating parts of the production process to more cost-effective external partners, Ericsson can increase its competitiveness and its opportunities to continue growth in AXE and access products, the two product areas which are affected by the agreement.

Gradual takeover

The two contract manufacturers will gradually take over a large portion of Infocom System's manufacturing of printed

Ericsson in Linköping needs new recruits

Ericsson's plant in Linköping requires more people, both in production and administration. Håkan Liedman, production manager in Linköping, sees good prospects for recruiting employees from Norrköping.

"The Norrköping employees' skills and know-how would be a valuable addition to our business. Previous personnel exchanges between our companies have been very positive, so applicants are more than welcome to contact us," says Håkan.

The job opportunities Håkan Liedman is referring to are within surface mounting of cellular telephones as well as within technical and administrative departments. The operations, together with the Kumla factory, are the Mobile Phone and Terminals business areas' largest production unit in Sweden and work at full capacity. The production trend is expected to continue rising somewhat during 1997.

The plant in Linköping currently employs 1,200 people and it is estimated that another 400 workers are needed, including the vacancies in Kumla. Most of the jobs, however, are in Linköping; an important factor for Norrköping residents since commuting time is only 30 minutes one way. Ericsson is looking into the possibility of running shuttle buses to facilitate travel.

LENA WIDEGREN



Håkan Liedman.

Photo: HELEN OHLSON

In Norrköping, 1,400 employees are likely to be affected. More than 400 can be offered other jobs in the region and all of those affected will be given priority status for the 3,000 jobs available within Ericsson throughout Sweden. Negotiations are now taking place as to the conditions of the takeover outside of Sweden. In some cases, Ericsson's new production partners will take over entire operations, including personnel.

The affected employees will be given priority to new jobs

circuits for AXE and access products. This will allow Ericsson to concentrate on final assembly and testing of AXE products. The details of the agreement will be negotiated during the next two months.

It has already been decided that the takeover form will vary between the different units. In some cases, either SCI or Solectron will take over entire operations - as in Karlskrona, where Flextronics has taken over the production of MD110. In such cases, all or a portion of Ericsson's personnel will be transferred to the new owner and production will continue in the same premises.

1,400 affected in Norrköping

The agreement with SCI and Solectron will have a major impact on Ericsson in Norrköping, where several operations will be affected.

In Norrköping, 700 employees are engaged in printed circuit assembly. If SCI and Solectron can meet the financial and manufacturing conditions in the agreement, they will be taking over the entire operation. Outsourcing of the type Ericsson has applied on previous occasions, whereby personnel, plant and production resources have been included in an agreement was not possible in this case. The printed circuit assembly operations in Norrköping are simply too large for that type of an arrangement. Co-determination labor negotiations on this issue will begin immediately.

Also affected by Infocom System's recent management decisions are the operations

for transport networks and access products in Norrköping, which are now being evaluated in order to adapt production to demand and thereby reduce costs. If alternative and more cost-effective solutions are found, this production line will also be relocated. This decision would affect 400 employees. Labor unions will be invited to follow the evaluation process closely.

Ericsson is already looking for a partner for printed circuit board production in Norrköping, a process which employs another 300 people. A number of parties are interested in this venture and a takeover agreement can hopefully be reached before mid-summer.

AXE manufacturing not affected

The final assembly of AXE in Norrköping, which today employs 600 people, is not affected by the measures announced. However, together with earlier announced measures, the announced changes will affect a total of 1,400 employees in Norrköping.

400 new jobs

All personnel affected by these changes will be given first priority for new jobs within Ericsson.



ABOVE: SCI Systems Incorporated is the world's largest contract manufacturer.

Ericsson Mobile Communications will recruit 440 new workers to its factories in Linköping and Kumla. In total, Ericsson needs to recruit up to 3,000 new employees in Sweden during 1997. Those affected by the measures taken in Norrköping will be given first priority for these jobs if their skills and experience correspond with Ericsson's needs.

The two parties will begin discussing cooperative projects and specific steps that can be initiated, as well as job opportunities these projects could create in the city.

LARS-GÖRAN HEDIN

The companies that will be taking over Ericsson's printed circuit manufacturing are two American contract electronic manufacturers (CEM). CEMs are increasingly shifting their focus from manufacturing to the development of printed circuits and assembly of finished products. Their manufacturing is much more efficient, due to their large-scale production, even capacity and large volumes when it comes to production and purchasing components. SCI Systems Incorporated is the world's largest

contract manufacturer. The company's strategy is based on global manufacturing in low-cost regions in Latin America, Europe and Asia. SCI's operations comprise a total of 22 factories worldwide. The company's headquarters are located in Huntsville, Alabama, in the U.S. Solectron is the second-largest company in the CEM market. Its strategy is to provide everything from design to components. The head office is located in Mipitas, California, in the U.S., with 11 factories worldwide.

The Norrköping operations

Ericsson has had operations in Norrköping since 1962. Ericsson Telecom AB employs approximately 2,300 people and is the largest employer in the city.

There are chiefly three types of manufacturing in Ericsson's Norrköping facilities. The printed board segment employs 400 people, while 1,100 employees work with printed circuit manufacturing and final assembly of AXE stations. Broadband and transport network products employ 800.

Photo: PETR ZATREPALEK

The contract makes us much stronger

"Outsourcing Infocom Systems' printed circuit assembly is a necessary part of Ericsson's global restructuring," explains Lars Ramqvist, Ericsson's President and CEO.

"We must always be prepared to reevaluate our operations if we are to succeed in an increasingly competitive telecom market. No company that wants to survive and secure jobs in the long run can say no to the cost reductions that contract manufacturing offers in this case."

Lars Ramqvist continues, "The various measures taken in Norrköping may affect up to 1,400 employees. Therefore, it is important that companies, labor unions, employees and the appropriate authorities work together to make the best of the situation. The 400 jobs we are offering in Linköping and Kumla, as well as the cooperative projects we are initiating with the high-school in Norrköping are a part of these efforts."

Ericsson has been in a major restructuring phase for the past two years, which includes technical investments that costed over SEK 22 billion in 1996. Over 6,000 employees in Sweden alone changed jobs within Ericsson during 1996. An additional 6,000 employees were recruited and 3,000 left the company. These gigantic changes within the company are an adaptation to market trends. The ability to handle such changes is a criterion

for survival in a dynamic industry such as ours.

Alongside market trends, there are technical developments which mean that productivity is constantly on the rise and the size of the company's products is decreasing. Cellular telephones are not the only products we make that have become smaller. Even the sizes of radio base stations and AXE equipment have decreased considerably.

"This means that our need of production facilities and personnel are constantly decreasing, even though volumes are simultaneously on the rise," explains Lars Ramqvist. "This trend is the reason several of Infocom Systems' production units have been outsourced to external partners over the past two years."

A defeat

"Outsourcing is the next best way to carry out our restructuring plans," Lars Ramqvist emphasizes. "Of course the best method would have been to relocate personnel to other parts of Ericsson, something we have done with thousands of other employees. We would then have been able to retain their skills within Ericsson. However, when this is not possible, outsourcing is a good alternative for both the individual and the company."

"Until now, we have been able to carry out our restructuring plans without any negative consequences for our personnel. Therefore, I consider it to be somewhat of a

personal defeat that we have not been able to manage the same with regards to the printed circuit manufacturing. Unfortunately, there were no alternatives that were truly economically feasible."

Anders Igel, head of the business area Infocom Systems, explains, "Our evaluation of the production process showed that printed circuit manufacturing needed to be rendered more effective. That is why we have been forced into the current situation. Closing down such a large plant in Sweden is a difficult measure for a company which has always considered its personnel as well as its operations in this country."

"It is not just a question of reducing production costs, but also of downsizing our production structure. Infocom Systems cannot afford to have so much capital tied up in production facilities if we are to have a chance in the infocom market. We are competing with companies that have long since tightened their production processes by mainly relying on contract manufacturing."

"Even though we are expecting large volume increases for Infocom Systems, rapid technological developments make it necessary to drastically reduce our production capacity over the next few years," says Anders Igel.

"Contract manufacturing gives us an opportunity to substantially strengthen our competitive advantage. Of course, this is provided that we choose a partner that can offer not only lower costs but also maintained, or even higher, quality. We are beginning co-determination labor negotiations on the proposed changes and their consequences for employees."

Anders adds, "A question that has arisen in these discussions is whether it would be possible to move cellular phone manufacturing to the Norrköping plant. Our discussions with business area Mobile Telephones and Terminals have confirmed that this is not a feasible solution. The cellular phone manufacturing operations in Linköping employ 1 100 people and have recently been expanded with new production equipment. There are 300 vacant positions for which the affected Norrköping personnel have first priority. It's more realistic and environmentally friendly to have 300 workers commute from Norrköping to Linköping every day than to have 1 100 workers commute in the other direction," Anders points out.

"The main points of the measures we are now announcing have been generally known for some time. But I nevertheless understand that the final announcement comes as a shock to many of our employees. We will make all efforts within reason to help those affected find other employment, either within Ericsson or at another company. How we will go about doing this will be discussed in close cooperation with labor unions and the relevant authorities."

Anders continues, "The business effects of our agreements with SCI and Solectron are nonetheless good news for Ericsson. We have significantly reinforced the opportunities for AXE to continue its triumphal progress throughout the world. Not to mention Ericsson's possibilities to reach its goal and become the world's largest supplier of equipment to the infocom market!"

LARS-GÖRAN HEDIN

hello there! Why choose Germany?



Karl Alsmar, just turned 48, takes over as president of Ericsson Germany on June 1 this year. Formerly, he was manager of Ericsson's operations within Network Engineering. In this position, he received a solid grounding in the art of conducting business with new operators throughout the world. Contact interviewed him on the CeBIT booth in Hanover recently.

• Why did you choose Germany?

"I was attracted primarily by the scale of the market changes in Germany. The German telecommunications market will be deregulated in 1998, which will create substantial opportunities, with many new players entering the market. A number of powerful alliances are competing to challenge Deutsche Telekom. The challenge for Ericsson is to be perceived as a significant supplier to these players. I do not pretend that this will be an easy assignment, but I enjoy an uphill fight. Ericsson Germany currently has sales of around SEK 5 billion, which I consider is too little for a European market with 80 million inhabitants."

• Mannesmann is already a large customer within the mobile telephones area.

"That is correct. It is a large customer that we handle well and it will remain one of our most important customers. Our hope is to expand our relations with Mannesmann in line with the company establishing itself in the fixed network as a member of the new Arcor consortium. It is my belief that our short-term growth in the public area will mainly be achieved through the new operators. Naturally, we will also focus heavily on developing the rolling/ongoing business we have already established with Deutsche Telekom. In this respect, it is important that we produce even better access products."

• How would you summarize the clear goals to be attained in Germany?

"Continue to work with Mannesmann in the same exemplary fashion, so that Arcor also becomes one of our customers. We must also improve our business situation with regard to Vebacom, which is now part of the new Oteco. Our goal is to become a main supplier. On the whole, we need to increase our customer focus within all areas of our operations."

• When will you move to Germany?

"After the Easter break. My wife Arja and our 9-year-old son Victor will follow in June. We will live in Düsseldorf, close to my work."

• How is your German?

"It's going well, despite being something of a battle. I've progressed beyond the reading and comprehending stage, but deep discussions and the selection of the most appropriate verbs are areas which still need some work."

THORD ANDERSSON

Focus on the future...

"We must accept change. It's the only guarantee in Ericsson's future," Lars Ramqvist stated to union representatives at Ericsson's annual meeting of European trade unions and management.

About 30 representatives of trade unions in EU countries attended the meeting with Lars Ramqvist, CW Ros and Britt Reigo, who presented information about current trends and events in Ericsson. The union representatives also asked questions and discussed topical issues.

The hottest item on the agenda, of

...at meeting of EU unions and Ericsson management

course, was Ericsson's recent reorganization and its future vision, as presented in the three scenarios of "2005."

Summary of present position

Lars Ramqvist opened the meeting with a summary of Ericsson's present position. He also pointed out that it will never again be as easy as it was in the past to achieve commercial success. The competition is becoming much tougher.

The potential for telecom is enormous. No more than 10 percent of the world's population have telephones. Alcatel, Siemens and Motorola also want a piece of the market, however, and will match Ericsson's efforts to provide the other 90 percent with telecommunications, Mr. Ramqvist said.

An American survey shows the number of households that use the Internet will increase from 10 to 60 percent in the near future, a clear indication that datacom will eventually become bigger than telephony. The market potential is enormous if everybody connects to the Internet.

"The Internet is much different than telephony. A telephone call averages about three minutes. The average Internet session is three hours.

Outsourcing necessary

The Infocom Systems Business Area is approaching a period of transformation.



About 30 representatives of trade unions in EU countries met recently for discussions with CW Ros, Britt Reigo and Lars Ramqvist at Ericsson's annual European Union Meeting.

Photo: ANDERS ANJOU

If we play our cards right, the new business area will become Ericsson's largest cash cow by the year 2000. Today, mobile systems and telephones account for the largest cash flows.

"The need for hardware is declining, in parallel with stronger demand for software. It is necessary, therefore, for Ericsson to outsource production operations not included in our core operations to business partners," explained Harald Johansen.

"Today, 30 cabinets are needed for AXE equipment to perform a function

that will eventually require two cabinets. The pace of development is dynamic, driven by improved technologies."

Correct quality

"Ericsson had 69 production units in 1995 and 60 at year-end 1996. And the decline will continue," Harald Johansen said.

The announcement was met by concern and several questions from the union representatives. How will outsourcing affect quality, they asked, if Ericsson transfers production to other companies?

"Naturally, Ericsson will have to make

sure that proper quality standards are maintained," Lars Ramqvist replied.

"We also know, however, that 80 percent of present business operations comprise software, with hardware accounting for only 20 percent."

"I believe we have to show courage and try to outsource production in parallel with unchanged quality standards. For this reason, we shall seek out the best business partners available to work in future cooperation with Ericsson," Mr. Ramqvist concluded.

INGER BJÖRKLIND BENGTSOON

Ericsson Cables and Sumitomo form joint company

■ Ericsson Cables and Sumitomo Electric Industries of Japan have signed an agreement to establish a joint venture, owned equally by the two principals, to develop and manufacture optical fiber to be used in production of fiber cable for telephone networks. The new company will be based in Hudiksvall, Sweden.

Sumitomo is one of the world's largest manufacturers of optical fiber, and the world leader in development of new technologies for optoelectronics.

The joint venture company will deliver part of its production output to Ericsson Cables, thereby meeting the Swedish company's growing requirements to increase production of fiber optic cable.

Based on fiber

The world market for telecom networks based on fiber optics is already an extremely interesting sector and is continuing to expand sharply.

"In our judgment, it's extremely important that we secure supplies of optical fiber for our cable production units. Cooperation with Sumitomo will be very important in maintaining Ericsson's high standards of product sophistication and continued development," says Janne Sjöden, President of Ericsson Cables AB in Hudiksvall.

The new plant is expected to begin production in the autumn of 1998. Sumitomo will appoint the new company's Chairman, and Ericsson will appoint the President. The company will employ about 50 people.



The agreement between Sumitomo and Ericsson was signed at Ericsson Components in Kista. (L-r): Mr. M. Noshikawa and Dr. H. Fukutomi, both of Sumitomo; Bert Jeppson, President of Ericsson Components, and Janne Sjöden, President of Ericsson Cables.

Photo: Anders Anjou



Erieye will be installed on Brazilian 145 Embraer aircraft. The airborne radar surveillance systems from Ericsson will be used in Brazil's Sivam Project to monitor the Amazon rain forests.

Brazil orders Erieye

Ericsson booked an order recently for Erieye, the airborne radar surveillance system, in Brazil. The order culminated three and a half years of negotiations with the Brazilian government. The radar system will be used primarily to monitor and combat illegal activities in the Amazon rain forests.

The Brazilian order for Erieye is valued at SEK 1.1 billion by Ericsson Microwave Systems, and represents the largest Erieye order ever booked outside Sweden. EMS will hire an additional 50 engineers to fill the order.

Project Sivam was created as the result of the United Nations Environmental Conference in Rio de Janeiro in 1992. Sivam stands for "Sistemas de Vigilância da Amazonia" in Portuguese, or "Amazon Surveillance Systems" in English. The system is used to combat drug trading, reckless felling operations in the nation's rain forests and illegal mining operations.

In 1993, Bertil Hellström, Roland Liljevall and Anders Rilby, who have different marketing functions at Ericsson Microwave Systems, initiated negotiations covering the radar parts of the project.

"The project is the biggest of its type," says Bertil Hellström, Export Marketing Manager at Ericsson Microwave Systems, who has "lived with" Erieye since negotiations were started in October 1993.

"Now, just a few days after the contract was signed, it's a great feeling to have the order booked, although there are some great memories from those eventful years," Bertil Hellström continues.

The contract was signed on March 14, after more than 24 hours of uninterrupted negotiations in the final stage. The last negotiating trip to Brazil began on February 17, so it was a tired trio that was greeted in Mölndal the following Monday, just two days after returning to Sweden.

New export potential

"Now we have to look ahead. The contract is really "only" the necessary condition for all the work involved in producing and delivering the radar systems. Cooperation with Embraer and Raytheon, the main supplier, will be extremely important in future operations," says Anders Rilby.

In his address to employees affected by the contract after the order booking was finalized, Jan-Åke Kark, President of Ericsson Microwave Systems, pointed out that export orders of this magnitude may generate business opportunities valued at about SEK 20 billion by the year 2000. Interest has also been noted for JAS 39 Gripen fighter jets, as well as Arthur and Giraffe radar systems. There are prospective markets in South America, Europe and Asia.

The order in Brazil also provides Ericsson with its first export reference for the totally "Made in Sweden" radar surveillance system.

Ericsson Microwave Systems' contract was signed with Embraer, a Brazilian aircraft manufacturer that, in turn, is responsible for the contract with Sivam along with Raytheon, a major American military defense supplier, and a Brazilian foundation.

The total project is valued at about USD 1.4 billion, of which USD 1 billion will be financed by the American Exim Bank. The Swedish Export Credits Guarantee Board has guaranteed about SEK 100 million.

50 new engineers

Erieye is equipped with an electronically controlled antenna that facilitates radar scanning operations without any moving parts. The design provides lighter weight and much lower air resistance, compared with surveillance systems with rotating antennas. Its coverage range is 450 kilometers. Erieye is the world's first and only advanced airborne surveillance system that can be mounted on small turboprop airplanes, which makes procurement costs and operations much cheaper, compared with other systems.

Deliveries are scheduled to begin in 1999. To meet its commitment, Ericsson Microwave Systems will hire at least 50 new civil engineers.

People who have worked for years on the design and development of Erieye believe the order was booked at exactly the right time, although the three-plus years of waiting and indecision put some strain on patience. Until now, they have been extremely busy working on development and follow-up of five radar systems delivered to the Defense Materiel Administration of Sweden. The Swedish order was instrumental as a reference contract for foreign customers.

BRITT-MARIE WİHDÉN



Anders Rilby, Bertil Hellström and Roland Liljevall.

How do you feel today?

Bertil Hellström, Export Marketing Manager at Ericsson Microwave Systems, was involved in the Erieye negotiations since they started in 1993.

You have just returned from Brazil with the largest export order in the history of Ericsson Microwave Systems, valued at SEK 1.1 billion. Your comments?

"The order is extremely important to Ericsson Microwave Systems, a major breakthrough for export sales of Erieye. I am very hopeful about future business opportunities. There is considerable interest in several markets."

What were the decisive factors that helped Erieye and Ericsson win out over the competition?

"We positioned ourselves early in the negotiation process in three of the five consortiums competing for the project, which has a total value of USD 1.4 billion. We won because we have the best technology and commercial staying power. The deal was very complex."

Erieye was developed for Sweden's military defense. It has now been sold for civil aviation applications. Is this type of interchangeability common?

"Ericsson Microwave Systems has a long-term strategy whereby we offer sophisticated military defense electronics for civil aviation markets and other operations that support world peace. That is the focal point of our business concept."

What happens now?

"The project will hit full stride in Ericsson Microwave's airborne radar surveillance division. The first Erieye systems will patrol the skies over Amazon rain forests by the year 2000."

Industry news

BT, MCI and Concert investing in the Internet

BT and MCI are creating a new global hosting service for the Internet. It will be marketed by the Concert Communications Company, a joint venture company owned by BT and MCI. The new service, Concert Global Web Hosting Service, will offer more rapid flows of information via the Internet, making it possible for companies to store customer information on both sides of the Atlantic and provide faster connections for users.

Targeting internal communications requirements of companies, BT and MCI will also offer Internet services to enable international companies to quickly discuss new information and data in all parts of the world. The service will be marketed by BT and MCI in their respective markets, and by Concert Communications and its partners in the rest of the world.

AT&T books large order

AT&T has received a contract to supply global telecommunication services to United Technologies, an American company. The contract is valued at more than SEK 1.5 billion and includes a broad range of products and services, from wireless Internet communications to sophisticated systems to operate the U.S. company's telecom network.

Loral acquires satellite telephony

Loral Space & Communications Ltd. has acquired Skynet Satellite Services, AT&T's satellite telephone operations. The purchase price, which reflects the crash of a Skynet satellite in January, was USD 478 million. Loral plans to expand Skynet to create an international network of geostationary satellites connected to wired networks of joint venture operators.

Nortel books GSM order

Two small C-band operators for PCS personal telephony in the U.S. have ordered a GSM network from Nortel valued at approximately SEK 150 million. The operators intend to connect the new network to subscribers who have chosen the TDMA-based 1900 MHz GSM standard. The contract extends over a three-year period and covers networks in the northern part of Michigan.

Internet access for rural U.S. areas

Nortel and NRTC (National Rural Telecommunications Cooperative) are behind new efforts to improve Internet access for subscribers in rural areas of the U.S. market. The cooperation agreement includes overhaul of the nation's telephone and power lines in rural areas. The objective is to improve the ability of the lines to develop new local Internet services or improve existing Internet access servers.

Alcatel and Sharp show new products

Alcatel and the Sharp Corporation recently presented a new cellular telephone with increased functionality, also called the "enhanced telephone" or "smart phone." The telephone is reportedly the first of its kind: an electronic calendar integrated in a GSM terminal. (Nokia has also launched a similar product called Communicator 9000.) Alcatel's version will be available in pocket format, and is expected to be introduced in Europe during the autumn.



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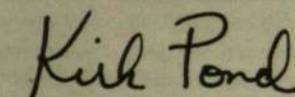
Fairchild Semiconductor is proud to announce we are now an independent company with the freedom to focus on our core product strengths. We're a \$700 million start-up with a global workforce of 6,400 dedicated employees operating manufacturing facilities worldwide.

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Kirk Pond
President and CEO
Fairchild Semiconductor

p.s. It's good to be back!

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The reasons why it's so small

The challenge facing technicians at the research and development center of Ericsson Mobile Telephones and Terminals in Lund was to design the smallest telephone ever produced by Ericsson.

In the following article, for the first time, they describe how they finally accomplished their objective.

A relaxed atmosphere prevails at the table in a small conference room at Ericsson in Lund. After many months of hard work, the GF 788 model is now ready to be delivered to customers. The following day, the staff is scheduled to leave for CeBIT in Hanover, including Hélène Barnekow, product manager; Lars Sjöbeck, project leader; and development engineers Olof Zander and Oscar Strand. They are all pleased over the positive press and market reviews.

The favorable press reviews for the new GF 788 were not written by chance. The new telephone WILL BE a success. Before the product launch, Ericsson made determined efforts in highly comprehensive market surveys to ensure its commercial success.

High scores

"Design, feeling and trademark features have earned high scores," explains Hélène Barnekow. "That is why we don't talk too much about technology in our advertising, mainly because we know that most people use only a fraction of all the technical finesse of cellular telephones."

Making the telephone small, very small, was one of the main demands specified by Nils Rydbeck, manager of Ericsson's global research and development for Mobile Telephones and Terminals. Preliminary studies of the GH 788 model were completed toward year-end 1994. A few months later, Ericsson in the U.S. finished its work on basic mechanics and parallel development efforts were started.

Technical engineers in Lund worked in cooperation with Yeo Chung Sun – chief designer for Lawton & Yeo in Singapore, who visited Ericsson facilities in Lund on several occasions – and with Ericsson in the U.S. The American center is working on a 788 variation called the 738 model, designed specifically for the AMPS analog cellular system in the U.S.



The team that spearheaded development of Ericsson's smallest telephone comprised (l-r) Hélène Barnekow, product manager; Lars Sjöbeck, project leader; and development engineers Olof Zander and Oscar Strand. Photos: TOMMY NILSSON

"We worked in very close cooperation," says Oscar Strand. "The AMPS telephone does not need the same number of components as the 788, so there was more scope for other solutions. The smallest change in AMPS, however, can spell chaos for GSM."

There were several stumbling blocks along the way. Lars Sjöbeck recalls the day he was out fishing in the archipelago, when his cellular phone rang and development manager Mats Lindoff said: "We have to start all over again, right from the beginning."

The real problem was to get everything into such a small space. After five months of development work, the surface area covered by all necessary components on the circuit was larger than the circuit board itself.

"That's when we started to play around more seriously," says Olof Zander, with a cunning smile.

Question every component

He quickly becomes more serious again, explaining how the team started to question every component. In the end, there was always a way to find something that wasn't absolutely necessary, or couldn't be made smaller. The team also found smaller components, but couldn't use them because they were available from only one supplier. Ericsson never wants to be dependent on a single supplier, and thereby run the risk of a single source shutting down or cutting off supplies for some other reason.

The loudspeaker was three millimeters too large when it arrived from the supplier, who said it could eventually correct the situation. The development team had to choose between taking a chance and waiting for the smaller loudspeakers or producing a telephone three millimeters larger than blueprint plan.

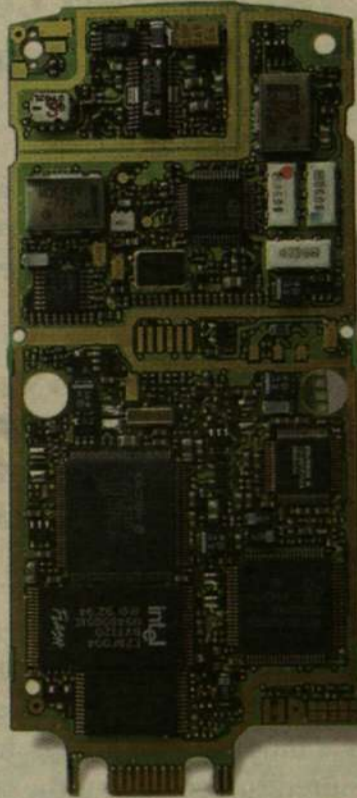
• And you took the chance?

"Absolutely," reply Olof Zander and Oscar Strand in unison.

"It's better to take a chance, than not make any decision at all," explains Lars Sjöbeck.

The technical team worked without any pressure "from above," and not always "by the book." Technicians were often forced to improvise. Overtime, canceled courses and improvised vacations were commonplace. But nobody was given any orders, they weren't necessary.

"I really cannot imagine a more enjoyable job," says Olof Zander. "I am able to influence



Ericsson's compact new GF 788 is the result of highly coordinated team efforts.

a great deal, meet with suppliers and mistakes are allowed. We don't try to find scapegoats, and there is no prestige attached to who does what. We have always worked this way."

Cooperation with Yeo Chung Sun was characterized by a give-and-take approach. Tremendous effort was devoted to encouraging suppliers to develop the correct components, as specified in Chung's vision.

"It was especially difficult," recalls Hélène Barnekow, "to get the right structure for components molded in plastic with blended metallic paint."

"Chung was forced to back off on at least two points," says Lars Sjöbeck. "He wanted the display glass to extend over the edges and place the Ericsson logo inside the cover."

Specific purpose

The banana-shaped GH 788 was designed with a specific purpose, to include more components. Placement of the antenna at an angle from the telephone was designed to enhance operating efficiency and to provide the AMPS model with needed space for a pull-out (extension) antenna.

In the past, technicians conducted development projects and marketing departments came along in their wake. Development work on the 788 was conducted as an integrated industrial project, from start to finish. All personnel who could possibly contribute were involved in the project, involving the efforts of about 170 persons.

Thus the story of GH 788 and its odyssey to consumer markets is as much a story about production engineers at the Kumla factory and their efforts in parallel with the production line for 788 telephones, as it is of people working in accessories and repair operations and of the efforts put forth by marketing personnel.

CHRISTIAN WIGARDT



III: ÅSA HARVARD

Ericsson's MD110 business exchange ranks first in the competition for satisfied customers. The "1996 International Ratings Survey on PBX" conducted by Data-

MD 110 at the top

pro, an American market research organization, clearly shows that customers who chose Ericsson think they made the right choice.

Datapro last year sent out questionnaires to thousands of companies in more than 30 countries throughout the world. The study was based on 836 replies.

Based on answers to the question, "Which PBX system is used in your organization?" it was possible to document a number of aspects of customer satisfaction. For example: What demands do you impose for functionality? How well does your system meet these demands? Would you choose the same system when making a new investment?

The MD110 was at the top of the list in nine out of twelve categories, sharing the ranking in some cases. In addition to Ericsson and the MD110, six other suppliers – Alcatel, Nortel, Lucent, GPT, Mitel and Siemens – were represented in the survey. Three fourths of the MD110 customers said the system met or exceeded their expectations. None were dissatisfied.

Areas in which the MD110 "holds strong cards" relative to its competitors include the capability for cordless telephony, ISDN functions, computer-supported telephony, operations and maintenance, plus compatibility with other suppliers' products.

Other useful information that can be derived from the survey include the uses to which all PBX customers who responded to the question put their systems, in addition to using them for ordinary telephone calls. First of all, several trends that were apparent in earlier Datapro surveys, were confirmed. The voice mailbox is the most common supplementary service. Nearly half of all PBX users have one. Nearly as many are using automatic call distribution as a means of obtaining Call Center functions.

Interest in ISDN has grown considerably. The heavy impact of the Internet combined with an increase in "distance work" is considered to account for this trend. Integrated solutions for telephony and data (CTI) have also increased in popularity.

"Which supplementary services do you plan to add?" Datapro also asked. CTI ranks first, followed by an ISDN interface. The blending of telephony and data processing is now clearly apparent out among our customers.

KARI MALMSTRÖM

CeBIT Fair in Hanover, the world's largest fair and exhibition for the IT industry, lived up to its reputation again this year. With 6,855 exhibitors, CeBIT set another record that included 2,650 exhibitors from 59 countries outside Germany. The exhibition covered a total surface area of 352,623 square meters. CeBIT is not only the largest IT exhibition, it's also the largest exhibition all categories, according to Deutsche Messe AB, the CeBIT arranging company that works under the auspices of the Hanover Fair.

Welcome to CeBIT '97 in Hanover

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ifty years ago, Hanover Fair was started in a humble fashion under difficult post-war conditions in Germany. The first efforts would prove to be visionary. Offers were also sent to other cities, but they all declined. Hanover was given the chance, marking the start of a highly unlikely but undeniable success story.

Electronics takes over

In the late 1950s, office equipment was still relegated to third place among exhibitors. During the 1960s, however, the first signs of electronics were noted, as electronic products began to replace mechanical counterparts, led by a German company called Nixdorf. Construction of Exhibition Hall 1 was completed in 1970, adding 70,300 square meters at the fairground's northern entrance. Even then,

World's largest exhibition set new records in 1997 with 6,855 exhibitors

the new facility was one of the largest exhibition halls in the world.

By this time, office products had taken over first place among exhibiting companies, giving birth to the CeBIT name, which means "Centrum der Büro- und Informationstechnik." The German language name was chosen over CeBOT (Centrum für Büro und Organisationstechnik), mainly because of the reference to BIT, the smallest measurement unit in the digital world.

Rapid expansion characterized the CeBIT Fair during the 1970s, with the construction of one new hall after another at the Hanover site. Growth during the 1980s was explosive. The number of CeBIT exhibitors in the field of information technology increased rapidly. In

1985, CeBIT attracted 7,000 exhibitors and more than 800,000 visitors. The ceiling for what was possible and practical had been reached. The arrangers were forced to divide CeBIT into separate IT and industrial sections.

CeBIT stands alone

The first independent CeBIT opened on March 12, 1986. It encompassed a total surface area of 200,000 square meters and attracted 2,142 exhibitors, including 190 representatives of the telecommunications industry, which had been integrated in CeBIT. More than 334,400 visitors toured the CeBIT Fair in 1986. New efforts focused on an independent CeBIT were a huge success, passing even the hopes of organizers.

During the past 10 years, the growth of CeBIT has been even more dramatic. Commercial breakthroughs for personal computers and, more recently, the Internet, have been strong forces behind CeBIT's continued growth. A major trend today is increasing convergence between data and telecom industries. In 1995, CeBIT attracted 755,326 visitors, more than 100,000 of whom came from countries outside Germany to visit what became known as "Mega CeBIT." Once again, the ceiling had been reached.

A new division was made last year, with the spring CeBIT exhibition intended primarily for commercial visitors and CeBIT Home in the summer for the home electronics industry. With higher entry prices, DEM 50 compared with DEM 32 in the past, the number of private persons who visited CeBIT in the spring declined from 218,000 to 140,000. A total of 607,000 visitors were counted, which could be accommodated by the Hanover organizers more professionally. As this article is being written, nobody is sure how many people who visited this year's CeBIT, but representatives of the organizing committee expect another new record.

THORD ANDERSSON



Visitors to CeBIT are welcomed to Hanover as soon as they reach the central railroad station.



Louise Burton and Katarina Granstedt managed Ericsson's web site editorial office at CeBIT 97.

Ericsson's own web site desk

In a corner on the second floor of Ericsson's mobile phone stand, Katarina Granstedt works intently with Louise Burton, a freelance journalist from England, formulating news articles for Ericsson's CeBIT web site. The two journalists started releasing press information the day before CeBIT opened, reporting directly from Hanover.

The two-person editorial staff releases an average of six 200/300-word articles every day. Strong focus is placed on product news and information

about Ericsson's overall business operations.

The press releases are sent electronically to the Netherlands, where web master Tim Erhart enters the information in his server for distribution to all parts of the world. On March 13, the first day of CeBIT 97, about 150,000 persons "visited" Ericsson's CeBIT's web site, an indication of strong interest.

Ericsson's CeBIT web site was scheduled to continue releasing information for about two weeks after the close of CeBIT 97 on March 19, see: <http://www.ericsson.se/cebit/>

THORD ANDERSSON

To the tones of Vivaldi and Bach, played by two female violinists, Ericsson greeted visitors to its stand at CeBIT 97 from March 13-19. The music was one of several features used to create an atmosphere of elegance around Ericsson's exhibitions. The two

stands, one for a general presentation of Ericsson and the other concentrated exclusively on mobile phones, showed Ericsson's complete range of communications solutions in a highly convincing and impressive manner.

Elegance at CeBIT '97

Photos by: THORD ANDERSSON AND PATRIK LINDÉN

remendous efforts lay behind the result of this perfect meeting place for Ericsson and prospective customers. Colors, form and the overall message were all carefully planned down to the last detail. The objective here was clearly to project an image of corporate sophistication - to elevate Ericsson as high as possible on the image scale.

The meticulous planning was reflected in such a minor detail as Ericsson's small souvenir pin, designed as a dark blue cube that measured one square centimeter, regarded as a valuable collector's item and the object of souvenir hunters at CeBIT. The pins were worn by all 400 Ericsson employees working at both exhibition stands. The colossal glass cube that dominated Ericsson's corporate stand also featured the dark blue design, evoking reactions of "oohs and aahs" from visitors to the stand. A white Ericsson logo on top of the display could be seen from afar, drawing visitors to the stand as if by magnetic force.

Visitors felt truly welcome to Ericsson's

stand, with its generous and inviting sense of open space. In the tastefully designed café on the second floor, Ericsson offered all guests a "communications cocktail." There were no restrictions for access to the stand. Ample conference rooms were also available for individual meetings with existing and prospective customers.

Joachim Flihs, exhibition manager and chairman of the steering committee at CeBIT explains. "The corporate stand was designed to convey Ericsson's target position in the year 2000. We tried to display fewer products, compared with past exhibitions here in Hanover, putting greater emphasis instead on total solutions for various customer segments. I believe we're headed in the right direction, although we still had a large number of products on display."

Mats Rönne, Manager of Corporate, marketing communications, described Ericsson's message at CeBIT 97 as follows:

"We want to tell our customers that we understand their needs better than other companies. It's our job to recognize a customer's business potential and present suitable solutions to support their needs."

A unified Ericsson

Clearly defined borderlines that characterized displays of Ericsson's different business areas in the past were almost completely eliminated from this year's CeBIT concept. Ericsson projected an image as a unified corporation, a single industrial unit. The separate stand concentrated on mobile telephony was an absolute necessity for marketing purposes. All of Exhibition Hall 26 was devoted exclusively to mobile telephony, and players not represented in Hall 26 probably have no position in the marketplace.

Bo Albertson, the man in charge of the mobile phone stand, summed it up briefly: "Our main theme is 'Voice.' It permeates throughout our entire range of mobile telephones and supplements subordinate themes, such as 'Individual' for GF 788, 'Expressive' for GA 628 and 'Smart' for GH 688. The various themes also adorned the shirts of Ericsson personnel working the stand.

Most popular

According to an independent survey, Ericsson's mobile telephone stand at last year's CeBIT Exhibition attracted more visitors in Hall 26 than any other stand. This year's exhibition was equally if not more popular. TV teams and newspaper journalists were among frequent visitors to Ericsson's stand. BILD-Zeitung, Germany's largest daily



Accompanied by the soothing tones of classical music, members of The Random-Dance-Company of London performed for visitors to Ericsson's mobile telephone exhibition stand.

newspaper, devoted nearly half a page in its March 16 edition to Ericsson's mobile telephony theme, which combined modern dance and meditation.

Every day, visitors to the stand could attend a beautiful ballet recital performed by The Random-Dance-Company of London. The recitals offered a much-needed sense of relaxation in the otherwise very hectic atmosphere surrounding CeBIT 97.

"We want people to feel good when they visit our stand. If they are able to relax, they will also take time to look at all our new telephones, of which the new and compact GF 788 attracted the lion's share of attention," continues Bo Albertson.

No limits

Imagination, an English design company, worked with Ericsson personnel to create the exhibition stand's holistic concept. The entire mobile telephony stand was built by Imagination, and the corporate stand was designed and built by Ericsson Germany, under the leadership of Wilfried Hintsches.

"I converted an approved blueprint into a finished, real life exhibition stand," Wilfried Hintsches explains. "A German company was contracted for all construction



Lars Ramqvist presented a new solution for communications with HDTV (High-Density/Resolution TV) to Marcus Wallenberg. Mr. Ramqvist was assisted by Giancomio D'Amato and Fernando Gonzales.

work on the two-story stand, which measured 62 meters in length and 22 meters in width. The first nail was driven on February 15 on-site in Hanover. It was a difficult job, sometimes working around the clock, until opening day on March 12."

Wilfried Hintsches also points with pride to the huge blue cube overhead as it flashes the message "The only limits are those of vision," a quotation by James Broughton.

"Just for that light in the cube, we installed 720 incandescent bulbs each measuring 1.5 meter in length," Wilfried Hintsches concludes.

Ericsson at CeBIT clearly had no vision-



Refreshments highlighted by a "communications cocktail" were served at Ericsson's own café.

Ericsson presented several new products

Ericsson's new 788 model cellular telephone, already for sale on the market, attracted considerable attention at CeBIT '97. The new phone measures only 10 centimeters in length and is worthy of all the attention it has generated. It can be concealed easily in the palm of your hand, and the sides of suit coats and sport jackets will no longer sag when the owner has a cellular telephone.

In addition to the 788, two other new GSM telephones were introduced at CeBIT in Hanover, the GH 688 and GA 628 models. Ericsson's new GH 688 may be described as a modern version of the 388 model, but slimmer, lighter and equipped with a large display field. It contains virtually every feature that can be included in a GSM telephone, a cellular phone for demanding customers, with up to 100 minutes of standby capacity. A real workhorse, in other words.

The 688 model has a little brother called GA 628, a slightly simpler model for customers who prefer a visible cellular telephone. The GA 628 does not contain all the sophisticated features of the 688 model, but it has several different interchangeable surface panels. It also allows users to block certain numbers and other features to prevent international calls.

Although cellular telephone models are becoming smaller, customers don't always want hand-held phones, for example, if the user is driving a car or doing the dishes. To meet the demands of these and other situations, Ericsson has developed a small, wireless headset and microphone unit that fits behind the user's right ear. The telephone



Lars Ramqvist demonstrated the wireless headset telephone for a large group of journalists at Ericsson's press conference.

All the giants of telecom were represented in Hanover. Nokia, for example, displayed its widely celebrated solar cellular battery, which reloads itself on sunny days. In conjunction with CeBIT '97, Nokia also introduced a new communicator for the DCS 1800 standard. The communicator features a built-in telephone and electronic calendar, an Internet reader and other features. Nokia also announced the communicator will be used by Lord Sinclair in the upcoming movie release of "The Saint."

Alcatel of France displayed a solution to create large-scale broadband communications through conventional copper lines. Like the product introduced by Ericsson, the French operator's solution



In addition to the new 788 model, Ericsson also introduced two other GSM cellular telephone models at CeBIT, the GH 688 and GA 628 models. The GH 688 is a modern version of the 388 model.

is equipped with a small support unit that enables users to make telephone calls via a high-frequency, power-efficient link that allows complete freedom of movement with both hands, without becoming tangled in wires and cords. The telephone can be carried in the user's pocket or the seat of your car.

For people who must remain accessible at all times, but don't necessarily need a telephone, Ericsson has developed two new ergonomically designed personal pagers for the Erms standard. The alphanumeric model also allows for reception of various information services, including weather reports, stock quotations and other information, depending on what the provider offers.

Several new products and solutions for business customers were also introduced at CeBIT '97, including the launch of Ericsson's Multi-Purpose Exchange (MPX). With its new MPX, Ericsson is the first company to offer an exchange that can independently handle both voice and data traffic, adapting proportionately between the two depending on requirements. MPX allows companies to have just one network serving both data and telecom traffic. In simplified terms, MPX is a combination of Ericsson's Eripax computer exchange and the MD 100 business exchange.

Another major novelty introduced at Ericsson's exhibition stand featured call forwarding via GSM. The new product is still only in the prototype stage but, in the future, may enable cellular telephone users to transmit moving pictures directly onto computer screens.

An interesting novelty was also presented for users of Ericsson's DECT telephones, Freeset. With a simple docking station, a user's Freeset can be upgraded to include a range of expanded functions. For example, it may be used as a loudspeaking telephone



Ergonomically designed personal pagers fit the hand perfectly.

but, when connected to a user's computer, it automatically updates lists of telephone numbers and other information the user may have installed with the help of related software. When the user receives a call, he/she answers by clicking the mouse on the computer screen to access information installed about the caller.

For sophisticated home computer operations, Ericsson has developed a solution that offers 8 megabits per second in broadband over traditional copper lines. As a result, it's now possible to use all office features offered by the company's network in the privacy of your home via a conventional copper cable. The system is based on Asymmetrical Digital Subscriber Line (ADSL) techniques.

Furthermore, if the operator installs certain equipment in the telecommunications exchange, and end-users have units with design features associated more readily with the world motor sports than telecom industry equipment, impressive broadband communications can also be established through conventional copper networks. There is ample space for several telephone calls in parallel with data traffic, in which the Internet connection only needs to be another part of communications. The solution is also highly cost efficient.

PATRIK LINDÉN

Popular lectures during CeBIT

Not only were Ericsson's two exhibit stands full during the CeBIT show. Ericsson held a total of 18 different lectures over two exhibit days. Topics for the lectures included Ericsson's 2005 study, how consumers view communication in intelligent networks and what is driving the convergence of fixed and mobile networks. Simultaneous interpretation of the lectures from English into German was provided in order to make them accessible to a broader audience.



Some of the key persons who contributed to making Ericsson's participation in CeBIT such a huge success are seen here. (L-r): Annelie Hellström, Bo Albertson, Joachim Flihs, Elisabeth Madsen, Berndt Fischer, Heike Grsanna, Sten Yondt, Mats Rönne, Corinna Phillip-Weinelt, Hans Peter Brügges, Ewa Gallwitz and Maria Rudell.

WHO WE ARE

GEC Plessey Semiconductors (GPS) is an international semiconductor company with headquarters in Swindon, United Kingdom and four wafer fabrication plants across the UK.

Our broad technology base - founded on strengths in RF design and technology, mixed signal design capability and system integration skills - allows us to provide customers with appropriate and cost effective IC solutions for communications, computer and consumer applications. Our focus on these major high volume, high growth markets, is based on core competences in high performance CMOS and leading-edge bipolar technologies.

We are proud to be Europe's leading ASIC (application specific integrated circuit) provider and offer a range of embeddable cores including DSP and the ARM RISC processor.

GPS is present in all major electronics markets and has Customer Service and Design Centres worldwide. Our turnover is equally spread between Europe, the USA and Asia-Pacific.

GPS is committed to continued investments in R & D and we invest around 20% of annual sales. We are also actively involved in Europe's advanced technology research programmes.



SURF OUR SITE AT: <http://www.gpsemi.com>

GEC PLESSEY

SEMICONDUCTORS

CUSTOMER SATISFACTION

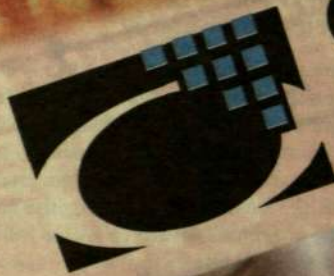
GPS prides itself on delivering customer satisfaction at all stages of the design and manufacturing process. We aim - through team based concepts - to provide solutions to exact customer requirements, so speeding Time to Market.

GPS is pleased to have had a close working relationship with Ericsson companies worldwide for over ten years. In fact, the development of the new analog cellular (or ACE) chipset came about as a result of GPS's close working relationship with Ericsson Mobile Communications. GPS devices are used in the new, super-small, AF738 phone which is proving popular in the USA.

Similarly, GPS's leading position as a supplier of integrated circuits for network applications and wireless data communication, and our developments in GSM, CDMA cellular standards, and 4 level

paging, is based firmly on an in-depth understanding of communications markets and customer needs.

This is the first in a series of features aiming to give all Ericsson staff an overview of GEC Plessey Semiconductors' capabilities so that we can better work together. Check out our WWW site for more details of the products and services we offer.



Equipment at our 8" CMOS wafer fab is individually housed in its own class one mini-environment.



Plan view of transistor fabricated in our HJ advanced bipolar process showing the 0.25µ emitter.



Meeting on the Emerald Isle

The Irish city of Limerick was the site for a recent international meeting of what is called the Product Line User Group. Some 70 participants from 20

limerick

countries met to share their experience of operation and maintenance of the AXE Local 12.3 and Transgate 2 systems. Information was provided on a forthcoming upgrade package and how meeting participants could influence its implementation.

"The exciting thing about

meeting like this is that all participants are able to present the product lines used in their local markets, including how many stations are in operation, and how these are upgraded and adapted to the market," said Anders Åkermann, who represented Ericsson Telecom Sweden at the meeting. "The meeting provided a wealth of new knowledge, but also a deeper understanding of the problems associated with maintaining the Global Application System (GAS).

Multimedia courses via computer

Employees of Ericsson Microwave in Mölndal are learning more about computers with the help of a self-instructional multimedia program. The PC team in Mölndal has been conducting workshops open to all employees since January.

Course participants have included a broad range of employees, from engineers to secretaries, interested in

learning more about computers and data processing," explains Fredrik Hallberg, a member of the PC team.

The software used in the workshops is called Windows Interactive Teacher (WIT). Initial tests determine the skills levels of individual course participants, and WIT then formulates a special curriculum adapted to the skills level of each student.

Based on the program's early success, the PC team now plans to expand the educational program. In the next stage, the software will be made available on local networks, enabling all employees to take part from their work places.

New appointments at EMW

Ericsson Microwave Systems has a new information manager. Henrik Brehmer, former head of personal skills and management supply, has replaced Bertil Hellström as information manager. Bertil Hellström, who is celebrating the large Erieye order from Brazil, has been named export market sales manager, effective February 1, 1997.



Ulf Lönnqvist, Governor of Blekinge County and Kennet Rådne, President of Ericsson Software, at the inauguration ceremony.

Ericsson Software inaugurates new premises

On March 11, 1997, one year after the inauguration of Ericsson Software's new office building in Karlskrona, another building was inaugurated by the rapidly expanding company. Ulf Lönnqvist, Governor of Blekinge County, declared the renovated and specially adapted premises officially inaugurated. The new facility will accommodate about 160 employees.

Ericsson Software's occupation of the new premises may also be regarded as a symbolic statement by the Municipality of Karlskrona to intensify its focus on high technology. The community's efforts are exemplified by Telecom City, a

form of cooperation for the many telecom companies that have established business operations in the city during recent years, led by Ericsson Software and Europolitan, a Swedish mobile telephone operator.

Successful year

"We had the best year in our 16-year history in 1996," said Kennet Rådne, President of Ericsson Software, at the inauguration ceremony. "It's particularly gratifying to open the new office building after such a successful year."

Ericsson Software has recorded exceptionally strong growth, especially during the past five years. The company now has 730 employees, but will recruit about 100 more in 1997. Job opportunities pertain mainly to development of products and services in mo-

bile telephony and business communications.

Profitability is a fundamental requirement of rapid growth, a requirement that Ericsson Software has fulfilled by a broad margin. Sales and income in 1996 increased more than 60 percent.

The new office building is directly across the street from Ericsson Software's head office, situated near the harbor in Karlskrona, with a beautiful view of the archipelago and the sea. Renovation of the historically designated building was completed in six months, with the exterior restored to its original classic style, while the interior features, modern architectural design.

Ericsson Software has offices in Karlskrona, Ronneby, Hässleholm and Kista. Q-Labs AB, a subsidiary, is based in Lund.



The winners of the 1996 Björn Lundvall scholarships visited Stockholm in late summer 1996: Emma Lu-Castro, Anja Ruff, Sam Saba, Nelka Fikeys Krmic, Pat Cash and Julian Lim. Pat Cash was a 1995 winner, but visited Stockholm a year later.

Photo: KARL-EVERT EKLUND

Contact network and improvement

Ericsson sponsors a number of scholarships and grants established to support the contact networks of its own employees and support education and research in the Company's core competence areas.

Foreign study scholarships are awarded in memory of Ericsson's founder, Lars Magnus Ericsson, to employees of Ericsson and Telia in Sweden. The scholarship fund promotes the educational pursuits of younger employees through financial support for study trips. It also provides opportunities for qualified employees to seek more specialized training that may, in turn, contribute to Swedish telephony in general.

The Björn Lundvall scholarship fund for special studies and foreign travel is named in memory of Björn Lundvall, Ericsson's President and CEO from 1964 to 1977. The scholarship finances study trips to Ericsson companies in all parts of the world with the objective of increasing general knowledge and

supporting cooperation between Ericsson units throughout the world.

The Marcus Wallenberg Foundation for scientific studies and education was established by Telefonaktiebolaget LM Ericsson as a tribute to the memory of Dr. Marcus Wallenberg and his many years of invaluable contributions to the Company. The foundation supports scientific and technical research and educational programs in areas of telecommunications that are or may become of particular interest to Ericsson. It also promotes and supports scientific research and education in administrative, commercial, legal and social science areas of particular interest to Ericsson.

Open to employees

All three scholarship funds are open to employees of Ericsson in Sweden. The Björn Lundvall and funds from the Marcus Wallenberg Foundation are also available for employees of Ericsson companies outside Sweden.

The following are statements by winners of Björn Lundvall scholarship grants in 1996:

"Until 1985, when Ericsson acquired our production plant in Lynchburg, I had never heard of the Company. I have learned a great deal about Ericsson since then, but everything was based on the American perspective. After traveling to Sweden on a Lundvall grant, I have a completely new perspective and I understand that I am part of a unique, solid and highly reputable company," says Pat Cash, an employee of Ericsson Inc. in the U.S.

"I'm positive that all the information I gathered and all the contacts I made during my visit to Stockholm will help me gain a better understanding of Ericsson's overall business operations, and help me in my work with personnel issues," says Nelka Fikeys Krmic, who works for Ericsson in Croatia.

"Ericsson employees from all parts of the world should take advantage of opportunities to apply for these scholarships," advises Sam Saba, an employee of Ericsson in Lebanon.

For additional information, contact Mikko Andersson, tel: +46 8-7193369. mo.LME.LMEMA



About 100 persons from Ericsson design offices in all parts of the world took part in the conference on new tools and methods organized by Ericsson Utvecklings AB in Älvsjö. Photo: KURT JOHANSSON

Conference on tools and methods

"Tools and methods are becoming increasingly important to technical development personnel," stated Gunnar M. Eriksson, **Älvsjö** President of Ericsson Utvecklings AB. Computer-stored design tools, including the well-known "APS tools," comprise one of the development company's areas of responsibility, as well as various methods for program design.

A conference was held recently in Älvsjö to disseminate the latest information on new tools and methods. It is extremely important to spread new information to other Ericsson development and design units.

More than 20 lecturers took part in the three-day conference. The agenda also included demonstrations of the latest in tools and methods. Gunnar M. Eriksson, who opened the conference, also emphasized the importance of quality.

"Quality is not just a matter of developing products characterized by high technical quality. It also includes the ability to deliver products on time, and to maintain complete control over your development costs. Quality tools and methods are invaluable assets in this context," Mr. Eriksson added.

Short lead times

Basic themes for the conference were "Short lead times" and "The best methods for development." Nearly 100 persons took part in the conference. Most were from the Local Support Organization, units established to accept the development com-

pany's products at local offices in all parts of the world, and to help with their introduction. An important part of the unit's overall responsibilities is to make sure all modern features are included, and to ensure they support end-users in various ways. The Local Support Organization also handles all preliminary ground work in preparation for the launch of new products.

Bo Bengtsson, who organized the conference, stresses the importance of tools and methods in modern technical development work.

Good tools and methods facilitate development work and reduce design time by a significant margin. They also increase product quality, enhancing their competitiveness on the market, by eliminating faults and defects.

New edition

During the conference, a new edition of APS design tools was released.

"The new release has upgraded about 80 tools, clearly improving their performance standards," explains Bo Bengtsson. "We asked the conference participants to familiarize themselves with all new tools and methods, and to make analyses of which new tools and methods can be used in their design offices."

Another important objective of the conference was to gather opinions and viewpoints of end-users. Which tools and methods can be eliminated? What new requirements have emerged in design offices? These and other questions were discussed at the conference in Älvsjö.

LARS-ERIK WRETBLAD

Canadian visit to Kista

■ The Canadian Air Force recently purchased sophisticated military defense electronics from Ericsson, comprising eight Eri-jammer A100 training interference pods supplied by Ericsson Microwave Systems. The interference pods will be used to train pilots on the American F16 fighter jet.

In the beginning of March, several representatives of the Canadian Air Force visited Ericsson Saab Avionics in Kista, accompanied by representatives of Rodale, a Canadian cooperation partner. Ericsson Saab Avionics has taken over responsibility for military defense electronics included in Eri-jammer.



Environmental certification. Left to right: Frits van Loon, environmental consultant, Haijo Pietersma, President of Ericsson Telecommunication in the Netherlands, and J. Spree, a representative of KEMA, the Dutch certification institute.

Dutch company receives environmental certification

Ericsson Telecommunications B.V. in the Netherlands recently became the first Ericsson company to receive environmental certification in accordance with ISO 14001 for its environmental management system. The activities included under ISO certification comprise marketing, sales, development, design, production, installation and service.

Environmental auditors from KEMA, the Dutch certification institute, were impressed by Ericsson's ability to make continuous improvements with respect to environmental considerations.

"We started about six months ago, working with our environmental management staff," explains Frits van Loon an environmental consultant with the Dutch company. One year of hard work was devoted to the project, from the first internal audit to the formulation of goals and improvement plans for 1997.

"It's extremely important for all of us at Ericsson to protect the external environment and minimize environmental threats that may be created by our operations," continues Frits van Loon. "The certification is an excellent start. Now we have visible goals we can work to achieve. We shall strive to retain certification through constant efforts to make further environmental improvements."

■ Ericsson Telecom Sweden and Telia signed a contract in the beginning of 1997 to upgrade the Swedish operator's Integrated Services Digital Network (ISDN) switches in Sweden. Telia wants to increase the functionality of its switches and has ordered a completely new service package from Ericsson.

"We have developed a new package of services called Local 4 for Telia, which complies with the European EURO-ISDN standard," says Håkan Karlsson, Account Manager for Telia Networks at Ericsson Telecom Sweden.

Upgrading Telia's ISDN network

"As a result of our negotiations concerning Local 4, Telia and Ericsson have initiated efforts to establish a negotiations model for development of Application Systems (AS), exchange methods and implementation. We regard the work as a positive step in the right direction, since it increases the security that we, as a customer, are buying the right equipment for our needs," explains Eva Boström, Purchasing Manager at Telia Network Services Purchasing and Logistics.

"Ericsson has developed the

method, which makes it possible to change software and introduce the new services package, without having to shut down existing ISDN switches," continues Mats Pettersson, Deputy Account Manager for Telia Networks at ETS.

"Work on the agreements was a real team effort between us, Johan Gunnefur at Business Support and Lars Goldberg and his staff at Operations," Håkan Karlsson continues. "Now we shall wait and see if deliveries are made on time, which comprises a major challenge that

we are determined to meet."

"We regard the difficulties ETS has experienced in making resources available for Local 4 within Ericsson as a negative factor, however. This must not be a problem for us as a customer," says Eva Boström.

"It is our hope that Local 4 will represent progress toward development of a standardized application system, since AS replacements are always a problem for the operator," Eva Boström concludes.

Ericsson and Telia will start field tests in the autumn, and the switches are expected to be placed in operation in the beginning of 1998.



New packaging saves time and reduces back injuries

A work team at the Nynäshamn factory of Ericsson Radio Systems has developed a new circulation

nynäshamn packaging concept for CDU products. The new package reduces production costs, guarantees quality and provides a lift device that helps remove the 12-kilo CDUs from the packaging.

The new packaging concept is made of plastic, the result of demands by the Gävle factory that suppliers refrain from using wood in packaging materials.

The first CDUs (Combined Distribution Unit) were delivered to the Gävle factory in the new packaging, a large black box that complies with ESD requirements, on March 11. The boxes were manufactured in Switzerland by George Utz and equipped with a special etha-phone inner liner by MK-Specialemballage to reduce transport damage.

Every box contains six CDUs,

and four boxes containing 24 units are placed on one pallet. The new concept saves warehouse space, compared with the old package design, which contained 13 units per pallets.

The new packaging was developed by a special team under the management of Claes Olsson, a member of the technical department, comprising Maria Kämbrant from Purchasing, Torbjörn Strand from Engineering and Niklas Blomberg from Final Assembly.

Comprehensive tests

Before the new packaging was given final approval, it was subjected to comprehensive transport tests at the Packforsk Institute for Testing and Analysis. It passed every test with flying colors!

CDU units are packaged at a work station situated directly adjacent to final assembly lines at the Nynäshamn plant. New inspection equipment has been added to every assembly line, and the specially designed hydraulic hoist will reduce back injuries by eliminating the need

for personnel to manually lift the CDUs from the packages.

Lower costs

During 1997, the Nynäshamn factory south of Stockholm will produce 250 CDUs a day, which means three tons of CDUs will leave the plant every day.

A CDU is the part of a radio base station that makes it possible for several transmitters to share one antenna. CDUs are available in a variety of models and designs, depending on site configuration.

The goal at Nynäshamn is to use the new delivery mode for all CDUs made at the plant, which is expected to reduce production costs by about SEK 75 per unit.

Improved quality

Quality standards will be improved and the shipment inspection station at the Gävle factory will have its workload reduced considerably. As an added highlight, the new packaging has also contributed to improved working conditions in final assembly.



Claes Olsson managed the work group that developed the new circulation packaging concept.

Ericsson's factory in Nynäshamn, which has about 700 employees, manufactures antenna-related products for mobile telephone systems and mobile com-

puter systems. The factory is owned by Ericsson Radio Systems AB and is part of the rapidly expanding business area Mobile Systems.

AMPS operators meet in Orlando

Ericsson was a double winner at the first global meeting of "Universal Wireless Communication" **orlando** held recently in Orlando, Florida. Ericsson also became the first company to demonstrate a seamless "hand-off" between AMPS networks in the 800 and 1900 MHz bands.

In addition, the company won the "Best Marketing" award for its cellular telephone campaign in the American market.

Considerable interest in D-AMPS and AMPS in all parts of the world was demonstrated by the large number of operators that participated in the first global conference sponsored by the Universal Wireless Communications (UWC) Consortium, a telecom industry trade organization.

More than 500 participants from all parts of the world took part in the conference. Some of the mobile operators present included Telecom New Zealand, AT&T Wireless Services, Rogers Cantel and Movilcom.

Discussions during the three-day meeting were concentrated on technical and commercial perspectives of recent developments in mobile telephony.

At year-end 1996, there were 17 million subscribers to

D-AMPS systems throughout the world. Combined with its analog counterpart, D-AMPS and AMPS systems have more subscribers in more parts of the world than any other mobile telephone standard. Since AMPS/D-AMPS are based on the same fundamental technology, it's easy to digitize AMPS networks. Digital and analog services can also live side by side in the same network. Ericsson believes, however, that most AMPS networks will eventually be converted to D-AMPS.

Ericsson is the world's largest supplier of AMPS and D-AMPS systems. At the UWC conference in Florida, the Company also seized the opportunity to present the latest technological developments in systems, terminals and services for wireless voice and data communications.

One of the highlights was a demonstration of how wireless networks can be used to surf the Internet.

Ericsson also showed how networks on the 800 and 1900 MHz bands can be combined, enabling subscribers to use both without any disturbances or interruptions. Dual-band telephones are the only requirement, which Ericsson also demonstrated at the conference. D-AMPS/AMPS technology is the only technology that offers the dual-band function.

Information campaign in Paraguay

Two PCS licenses for the 1900 MHz band were awarded recently in Paraguay, with a third expected to be issued later this year. New licenses are also expected to be auctioned for the 800 **paraguay** MHz band toward year-end. As a result, Paraguay has suddenly become a very interesting market for Ericsson.

"The mobile telephony market in Paraguay is extremely interesting," says Mike Peters, who is responsible for sales of mobile systems based on the American standard in Latin America.

"Close cooperation with Comsepar S.A., a Paraguayan telecom operator, combined with Ericsson's collective skills and expertise in telecommunications, has created a strong market position in the battle for deliveries to the new networks," continues Mike Peters.

Ericsson and its Paraguayan partner recently

invited a group of international experts to a discussion on the future of mobile telephony in Paraguay. Several important representatives of telecommunications authorities and prominent leaders of the Paraguayan telecom industry took part in the conference.

Ericsson presented information on opportunities made possible by IS-136, the new standard for D-AMPS, PCS solutions and various mobile telephones included in its range of AMPS/D-AMPS products.

Paraguay's is about the same size as Sweden. The country has one private operator, Telecel, which operates a mobile network on the 800 MHz band serving about 20,000 subscribers. Paraguay has a population of approximately five million persons, one million of whom live in the capital of Asuncion.

Struer

DiAx increasing strength

DiAx, an Ericsson subsidiary in Denmark, continues to expand. The Danish company's operations are concentrated on the development of Diamux, an access product. DiAx has hired 42 new employees since December 1, 1996.

Mobile office on Nauticom

A growing number of Ericsson units are concentrating on new office solutions. The mobile office is **copenhagen** one of the most attractive alternatives. Reconstruction of Nauticom, Ericsson's beautiful office in Copenhagen, was started recently to provide space for more employees. Walls and doors are being torn down to create more spacious facilities. Based on a concept developed by Er-

icsson Business Networks in Nacka Strand, the "mobile office" will be created for part of the Nordic Expertise Center.

All employees working in the office will be equipped with a portable PC, a desk on wheels and a Freeset telephone. When they come to work in the office, they simply connect wherever they are needed. Or they can work at home whenever it's more convenient.

St Petersburg Fair

Ericsson was one of the exhibitors at this year's Norwecom Fair, a local telecommunications exhibition held annually in St. Petersburg. All business areas were represented. In the picture at right, Mikail Baranov, Oleg Smolenkov and Igor Nikutin from Ericsson Corporatia AO are seen at the Ericsson stand.



The British telecommunications market is known as one of the most deregulated telecom markets in the world. Ericsson nurtures all genres of imaginable expertise in the UK to navigate in this multitude of business opportunities. During recent years focused efforts using Ericsson's Strategic Planning (ESP) as the vehicle, has provided a good overview of business opportunities and channels

Focus on strategy at Ericsson in the UK

It's important that plans are not etched in stone. Instead we rather try to establish realistic goals and plans of action that might facilitate their achievement," explains John Robbins, manager of the New Operators customer segment of Ericsson in the UK, and a driving force behind ESP.

Contact talked with John on a blustery day in their new offices in Stoke Mill, near Guildford. John was accompanied by Edvin Ruud, sales manager for New Operators and the man who facilitated the ESP operations during 1995, and Donal Lynch, manager of customer contacts with US West, the global mobile operator.

"Nils Grimsmo, our Managing Director, shares our view that strategic planning is important to all levels in the organisation and not only to top management," continued John.

Shared opinions have not always been so self-evident. As may have been in the case of other local companies too, Ericsson in the UK rank and file tended to regard ESP as one process relegated to the filing cabinet. In 1995, however, the ESP process was dusted off throughout all of Ericsson. Once again, strategic planning was destined to become a tool for dynamic business development and not, as so often in the past, basic documentation used in production forecasts.

"Today we have a much better exchange and connection with the Swedish organisation," explains Edvin Ruud. "Response from the Parent Company is very important to our program."

"It's a challenge for us to involve all employees of Ericsson Ltd. in strategic planning," John Robbins says. "We learned a great deal from ESP 95 and 96. One of the most valuable lessons: there is no such thing as too much communication.

All employees must be reminded time and time again that we are working with business strategies and that it's very important work. In 1995, we had to urge people to take part - today most employees realise what we are doing and are able to see the results of our efforts over the past few years.

Workshops

In conjunction with ESP 95, Ericsson produced a special ESP edition of the internal publication Linx. Its objective was to get people involved, to make them realise "this concerns me." To jack up the pulse rate in the Company, representatives from various business areas and divisions attended workshops and other types of get-togethers. Within their own divisions, all employees also attended thorough reviews with continuous information of the status quo in ESP efforts, with virtually 100 percent attendance and commitment.

Ericsson UK has spent two years focused on market analysis and studies of future business potential. The Company has a clear vision of its present position and what is needed to strengthen Ericsson's standing in the market according to John, Edvin and Donal. In their work with ESP 97 they can now concentrate more heavily on the critical question of "how do we get there?"

Reach further afield

The plan for 1997 is to reach further afield in the organisation. Ideally, all employees should make active contributions to the strategic plan. One of the overall objectives is to address critical questions at early stages in the planning processes, as well as choices for persons working in "the real world," thereby gaining greater access to proposals for concrete plans of

John Robbins is manager of the New Operators customer segment at Ericsson Ltd and the driving force behind ESP. He is shown here with Edvin Ruud, sales manager for New Operators, who was involved with ESP activities in 1995, and Daniel Lynch, customer contact for the global mobile operator US West.

Foto: RICHARD BOOTH



action formulated to suit the true needs of hands-on business operations.

Several different phases

The formulation of a strategic plan involves several different phases. Questions and viewpoints raised in phase one should be reviewed and acted on during phase two, and so forth. Continuous links should be maintained with the Company's own external business interests and with Ericsson in Sweden.

Executive management in Ericsson in the UK recently approved phase one of ESP 97. Efforts are now focused on implementation of phase two, which will di-

to capitalise on market potential. Ericsson Ltd is now focusing their strategic planning activities to the 2000 wanted position of a billion pounds sterling.

Formula for business growth

Seen from the horizon of a local company, the most critical challenges lie in customer and market contacts. They are immediate and direct - and provide a clear indication of which way the winds of business are blowing. The ability to react quickly is essential. Ericsson Ltd in the UK has learnt from experience how hard it is to win a new customer and how easy it is to lose one.

Within a few years we have completely changed our mode of operations - from product focus to customer and market focus," says John Robbins. "Revolutionary changes have taken place in our industry. In fact, many operators have been quicker to adapt to market changes than Ericsson! We should all be aware of the competitive conditions that rule our world and the world of our customers as we approach the 21st Century."

Known as the leader

Ericsson is known as the leader in the UK market. Even in the field of Information, including Internet applications and integration between data and traditional telecom we are considered a market leader. We have to live up to the market's trust and their belief in us - it's a basic requirement for survival, and we have formulated a realistic strategic approach to meet new demands," he continues.

One of the major challenges facing Ericsson Ltd and several other local Ericsson companies to meet new demands characterised by the growing globalisation of customer operations. It is already the rule rather than the exception for national public operators to establish new operations in each other's markets. And new operators work from the start without regard for national borders.

Basic strengths

Many new operators started in the U.S., and are now expanding into markets in all parts of the world," explains John Robbins. MFS/Worldcom, for example, has operations today in 14 countries. We delivered AXE exchanges for their operations in England. When the company wants installations in other countries, it's essential for Ericsson to project a unified image.

"Ericsson's global presence is one of our basic strengths, but we must find more ways for local companies to cooperate with each other," says Edvin Ruud. "This is a critical question for all of us," and here we still have a lot to learn before we can take full advantage of our global market position.

Accurate forecasts and analysis of customer demands enable Ericsson to react more quickly and work more cost effectively. The real challenge of strategic planning is in choosing the 'right' direction, while also remaining prepared to turn sharply in another direction, at very short notice. In fact, there is virtually no scope for miscalculations. Not being able to offer what customers want amounts to offering a product nobody wants to buy.

"ESP's are not an isolated phenome-

non," John Robbins continues. "We also study other processes at the same time, our monthly reports, for example. There's another area that needs improvement, since the transactions we make and include in monthly reports are used as basic documentation in production forecasts and analysis of customer needs and demands. At the end of 1996, we also took inventory of all skills and expertise available in our company. We need reinforcements in some areas, in others we should concentrate on utilising available competence in new and different ways."

Highly focused company

Knowledge of the customers served by our customers is another key factor in many business transactions. Ericsson's relations with BT, a major customer for AXE and telephony transmission, were established in the days of telecom monopolies. Today, BT is a highly focused company that cultivates its markets with advertising and various sales promotion campaigns. Mobile operators are even more aggressive in their marketing programmes.

Four operators of which Vodafone is the largest, are also key players in today's market. All four operators are Ericsson customers.

Segmenting the market

"We have seen a clearly defined trend whereby telecom operators are segmenting the market," says Donal Lynch. "They are trying to create niches for themselves, with one operator concentrating on business customers, another on the mass market, for example. It's important that Ericsson understands their various needs and demands so we can offer the right solutions for each operator's specific purposes.

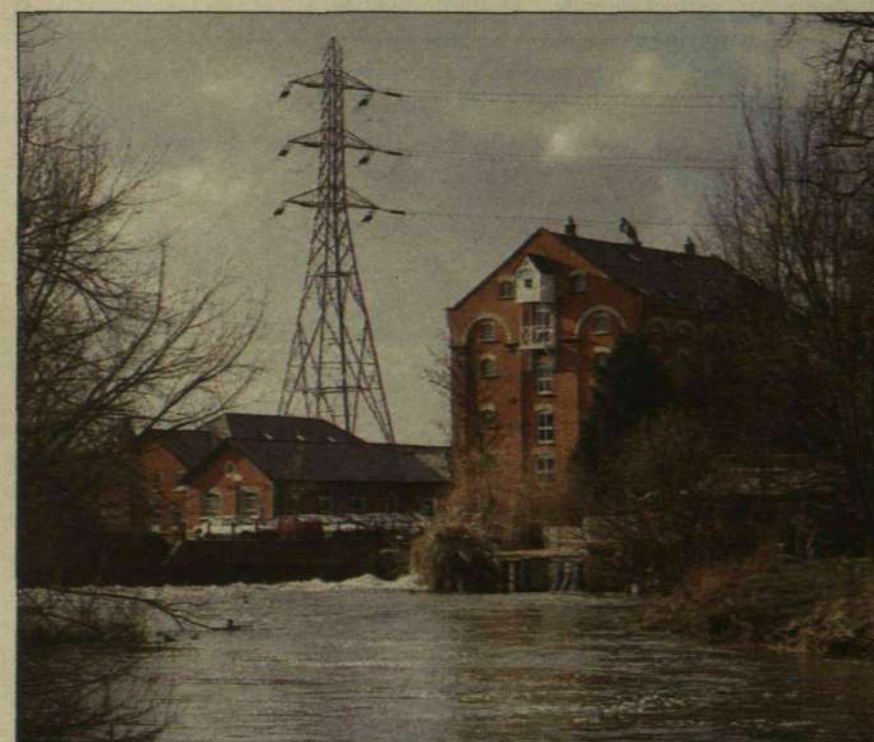
"Mobile telephony will see much more competition" Donal Lynch continues. "Expansion will almost certainly continue, but profit margins will come under more pressure and we in the local market must respond aggressively with increased cost efficiency."

"A carefully formulated strategy is also vital in Business Networks," John Robbins points out, "a melting pot for integration of voice and data. The business segment always leads the way for penetration of various types of multimedia application. In its capacity as a supplier, Ericsson is closer to end-users in this segment, compared with public and mobile telephony. Ericsson Ltd serves about 3,000 business customers, and we have to remain alert and ready to recognise emerging needs and demands, not just from dominant customers but also from the host of small business customers.

Strive to improve

"The employees of Ericsson Ltd take great pride in our track record and our position in the UK market," John Robbins concludes. "Being a leader, however, also involves much more aggressive competition. We constantly strive to improve our customer performance - that has been and continues to be our formula for business growth."

KARI MALMSTRÖM



Ericsson Ltd. has a separate unit that works with new operators. The unit is based in a rebuilt old mill at Stoke Mill, near Guildford.

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. 4 1997

Updated March 24

in sweden

LM Ericsson Data AB, Kista

PRODUCT MANAGEMENT - MULTI-SERVICE ACCESS

We drive an expanding business within the Multi-Service Access Product Line. Last year growth was 100% and we expect the trend to continue.

Important trends are open interfaces, SDH integration in Access and Narrowband - Broadband migration. To respond to the increasing amount of requirements from the different markets and to develop and sustain a successful product portfolio from POTS to Broadband we need business-oriented product managers in several different fields.

● Product Area Managers are responsible for one of our four Product areas. You will control the profitability of your portfolio, take the strategic decisions in development structure and projects, market adaptations, pricing and partnering.

You will cooperate closely with the product providing companies in Austria, USA, Norway, New Zealand and Denmark. To communicate plans as well as getting market inputs you will have regular contacts with our important market companies and customers.

Product Managers will work together with the Product Area Manager in the tasks above. You will drive our business by combining solutions according to market needs. The solution can consist of several products from our portfolio and other product lines. You will analyse the behaviour of our competitors and monitor market trends and technical trends.

We are looking for a mix of people, with experience in transmission or access products or with more recent degrees from the Technical University, men and women, from different countries.

Good proficiency with English is necessary since we cooperate closely with our product providing companies, as well as with the various markets both developed as well as developing. As a person you must have a strong driving force with a twist of diplomacy. You should enjoy both strategical technical and commercial challenges.

Contact: Mats Lindelöw, Manager, +46 8 719 3739, memo ETXT.ETXMLIW or Catarina Larson Åstrand, Human Resources, +46 8 7190836, ETX.ETXLCAT. Application: ETX.ETXLCAT

Ericsson Radio Systems AB, Kista

MANAGER PRODUCT MANAGEMENT SYSTEM SUPPORT GSM/NMT/TACS

● Within the unit LY Customer Services RMOG we are looking for a manager that can take the responsibility for System Support Product Management. System Support is a core service and mandatory for all our customers and is today the leading product unit within LY regarding sales and profitability.

You will be responsible for:

- Developing system support services that maximises the performance in the customers network.
- Developing and managing the GSO (Global Support Organisation).
- Proposing and implementing processes, methods and tools for the GSO.
- Achieving agreed profitability for system support within RMOG.

We believe the manager needs to have: Master degree in Engineering. Long managerial experience. Business interest.

Working experience from Telecom operator and abroad assignments is of advantage. You should be fluent in English both in speech and in writing.

Contact: Kaj Snellman, phone +46 8 404 20 24, memoid: ERAC.ERASNEL, Sören Ahlstedt, phone +46 8 757 09 63, memoid: ERAC.ERASA eller Lena Axhamre Hellberg, phone +46 8 404 54 21, memoid: ERAC.ERALEAX. Application: Karolina Borg, Ericsson Radio Systems AB, KIVERA/LY/HA, 164 80 STOCKHOLM

Ericsson Telecom AB, Public Networks, Customer Services

SERVICE BUSINESS IS YOUR FUTURE!

Customer Services (CS) is a Global Product Line Unit within Public Networks that is experiencing acknowledged rapid growth throughout the world. In the convergence process of Infocom, Services and Solutions are likely to be the glue tying the different hardware and software line-ups together.

Presently, our products range from Management Consulting to Outsourcing of Network Operation; from Network Integration to Training and from Help Desk service to Implementation of software upgrades.

● To contribute to the challenging expansion, we are seeking commercially oriented business people to assume positions as Business Managers within the regional marketing teams of CS.

You will be responsible for CS Marketing and Sales support to a market or customer, working closely together with Local Companies and Market Units, being the Customer Services Ambassador and external interface. You will also have intimate contact with the Product Areas within Customer Services; Support & Hardware Services, Training, O&M Services, Telecom Consulting and Integration Services.

You should have experience in International Marketing and/or sales, have good language and presentation skills - in writing as well as orally. You should be prepared to travel extensively and you must have a large portion of endurance. Commercial sense is a prerequisite as well as a basic working experience in telecom. Experience from Service Marketing will be considered a merit.

Contact: Hugo Österlund, South America, ETXT.ETXHULLU, +46 8-719 9108; Lars Ericsson, Western Europe & North America, ETX.ETXLAEN, +46 8-719 7812; Owe Falkenå, Far East, ETXT.ETX-OWEF, +46 8-719 6254; Hugo Österlund, South East Asia (Acting), ETXT.ETXHULLU, +46 8-719 9108; Lars Printz, Former Soviet Union/Central & Eastern Europe, Africa & Middle East ETXT.ETXPRIZ, +46 8-719 7591 or Jan Giese, Human resources, ETXT.ETXJG, +46 8-719 9357.

Ericsson Radio Messaging, Kista

WIDE AREA PAGERS

Wide Area Pagers, Kista are in the process of developing Wide Area Pagers for the new high speed standards like ERMES and Flex. During 97/98 we will launch our products in Europe, Asia and North America. The Wide Area Pagers business is a fast moving, consumer electronics types of business very much like cellular phones. The pagers are sold through operators, retailers or distributors.

For the global launch we will now build the core functions for the marketing, sales, product management and product support in Stockholm. For these functions we need a number of result oriented flexible and highly motivated individuals who like the pioneering work of building a new business.

PRODUCT MANAGER

● You will be responsible for one or more product/product lines within the Wide Area Pagers product range. This includes business analysis, specifications, development project follow-up, training and support of the sales channels.

As we are a small and newly formed unit you must like to span over a broad field of tasks. It is important that you really like embracing both the technical and economical part of the work as the profitability of the unit to a large extent will depend on your decisions. The products we are working with are definitively within the consumer electronic sector. This means that customer and product segmentation will be an important part of the work.

Ideally you have experience from the consumer electronic business where you have worked as a product manager. Your formal education is a Master degree in engineering or similar.

For one of the positions a newly graduated is acceptable. But most important of all is your attitude. The work will demand that you are a self motivating, creative individual who covers new ground willingly.

Contact: Johan Itzel, phone +46 8-404 5984 or Elsa Brodin, Human Resources, phone +46 8-404 2824, e-mail: elsa.brodin@ki.erm.ericsson.se. Application: Ericsson Radio Messaging AB, Doris Hagala, 164 80 Stockholm.

Ericsson Telecom AB, Sweden

PRODUCT MANAGEMENT - BUSINESS COMMUNICATION

● Your task requires both commercial and technical competence. The job requires a candidate that will be able to create solutions that in a clear and precise way describes the commercial and technical advantages for Telia.

Their are strong demands on us from Telia that we shall give them total solutions within this area including VPN, ISDN, Centrex, PABX, Mobile access etc.

For this position are we looking for a candidate with product management focus who shall actively be part of the development of existing and new solutions within this area.

Your task will be to have regularly contacts with Telia, do product presentation and produce technical documentation for RFQ, RFI and offers.

It is a requirement that you have experience from the AXE area. The above mentioned position involves crossfunctional coordination within business support unit and towards other units within the Ericsson group.

It is therefore essential that you are a outgoing, independent and self motivated. You should possess strong interpersonal and communications skills. You should ideally have more than 3 years of experience in the Telecom industry. Female and male applicants are equally welcome.

Contact: Peter Augustsson +46 8 719 9700, MEMO ETX.ETXPEAU. Application: Ericsson Telecom Sverige, X/NH Eva Gardh, 126 25 STOCKHOLM, SWEDEN

Ericsson Telecom AB, Global Product Line Network Intelligence

PRODUCT MANAGER,

Call Centre products for Internet and the Telecom Network

● WE WANT YOU as PRODUCT MANAGER for Call Centre products for Internet and the Telecom Network Do you want to take part in the rapidly growing success of Ericsson Network Intelligence today, and lead into the future? The Intelligent InterNetworking Services group is targeting network services products for combinations of Internet and the Telecom Network.

We are looking for a Product Manager for Call Centre service applications, with ambition to make an impact using leading edge SW technology.

You should have Call Centre, Internet and/or telecom products experience, and a degree in engineering. You will work with Ericsson products as well as sourced products, and products developed in co-operation with other companies, products based on UNIX/NT general purpose computers as well as telecom purpose computers.

Network Intelligence is one of the fastest growing area within Ericsson. Ericsson is the world leader in IN (Intelligent Networks) for fixed and mobile access networks, with more than twice as many customers as our competitors, in more than twice as many countries. We intend to be the leader also in the future for all types of Network Intelligence.

Contact: Anders Hultgren, Mgr Intelligent InterNetworking Services, Tel 08-7197090, memo: ETXT.ETXANHU, email: etxt.etxanhu@mesmtpse.ericsson.se, or Ewa Brandt, Human Resources, Tel 08-719 8289, memo: ETXT.ETXEWAB, email etxt.etxewab@mesmtpse.ericsson.se.

Ericsson Telecom AB, Global Product Line Network Intelligence

PRODUCT MANAGER INTERNET PRODUCTS

● WE WANT YOU as PRODUCT MANAGER for Services products for Internet and the Telecom Network Do you want to take part in the rapidly growing success of Ericsson Network Intelligence today, and lead into the future? The Intelligent InterNetworking Services group is targeting network services products for Internet and combinations of Internet and the Telecom Network.

We are looking for a Product Manager with ambition to make an impact using leading edge SW technology.

You should have Internet products experience and a degree in engineering. Telecom experience is a plus. You will work with Ericsson products as well as sourced products, and products developed in co-operation with other companies, products based on UNIX/NT general purpose computers as well as telecom purpose computers.

Network Intelligence is one of the fastest growing area within Ericsson. Ericsson is the world leader in IN (Intelligent Networks) for fixed and mobile access networks, with more than twice as many customers as our competitors, in more than twice as many countries. We intend to be the leader also in the future for all types of Network Intelligence.

Contact: Anders Hultgren, Mgr Intelligent InterNetworking Services, Tel +46 8-7197090, memo: ETXT.ETXANHU, email: etxt.etxanhu@mesmtpse.ericsson.se, or Ewa Brandt, Human Resources, Tel 08-719 8289, memo: ETXT.ETXEWAB, email etxt.etxewab@mesmtpse.ericsson.se.

Ericsson Telecom AB

Are you ready for this?!

Global Product Line Network Intelligence within the Business Area Ericsson Infocom Systems, have the global responsibility for Intelligent Networks, IN, and service applications based on IN, e.g. Virtual Private Networks, Personal Numbers, Freephone and Premium Rate. The Development of Service Applications is globally spread. We have Service Design Centres in Australia, Ireland, the Netherlands, Norway, Finland and Sweden.

Today 61 customers have chosen products from GPL NI, but that is only the beginning, the market is growing extremely rapid and we need to expand!

PATENT ENGINEER NETWORK INTELLIGENCE

● We need you who want and can take the responsibility for Patent ideas, within Global Product Line Network Intelligence, in order to secure the right to use and sell products that we develop.

As a Patent Engineer you will work as a consultant in development projects and help inventors to get their ideas patented and also investigate infringement on planned implementations in development projects.

The position as Patent Engineer includes responsibility for;

- develop and maintain the patent process,
- co-ordination of various patent activities,
- follow-ups on patents in the procedures at the patent authorities,
- help inventors to get patents,
- make patent investigations on competitors patent portfolio,
- co-operation with other Ericsson units for IPR matters.

We believe that you are over 30, holding a university degree, works as a Patent consultant or engineer for a similar business and now wish to move along into a role with a very exciting and great development potential. Since GPL NI have a global product responsibility there will be international travelling.

Qualifications: We want you to: be able to work both as a teamleader and a teamplayer, master English, the company language, in speech as well as in writing.

If this is YOU, we look forward to receiving your application (female applicants are especially welcomed).

Contact: Human Resources, GPL NI, Ewa Brandt, +46 8-719 82 89, memo: etxt.etxewab or the Manager of IPR Management, Per Ljungqvist, +46 54-19 36 36, memo: etxt.etxjup. Application not later than: Ericsson Telecom, att: TN/ETX/X/H Lena Averin, 126 25 Stockholm or via memo to etxt.etxewab.

Ericsson Software Technology AB, Karlskrona

SYSTEM DESIGNER & DESIGNERS

At Ericsson in Karlskrona we are developing the Service Order Gateway (SOG) product. The market for SOG is global. So far we are working within the GSM/PCS/DCS market. We now need to expand our

design group to cope with new requirements from our customers. SOG is based on OO design using the C++ language.

● If You have the skill and interest in SW design we are very interested to hear from You. You will join a department with 22 people. We have the full responsibility of the product which means that the department acts in SOG development from TG0 to TG5.

The design role includes: Requirement analysis, Functional analysis, Implementation proposals, Implementation & basic test. As system designer we see that You have at least 3 years of experience in OO-design and as designer at least 1 year of OO-design experience, preferably in C++. We are based in a new office just 100 metres from the sea. Living in Karlskrona gives a lot of opportunities both professionally and socially.

Contact: Tommy Sigsäter, phone +46 455 395978. MEMO: ERI.EPK.EPKTSI. E-mail: Tommy.Sigsäter@epk.ericsson.se Application: Ericsson Software Technology AB, Human Resources, Box 518, S-371 23 KARLSKRONA, SWEDEN.

Ericsson Radio Systems AB, Kista

SERVICE SUPPLY MANAGEMENT

DO YOU WANT TO IMPROVE ERICSSONS IMPLEMENTATION OF CELLULAR SYSTEMS WORLD WIDE?

A new unit within the Implementation department for D-AMPS/AMPS, called Service Supply Management is established. The Implementation department is overall responsible for the Process, Methodology and customer projects.

The Service Supply Management will establish Global Service Organization (GSO) for the competence areas, Network Planning, Engineering and Installation & Commissioning.

The Service Supply Management are responsible for implementation services supplied globally. The GSO is the network to provide services and define improvement projects.

● The Service Supply co-ordinator is responsible for:

- GSO administration.
- Process management.
- Resource Management.
- Competence Development.
- Indus projects.

The successful candidates has good negotiation, analytical and administrative skills. Written and spoken communication skills in English is mandatory, Spanish is an advantage.

Contact: For Network Planning, David Schelin, phone +46 8 404 5539 or Engineering and Inst.&commissioning, Peter Lindfors, phone +46 8 404 2972. Application: Ericsson Radio Systems AB, AH Marianne Molin, 164 80 STOCKHOLM

Ericsson Radio Systems AB, Kista

R&D SENIOR SPECIALIST - SOFTWARE DESIGN FOR EMBEDDED SYSTEMS

Radio Technology Research is responsible for radio technology development for both existing and future mobile systems with particular focus on base stations. We are a research department in the new founded organisation Generic Radio Network Products as well as a branch of Research Core Unit Radio (RCUR).

● Due to the fast technology development the borders between hardware and software will be more and more blurred. This increases the demand for consistent and traceable descriptions of signal processing and control functionality.

In order to design new generations of base stations it is necessary to combine the classical "bottom-up" component-based design style with "top-down" design styles based on high level architectural and functional descriptions and find ways to make much of the verification work already at the design level.

The appointment includes high level descriptions, software design of control functionality and software components (such as RTOS, APIs, drivers) for microprocessors and control hardware.

The assignment consists of functioning as a technical supervisor within the specialist area, working with our internal customers ERA/X and the business units as well as interfacing towards universities.

We are looking for a person with a broad background, with knowledge of both control and signal processing domains as well as hardware and software, with emphasis on software. You are open-minded, able to cooperate with others, speak and write english fluently, have an interest in systems oriented issues and a preferred background in base station design.

You have a minimum background as a M.Sc.EE (Civ.Eng.) and have at least five years experience in the area.

Contact: Peter Olanders, phone +46 8-7570518, email: peter.olders@era-t.ericsson.se, Svante Signell, phone +46 8-7572422, email: svante.signell@era-t.ericsson.se or Anders Forsén, phone +46 8-7572541, email: anders.forsen@era-t.ericsson.se. Application: Ericsson Radio Systems AB, ERA/X/H Karin Enberg, 164 80 STOCKHOLM

Ericsson Software Technology AB, Karlskrona

TCM COORDINATOR

Our Business Area, Value Added Services, is working with systems development and integration of future services and products, mainly mobile applications, in cooperation with other Ericsson corporations throughout the world. Intelligent Networks (IN), Operation and Support Systems and Gateway Products (Mediation) are examples of areas where we are active. Now, we are looking for a TCM coordinator.

● We have a test environment consisting of: Several CME20 MSC's, BSC's and BTS's. Several SSCP's and SCP's. Voice mail and SMS systems from several vendors. Several SMAS and OSS systems. Other equipment like GSM datacom, Service Order Gateway, Billing Gateway etc.

To handle this environment efficiently we need someone who can coordinate and take part in TCM activities like: Maintaining the network plan and the C-modules. Keeping the environment in accordance with the network plan. Maintaining a library of standard dumps and DT files. Dump assembly and generation handling.

Knowledge of AXE10, Mobile Networks, Ericsson IN and Unix is greatly appreciated.

The work will involve close contacts with other organisations within Ericsson all over the world.

Contact: Ulf Seijns, Office +46 455 395551, Mobile: +46 708 395551, MEMO: ERI.EPK.EPKULSE, Eva Nilsson, Office +46 455 395653, Mobile: +46 708 395653, MEMO: ERI.EPK.EPKVNI or Martin Kirchberg, Office +46 455 395342, MEMO: ERI.EPK.EPKMKG. Application: Ericsson Software Technology AB, Human Resources, Box 518, S-371 23 Karlskrona, Sweden.

Ericsson Radio Systems AB, Kista

IN GOES CELLULAR IN JAPAN

Business Area Radio will during summer 1997 launch a new cellular IN system, based on AM AXE Technology, for mobile subscribers on the Japanese market.

We are expanding very rapidly with our cellular mobile system and have now established operations in six different regions in Japan. Our headquarters are located in Tokyo.

We have vacant positions, long term and short term, in both Japan and Sweden. Employment in Sweden includes possibilities for future assignments in Japan.

We are looking for people from all over Ericsson to support us in this challenge.

IN SCRIPT DESIGNERS

● The responsibilities include designing IN scripts according to Japan specific requirements in co-operation with, the VPN 2.2.1 project executed at ETM, Holland.

Previous experience from telecommunications, as well as IN, UNIX and designwork is required.

Starting date: As soon as possible Location: Kista, Sweden

Contact: Torbjörn Boltshauer, phone +46 8 757 0233, memoid: ERA.ERATORS or Anna Lindvall, phone +46 8 404 7662, memoid: ERA.ERALIAN, email: anna.lindvall@eraj.ericsson.se Application: Ericsson Radio Systems AB, J/H5 Ann Beer 164 80 STOCKHOLM

Ericsson Radio Systems AB

SYSTEMS MANAGEMENT for MOBILE IT, SYSTEM DESIGNER AND TEAM LEADER

The product unit Digital Switching Systems and Applications (DSA) provides competitive switching, service control and application products for GSM/DCS/PCS operators through Ericsson/IRMOG marketing and sales channels.

● Systems management within product area Applications is responsible for the technical network solutions when we now further develop new services and applications, based on our well-established GSM system. We perform system analysis, specification work and participate in standardisation activities. Our natural interfaces are product managers, telecom operators and the design organisation for GSM network products.

We are a team experienced system designers that now need to strengthen our resources in the fast growing area of mobile IT with two more persons. We are interested in you who have been working with e-mail systems, Groupware functions, Intranet solutions and voice/fax mail systems and the integration of these systems. You are probably familiar with CTI, CORBA, HTTP, IMAP4, JAVA, POP3, TAPI, and TCP/IP.

One of the open positions is a System designer where we expect you to have been working at least three years. The other open position is a Team leader for the Mobile IT team within systems management. Here we believe you have at least five years of technical experience and have the ambition and motivation to lead other people. A prerequisite to both positions is that you like to take own initiatives and enjoy the challenge to guide and control development.

Contact: Viktor Berggren, tel. +46 8-757 13 21 or Erik Thorén, human resources, tel. +46 8-404 49 59

Ericsson Telecom AB, Infocom Systems, Business Unit Datacom Networks and IP Services

SW DESIGNERS - PUBLIC INTRANET

Within the BU Data Networks and IP Services we are developing the Public Intranet product.

● This is a new area and we are now expanding. Therefore we need two SW designers, with experience from development in object oriented environments, to our design unit in Stockholm.

You will be part of a team responsible for service management, and be working with everything from system design and development to testing and productification. Since our products will be used in a multi-platform environment, we are mainly developing in Java.

Object oriented design experience, preferably Java or C++, is required and also knowledge of the Unix environment.

If you also have some experience in some of the following areas, we are very interested: Development using Java APIs. Development using Corba. Web technology; Web server configuration, HTML, CGI. GUI design. Development in Windows-95 environment.

Contact: Martin Wennberg, phone +46 8-719 6092, e-mail etxmwe@kk.ericsson.se or Annette Averstad, Human Resources, phone +46 8-719 8332, memo ETX.ETXAVA

Ericsson Radio Access AB, Cellular Transmission Systems, Kista

Cellular Transmission Systems (CTS) is a business unit within Ericsson Radio Access AB. We offer complete transmission systems for all mobile net-

works which increase the use of infrastructure and provide increased control, flexibility and reliability.

INSTRUCTOR

● Our Customer Support needs to expand with an instructor for training on our digital cross connect transmission systems. Our intelligent, computer based transport networks are used by mobile operators all over the world.

We dimension systems, install them and help our customers "up and running" with them This includes training of customer's staff on our systems to get an easy and quick start with the system we provide.

We provide education on different levels as system overview, installation, operation and advanced training at home in Kista as well as at customer's site.

You will participate in preparation of training material, documents and equipment and you will teach mainly international classes, which means that most of our training is held in English.

If you are capable of teaching in other languages, you will have a good chance doing this in Spanish, Portuguese, Italian, Chinese, etc.

We expect you to have pedagogic experience, some basic knowledge in telecommunications and a strong interest in continuously learning new things. Products are developing very fast, and you have to keep yourself and the courses up to date. You need to be familiar with the use of PC-based systems and possibly LAN networks and Unix.

Contact: Joachim Walz at +46 8 404 2845. Application: Ericsson Radio Access AB, HPS Pia Bolmgren, Box 11, 164 93 STOCKHOLM

Ericsson Radio Systems AB, Kista

CO-ORDINATOR - MEASUREMENTS AND INTERNAL INFORMATION

● We are looking for You who would like to work with co-ordination of measurements and internal information. We will need You during our colleague's maternity leave, from middle of April 1997 until August 1998.

We work in the unit for Processes, Methods and Tools, and our main objective is to propose and implement processes, methods and tools within the system support organisation world-wide. Our unit is a part of RMOG's product unit Customer Services.

Co-ordination of measurements means that You will be the driving force for improving the management of lead time data, which includes development and implementation of a new application. Furthermore, You will produce both monthly as co-ordination of LY/R's information on Ericsson's intranet.

We would like You to have a university education, together with knowledge of how to use measurements in the work for improvements. Moreover, we put a high value on Your ability to cooperate, co-ordinate and communicate.

Contact: Åsa Widestig, phone +46 8-404 56 90, memoid: ERAC.ERAAWID. Application: Karolina Borg, Ericsson Radio Systems AB, KI/ERA/LY/HA, 164 80 Stockholm

international

Ericsson Ltd, UK

SUPPORT/SENIOR SUPPORT ENGINEERS - TMOS

The Technical Support Department, which is part of the new BX Support and Services Sector, provides a high level of customer technical support throughout the UK. This support includes the Ericsson TMOS family of network management systems.

● Ideally, we are looking for experienced and competent TMOS Engineers. However, if you are experienced in the IS/IT field and have an ambition to work on state-of-the art network management sys-

Welcome to an International Configuration Management Conference Stockholm 29-30 May

First day

- International Speaker
- Tool support - Get the latest at Ericsson
- Five Mini-seminars
- Best practices from successful projects
- Discussion groups

Second day

- Configuration Management tools presentations
- Configurations Management tools demonstrations
- Discussions

You will get the latest information on CM with regard to processes, methods and tool support. This is the third annual CM conference arranged by CMcc. CMcc is a Competence Center established at LM Ericsson Data AB with the mission to provide and spread best practices around CM at Ericsson.

For further information contact:

Helena Lagerlöf, EDT.EDTHELA, +46 8 726 24 80
Visit our Web site <http://www-cmcc.ericsson.se>

ERICSSON
LM Ericsson Data AB

tems, then we would be interested to hear from you too.

Contact: ETLXV/T Michael McNulty, +44 1444 234123.

LM Ericsson Ltd, Dublin, Ireland

WILL YOU ACCEPT THE CHALLENGE

● Vacancies have arisen in the LMI SD&D Centre for Service Management designers. You will work with software development of tools for effective management of Ericsson's Network Intelligent (NI) applications. Currently, work is focused on the Business Communications Group of services, where in the SD&D has full life cycle responsibility for the Information & Toll-Free services. As a designer you will be involved in all phases of the development, from requirement management & design, through implementation, function test and Network Integration Test.

Ericsson identifies the challenge in merging Telecommunications and IT capabilities in order to create competitive products. As the service management tools interface with operators and NI applications, technical knowledge is required from designers that enables the creation of a product that is both technically excellent and user friendly.

You should have knowledge and experience gained in a combination of the following technical areas:- OOAD methods, Technologies in User Interface design (eg Powerbuilder), Database design, UNIX, C/C++, 4GL programming, JAVA.

An engineering, computing or telecommunications qualification is preferred, but applicants with other relevant qualifications are also very welcome.

We invite applications from personnel internally and externally who believe that they have acquired sufficient expertise in the relevant areas to undertake this task. The position may involve a certain amount of foreign travel.

As a screening process based on applications received will take place, it may not be necessary to interview all candidates.

Applications in writing marked HR-97:0299 not later than : Margaret Gaffney, Personnel Officer, LM Ericsson Limited, Beech Hill, Clonskeagh, Dublin 4, Memo ID LMIIMGY.

The LMI SD&D Centre commenced business in July 1995 and is now in a phase of extensive expansion and competence build-up. The SD&D is working in various areas within Network Intelligence (NI) based Service Application Development across fixed and mobile networks. The SD&D is part of a virtual organisation which has global responsibility for all NI products within Ericsson. Consequently there is a high level of communication outside LMI, and work in cross-cultural development and delivery projects.

In 1997, the SD&D will further expand its operation to meet its 3 main objectives:- To contribute significantly to making Ericsson the world leader in NI service delivery to Global Customers; to help TE achieve their vision of becoming the most advanced service provider in Europe; to develop a portfolio of own complimentary products in areas allied to NI services.

Ericsson Ltd UK - Burgess Hill

PRINCIPAL/SENIOR SUPPORT ENGINEERS

The Technical Support Department, which is part of the new BX Support and Services Sector, provides a high level of customer technical support throughout the UK. Our main tasks are trouble shooting, TR handling and specialised technical support/technical consultancy.

● We are looking for a number of engineers who have experience of the AXE 10 PLEX/HLPLEX troubleshooting, ISDN knowledge would also be an advantage.

The successful applicant will be challenged and stretched to the limits of their knowledge and ability in this new and growing sector.

Contact: Ian Hill, phone 44 1444 234827, ETL.ETLIANH

Ericsson Cellular Phones EUS/CP, Raleigh, NC

STAFF ENGINEER: TEST

● This position will be responsible for applying the appropriate data collection and processing techniques to support R&D with factory feedback from the factory data systems. Providing appropriate and timely inputs for approving capabilities of the production process and providing technical assistance and guidance to other team members.

Candidates must have a BSEE (BSEE and BSCS or BSCE preferred) with 2 or more years test experience with emphasis in RF testing and FM communication systems, knowledge of SW design and proficient in either /both C++ or Pascal.

This position will be reporting to the Advanced Manufacturing group of Cellular Phones. Both jobs will be located in RTP, NC and will require that the

first 3-6 months will be spent in Lynchburg, VA factory, after that the primary location is in RTP, with 80 - 90% of the time at RTP and the rest in Lynchburg, Va. These positions also require international travel to Sweden, Spain, Japan, and England.

STAFF ENGINEER: BASEBAND/ACOUSTICS

● This position will work with R&D to improve the acoustic performance, robustness and reduction of the need for acoustic testing in the product line. Will be responsible for bench marking both within the phone market and other high volume products. Candidates must have a BSEE with experience at least 2 years of acoustics experience. Prefer but don't require experience with RF testing, FM communication systems, DSP, and logic HW.

This position will be reporting to the Advanced Manufacturing group of Cellular Phones. Both jobs will be located in RTP, NC and will require that the first 3-6 months will be spent in Lynchburg, VA factory, after that the primary location is in RTP, with 80 - 90% of the time at RTP and the rest in Lynchburg, Va. These positions also require international travel to Sweden, Spain, Japan, and England.

Ericsson Cellular Phones EUS/CP, Lynchburg, VA

BASEBAND HARDWARE / LOGIC ELECTRICAL ENGINEER:

● This position will work with R&D to insure producibility of new products at concept or producibility phases, insuring the highest quality and productivity consistent with the Lynchburg Cellular Phone manufacturing processes. BSEE (MSEE preferred) with 5 or more years of radio design experience in areas of baseband hardware / logic / DSP based circuits (cellular phone and acoustics knowledge a plus). Involves domestic and some international travel.

TEST ENGINEER - CELLULAR PHONES MANUFACTURING

● Will be responsible for developing advanced hardware and software test systems for state of the art manual and automated cellular phone manufacturing assembly lines. Serve as a technical interface with design engineering, product management to provide for new product testability.

Requires 5 or more years test engineering experience with emphasis in RF testing and FM communications systems. Recent experience in automated manufacturing systems a plus. Good background in C and HP Basic programming.

RF VERIFICATION ENGINEER - CELLULAR PHONES MANUFACTURING

● Responsible for the verification of new product processes and changes to insure highest quality and producibility with the Cellular Phones manufacturing products. Be a technical liaison between design and manufacturing functions identify, evaluate and approve short term and long term solutions for radio/process problems.

BSEE with 3 years RF design experience preferably with cellular and / or other portable phones. General radio knowledge in audio and software a plus. Experience with Spectrum/network analyzers, signal generators, Rf component fixtures, communication test sets, modulation analyzers, etc.

Contact: Natalie Martin, phone: 804-592-6618, Fax: 804-592-6543, email: Natalie_Martin@ena-east.ericsson.se, memoid: EUSNKM. Application: Natalie Martin, Staffing Department.

Telefonaktiebolaget LM Ericsson Technical Office UAE, United Arab Emirates

RADIO NETWORK PLANNERS GSM

The Technical Office in UAE, (TKU) is seeking an enthusiastic person to join the existing team of cellplanners for a local contract in the UAE. TKU is responsible for all marketing, sales, implementation and system support for GSM and TACS systems within the UAE and Qatar. The technology of the mobile telephone environment is rapidly developing. To enhance our growth and maintain our success in this market, technologically aware and commercially team players are sought to strengthen our local organisation.

● The position: Working in a "close to the market" environment within the local Mobile division. Dimensioning the mobile telephone network with coverage and capacity. Making RF-measurements and parameter settings on prediction models. Optimise the radio network performance. Working with common market support and participate at customer meetings.

The qualifications: A confident and effective communicator with interpersonal skills capable of maintaining close customer liaison. Willingness to attend training and development courses and travel on business trips. Knowledge of several advanced

computer systems in the UNIX and PC environment. A university or high school graduate or equivalent with a background within radio and telecommunications. Fluency in English is essential.

Contact: tel +971 2 724 222: Mr Jan Jansson, Radio Network Design Manager, memoid XCOM.TKUJA-JA, Mr Jerry Carsson, Marketing Manager, memoid ERAC.ERAJERC eller Mr Bo Nilsson, General Manager, memoid: XCOM.TKUBN. Application: Telefonaktiebolaget LM Ericsson Technical Office UAE, TKU, Box 3704, Abu Dhabi, United Arab Emirates.

Ericsson South Africa (Pty) Ltd

BSS SYSTEM SUPPORT EXPERT

● We are looking for BSS System Support Experts for a long term, (1 year), contract in South Africa.

Our network consists today of 1 Stand Alone HLR (and 1 Standby HLR), GMSC's, MSC/VR's, BSC's, MIN AXE (Prepaid SIM), TMOS -CMAS and SMAS, VMS, SMS-C and Voice recognition system. We will soon have 500k subscribers.

We will also support the other GSM networks in southern Africa.

OBJECTIVES: To provide technical expert support to Ericsson's customers and Field Support Centre within the coverage of the field support area. To be accountable and responsible for the efficient running of the System Expert function within FSC in order to reach a higher level of customer satisfaction.

RESPONSIBILITIES: To assist in building up the expertise and to transfer knowledge within the department. To make judgement of the most efficient way, technical and economical, to solve a problem. Full reporting shall be done.

MAIN TASKS: To review, develop and improve the procedures in Field Support. To ensure that all activities within the department meet the Ericsson Quality standards. To identify, investigate and report or solve problems of a complex nature in the both hardware and software. To be able to explain highly technical issues to different levels within the organisation. To be part of the 24 h emergency service if appointed.

REQUIREMENTS: Degree in Electronic Engineering/Telecommunications or equivalent. A minimum of five (5) years relevant experience working in the telecommunications/computing industry where at least three (3) years has been working for Ericsson within testing or customer support of CME20.

The applicant should be skilled in the following areas: BSS (BTS/BSC) O&M (BSCR5+, RB52xx and RB5 2xxx), GSM900 Radio environment (Cell Planning and Fault finding), AXE 10 Operations and emergency recovery procedures. Have a sound knowledge of the CME20 Switching System, trouble shooting and trouble report handling, CN-A and CN-I handling and correction implementation.

System Expert needs to be familiar with the product structure at a level equivalent to the components of a function block (hardware and software functions).

Personal skills as a thorough and methodical approach to work, be able to work as a team member, perseverance in tracking and proving the existence of faults, be flexible and responsive to changing work patterns and demands. Very good knowledge of English is a must.

Contact/Application: Riku Vastela, Memoid ESA.ESARIKU, tel ESA +27 11 447 6440, fax +27 11 447 6469.

Ericsson AS, Oslo, Norway

SOFTWARE DESIGNERS

Our Datacom Design department develops and maintains datacom products and services for Ericsson's digital mobile systems for GSM, D-AMPS, PCS1900 and PDC. The department is a resource and competence centre for mobile datacommunication within Ericsson.

● We are looking for software designers with experience from and interest in on or more of the following areas: Data communication. Internet protocols (e.g. TCP/IP, SLIP, PPP). Design and programming of realtime systems, based on C/C++ and SDL methodology. HW oriented programming. AXE10 System Design.

We are offering you: Challenging tasks within an exciting and fast growing area. Excellent opportunities for personal development.

Qualifications: Experience with telecommunications. Good spoken and written English. Preferably ability to understand Norwegian. B.Sc. or equivalent.

QUALITY

● We are looking for a person with experience from and interest in quality work. One task will be to increase the awareness of quality aspects within the organisation by informing and educating the personnel.

Another tasks will be to find and evaluate new methods and activities to increase the quality in our design projects.

We are offering you: Challenging tasks. Excellent opportunities for personal development.

Qualifications: Experience with quality work. Knowledge of ISO 9000, TQM and CMM. Good spoken and written English. Preferably ability to understand Norwegian. B.Sc. or equivalent.

PROJECT MANAGERS

● We need project and subproject managers and to manage our design projects of 40.000-80.000 manhours. We are part of an international organisation, and coordination between different Ericsson companies in different countries will be one of the tasks. Thus, some travelling is required.

We are offering you: Challenging tasks within an exciting and fast growing area. Excellent opportunities for personal development.

Qualifications: Experience as project manager. Good interpersonal skills.

Good spoken and written English. Preferably ability to understand Norwegian. B.Sc. or equivalent.

FUNCTION TEST LEADER

● We need function test leaders to plan and manage function test in our design projects. We are part of an international organisation, and coordination between different Ericsson companies in different countries will be one of the tasks. Thus, some travelling is required.

We are offering you: Challenging tasks within an exciting and fast growing area. Excellent opportunities for personal development.

Qualifications: Experience with function test. Good interpersonal skills. Good spoken and written English. Preferably ability to understand Norwegian. B.Sc. or equivalent.

INTERNATIONAL STANDARDISATION WORK

● We are looking for persons with experience from and interest in standardisation work. Main tasks will be participation in standardisation committees (e.g. ETSI), technical support towards design projects and technical market support. Some travelling is required.

We are offering you: Challenging tasks within an exciting and fast growing area. Excellent opportunities for personal development.

Qualifications: Experience with standardisation work. Good spoken and written English. Preferably ability to understand Norwegian. B.Sc. or equivalent.

Contact: Inger Nordgard, tel. +47 66 84 16 27, email: etoin@eto.ericsson.se, MEMO: ETO.ETOIN or Espen Thorsen, tel. +47 66 84 13 54, email: etoet@eto.ericsson.se, MEMO: ETO.ETOET. Application not later than : Ericsson AS, Human Resources, P.O.Box 34, N-1361 Billingstad. Mark application "TX/D"

Ericsson Telecommunicacoes S.A, BRAZIL - EDB/RA

CELLPLANNING MANAGER

The Regional Supply Centre for Latin-America, based at EDB in Sao Paulo, supports all Radio Network Planning activities in Latin-America. Both a cellplanning and a network optimising groups are being set-up.

● You will be in charge of recruiting, training and managing a group of RF engineers.

You hold an B.Sc. or M.Sc. in electrical engineering, telecommunications or equivalent experience. You have a broad international experience and are fluent at English. You have at least a few years experience of both cellplanning and management, preferably on D-AMPS/AMPS markets.

Portuguese and/or Spanish are a strong advantage. The assignment will be of one year minimum.

Contact: EDB/RAC Frédéric Aron, +55 11 681 02 98, memo ERA.ERAFAR

Ericsson Australia, Melbourne, Australia

MOBILE NETWORK SUPPORT ENGINEER

● The position to be filled is that of Senior Support Engineer, Trouble Shooter for the Telstra GSM network.

It is intended that the person filling this position will be skilled in all facets of GSM technology, with particular emphasis on MSC ability. The position is offered for a 12 month period.

The job requirements are as follows: Strong MSC ability, proven Trouble Shooting record, experienced in Trouble Report Handling. The applicant should also possess good communication skills, with a desire to work in a close-knit team environment.

Contact: Adrian Heley, Ericsson Australia F5C, Ph:+61 3 9301 2072, Memo: EPA.EPAANH. Application: Peter Moore, Ericsson Australia Human Resources, 202 Bell St. Preston, 3072, Australia, Ph:+61 3 9243 5205, Memo: EPA.EPAPGM.

It takes half a day by car when he wants to phone home. The closest village is 150 kilometers away. Bert Hedrén is stationed under the scorching sun of the desert. He works for Ericsson Business Networks as foreman for the cable-laying operations at the Great Man-Made River project in Libya. In a location where sandstorms constitute the only daily contact with other places, he and his colleagues are installing the latest technology.

A restless soul in a foreign land

It's like doing military service. You're stuck in the same place with the same people around the clock. Work duties are concise and repetitive. It's vital that we don't drive each other crazy. You have to compromise, be considerate and help one another," he says.

They work six weeks including weekends and then have three weeks off.

"I've worked in many different places in the world, but never one that was this isolated. There's nothing but sand and rocks here; if you look towards the horizon, it's like sailing on a light brown ocean," says Bert.

Twenty nationalities

Several colleagues had worked on oil platforms earlier. For them, the Libyan desert wasn't as great of a shock – it was equally as isolated with just as much endless sky.

Around 20 nationalities are represented at the site, including Koreans, Iraqis, Filipinos and Burmese. The workers live in portable barracks in a camp surrounded by barbed wire. The facilities have a high standard but there isn't much time left over for socializing since the shifts are 12 hours long.

"The language difficulties are enormous. Only a few speak English. I get by with sign language and a word or two of Arabic that I've managed to pick up," says Bert.

It's easy to lose track of the days since the desert always looks the same. Camels



Bert Hedrén, at home in a frigid Sweden. Photo: PETER GUNNARS



often wander by the camp, grazing on small, dry bushes. Every once in a while, we'll find a snake or a scorpion in the barracks.

Good reputation

A courier comes by twice a week – the only regular contact with the outside world.

"It can feel strange for an Ericsson employee to not have access to a telephone. If I need new instructions from above, it can take three weeks before I get an answer. We try to manage on our own, which takes a great deal of responsibility.

Ericsson employees have a good reputation. Many of the Burmese and Koreans laying cable are accustomed to tough management and poor working conditions.

Bert explains, "Things we take for granted – one's own bed, laundry facilities

and a decent table for meals – are incredible luxuries to them."

"We Swedes have a completely different concept of what equality and cooperation is than they're used to. We treat people as equals, even if we're not doing the same job – a trait that is very appreciated."

One has to be careful outside of the camp. There are bandits in the desert and several cars have been stolen.

Restless soul

Bert doesn't feel particularly nervous.

"The hardest part is being away from my family for such a long time. On the other hand, I usually want to go abroad again as soon as I get home. It must be in my blood. I guess I'm what you might call a restless soul."

The Swedes have paid home visits.

Bert Hedrén is stationed under the scorching sun of the desert. He works for Ericsson Business Networks as foreman for the cable-laying operations at the Great Man-Made River project in Libya.

Photo: BERT HEDRÉN

Some chose to meet their families in Cyprus or Tunisia, but Bert always goes home.

His family has previously relocated with him on foreign assignments. "They are often more enthusiastic about it than I am. If all is well with our living arrangements and the schools, then it's a great experience. Living abroad is an adventure for me. I get to meet many new people and live in different environments. It's also well-paid, which certainly has its advantages."

THEODOR PAUES

■ The project in Libya is designed to create a new water supply and goes by the name "Great Man-Made River Project." The Sahara's sea of sand hides a wealth of resources under its surface, namely underground oceans of fossil water.

Wells are drilled down to these water sources and double pipelines with an inner

Water supply project

diameter of over four meters will pump up two and a half million cubic meters of water each day. When the project is finished, a pipeline system will

provide water to all of northern Libya.

The entire project is worth over SEK 65 billion and is being implemented by the Korean company Dong Ah. Ericsson's assignment, worth around SEK 1 billion, is to install specially-adapted communication and surveillance networks, a typical example of what we call "Dedicated Networks" within Infocom Systems' business unit Business Networks.

THORD ANDERSSON

contact

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

last word

First it was the Romans. Then the Vikings. The Moors came later, followed by the famous Barber. And, finally, Ericsson arrived. The Spanish city of Seville has seen many foreigners come and go through the centuries. Ericsson's invasion was brief. For three days, Seville was the site the Ericsson Management Forum, a meeting that brought together 370 of the Company's top executives.



LARS-GÖRAN HEDÍN



When 370 Ericsson managers meet, there is a lot of talk. In the intermissions it often became almost painfully loud.

Usually whenever Scandinavians who burdened by the dreariness of a long winter get together with colleagues from friendlier climes, sweet music is often heard. The meeting in Seville was no exception. Here, the sounds of flamenco music were a welcome contrast to the often harsher tones of modern music. Lars Ramqvist's third Ericsson Management Forum, a meeting of executive personnel from Ericsson companies in all parts of the world, was a carefully staged get-together that participants will long remember. Compared with the two previous meetings – in Sonthofen and Hasseludden – the meeting in Seville was completely different.

Younger, more vibrant company

In the same vein as Ericsson's exhibition at CeBIT '97, the mood at Ericsson.

Management Forum in Seville was that of a younger, more vibrant company. This spirit permeated the lectures and presentations that highlighted the three-day conference. And, as was the case at CeBIT, Imagination, an English consultancy stage-managed the show. Pär-Anders Pehrson, of Corporate Human Resources and Organization, orchestrated the meeting with a masterful touch on



Spanish flamenco is an extremely expressive form of art. It was a welcome contrast to the business at hand.

Photo: LARS ÅSTRÖM

Meeting in Seville was a brilliant show

Ericsson's behalf. In the background, the spirit of Britt Reigo, Senior Vice President, Corporate Human Resources and Organization, dominated an overwhelmingly positive air of approval. Participants were assisted by a staff of hostesses assembled by Monica Nyström and her boss at Ericsson Events, Arne Johnson.

"Ericsson has a long road to travel before we reach our vision of becoming a world leader for internal utilization of

information technology," it was pointed out several times during the conference. In one respect, however, Ericsson has made considerable progress since the last Management Forum in Hasseludden nearly four years ago. Computer-supported presentations have replaced

manual leafing through displays and overhead presentations.

A common theme inked all presentations at the Management Forum in Seville: How shall we reach our "Wanted Positions" in the year 2000, and the visions expressed in the study entitled "2005, Ericsson Entering the 21st Century"? Lars Ramqvist and CW Ros described the basic requirements in the form of market trends, various financial aspects of Ericsson and other considerations. Kurt Hellström, Anders Igel and Johan Siberg, Senior Vice Presidents of Ericsson's three new business areas described their operations. Various insights were also presented on AXE development, microelectronics and IS/IT issues.

Representatives of some of Ericsson's "Major Local Companies" described how the Company is strengthening its market dimension and working in closer cooperation with customers. Lennart Grabe, in charge of the "2005" study, led a series of presentations focused on how Ericsson plans to achieve interim goals established

for the year 2000, halfway to 2005. The plans were also a focal point of group work sessions on Day Two of the conference.

Meeting place

In addition to the business at hand, the Ericsson Management Forum also provided an ideal meeting place for Swedes scattered throughout the world or at home in Sweden, and for non-Swedes from all parts of the globe. Informal discussions during intermissions for coffee breaks and meals knew no bounds. At times, the talks seem to rise to unprecedented levels. But no wonder, there is a great deal to talk about in Ericsson today. The timing for the Seville conference was chosen carefully, now that Ericsson has clearly set its sights in preparation for a quantum leap into the future.

Contact will describe Ericsson's leap in an "in depth insert" in its next edition, which will be devoted to the issues discussed in Seville.

LARS-GÖRAN HEDÍN



Towards the end of the Forum, Ericsson's corporate executive committee – Anders Igel, C W Ros, Kurt Hellström and Lars Ramqvist – answered the participants' questions under guidance of Nils Grimsmo and Kjell Sörme (center).