


contact

ERICSSON  PUBLICATION FOR EMPLOYEES WORLDWIDE

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Celcaribe – Colombia's most expansive operator



Celcaribe is Colombia's fastest growing mobile operator and a customer that has chosen to purchase all of its infrastructure from Ericsson. As its name implies, Celcaribe has chosen to concentrate its business on the Caribbean coast. Subscribers are mainly business people and tourists visiting the coastal areas. The success of mobile telephony in Colombia is mainly attributable to the congestion of fixed networks and the high cost of an ordinary telephone.

Pages 12-13

Strong convictions

Helena Lindskog has returned to Ericsson after working for another company for several years. She is very emphatic about increasing understanding of end-users and is not afraid of going up against universally accepted opinions at Ericsson. Her aim is to shift focus from technology to customer benefits.

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Key customers with their own ambassadors

In order for Ericsson's global customers to avoid having to meet different Ericsson representatives in different markets, they can now deal with their own representative. The Global Account Managers, as they're called, serve as a link between the customer's international organization and Ericsson.

Pages 8-9

A more flexible architecture

With point-to-multipoint technology, networks can be built more economically and more flexibly than with today's point-to-point technology. The objective is that this technology will be used in mobile telephone networks and to provide companies with broadband voice and data communication.

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Photo: LARRY LUXNER

VACANCIES SEE PAGES 20-23

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New record for quarterly earnings

It is highly gratifying to report that orders booked have now increased for the 24th consecutive quarter. These six years of uninterrupted growth mean that Ericsson has built up a very substantial customer base and that we through working closely with our customers have earned their confidence and been able to participate in new business. In turn, the increase in orders booked has resulted in increased net sales and income, while improving cash flow considerably.

Income for the third quarter of 1997 is the best quarterly result ever reported by Ericsson. Ericsson has become a more efficient company.

The efforts of our employees have led to this success. The Board of Directors has proposed that Ericsson employees should be given the right to purchase convertible debentures, a proposal that was approved by an extraordinary general meeting held on September 11. In addition, the Board of Directors has approved an options program for executive management. The conditions for the allocation of options for the year 1998 will be established at the end of this year. I personally feel that it is very gratifying that the Board of Directors is giving em-

Southeast Asian market has become more uncertain. A weakening in orders booked is seen in certain countries, although we are still able to report a sharp total increase in net sales and orders booked in the Asian market.

On the whole, I would emphasize that we see signs of ever more increasing competition. Therefore, the improvement programs continue with undiminished strength, particularly in the Infocom Systems Business Area, which still reports unsatisfactory earnings. The AXE public systems and the Consono business systems are still profitable, although price pressures have increased. The most significant charges against income are new investments in transport and access networks, as well as in data communications.

The Infocom Systems Business Area is investing heavily in the development of its product portfolio for data communications and Internet applications. One example is the business area's new Phone Doubler, which allows simultaneous use of a single telephone line for an Internet connection and a voice call. Public Intranet is another service included in the new portfolio of IP-based products combining telecommunications and the Internet.

Infocom Systems is supplementing its own product development with cooperative agreements and partnering with oth-



The efforts of our employees have led to this success, says Lars Ramqvist.

Lars Ramqvist comments on the nine months interim report

ployees the opportunity to participate in Ericsson's continued success in this manner.

Although the trend for Ericsson has been very favorable thus far in 1997, competition has clearly increased. Ericsson's competitors are increasingly more active and aggressive. We accept this challenge and are focusing on shorter lead times for time to customer (TTC) and time to market (TTM), higher quality and increased flexibility. Price pressures are being countered by controlling costs, while rationalization measures continue, as well as measures to improve efficiency, among which outsourcing is one component. In so doing, we have succeeded in maintaining gross margins and improving the profit margin.

Regrettably, we must note that the

er leading companies. One such relationship has been established with the U.S.-based company Juniper Networks with regard to part ownership and distribution rights, as well as possibilities for joint development and software licensing in the area of high-capacity routers for data communications.

Global growth in the number of mobile telephone subscribers continues, with the system standards supplied by Ericsson strengthening their position. Ericsson has thus been able to consolidate its leading market position. Within the Mobile Systems Business Area, a system is being developed for what is called third generation mobile telephony. Market demand for increased mobility, in combination with faster and more functional network connections, will make

mobile multimedia possible. Our ambition is to develop this capability within existing mobile telephone networks as far as possible, while at the same time employing new technology, WCDMA (Wideband Code Division Multiple Access) that is more effective in terms of capacity and paves the way for competitive and sophisticated multimedia communications.

The Mobile Phones and Terminals Business Area continues to develop very strongly, with a doubling of sales. Our total market share thus continues to increase sharply. Price levels for the business area's products remain satisfactory. Our new product program, targeted to different customer segments, has been very favorably received by the market on all counts.

Ericsson is placing increasingly greater importance on securing the value of our research and development efforts through patents. The number of patent applications is increasing sharply and will exceed 1,000 during 1997. This is a reflection of our innovative ability and of our position at the leading edge of technical development. Ericsson is well prepared to meet future market demands.

Stockholm October 23, 1997
LARS RAMQVIST

news briefs

Ericsson supports voice control for two processing companies

Ericsson has signed an agreement with two voice processing companies, Brite and Vocalis, to provide a built-in voice-controlled calling system for Ericsson's total solutions to GSM operators. This means that the end-user can call someone by simply saying his or her name, making mobile phones even more user-friendly. Eventually, other ser-

vices, such as call-forwarding, can become voice-controlled.

Production of base stations in Brazil

The number of mobile telephone subscribers in Brazil is expected to increase from the current 2.9 million to 8.2 million by year-end 1998. In order to meet the expected demand, Ericsson is investing SEK 84 million (USD 11 million) in a

local production plant that will produce base stations for AMPS and D-AMPS networks. Today, most subscribers use the analog AMPS system, but heavy growth is expected in conjunction with the transition to the D-AMPS system, which is digital.

The plant has 5,000 square meters of floor space and is located next to Ericsson's existing factory in São Jose dos Campos, about 100 km from São Paulo. The plant will commence production in January 1998.

Ericsson moves into Silicon Alley

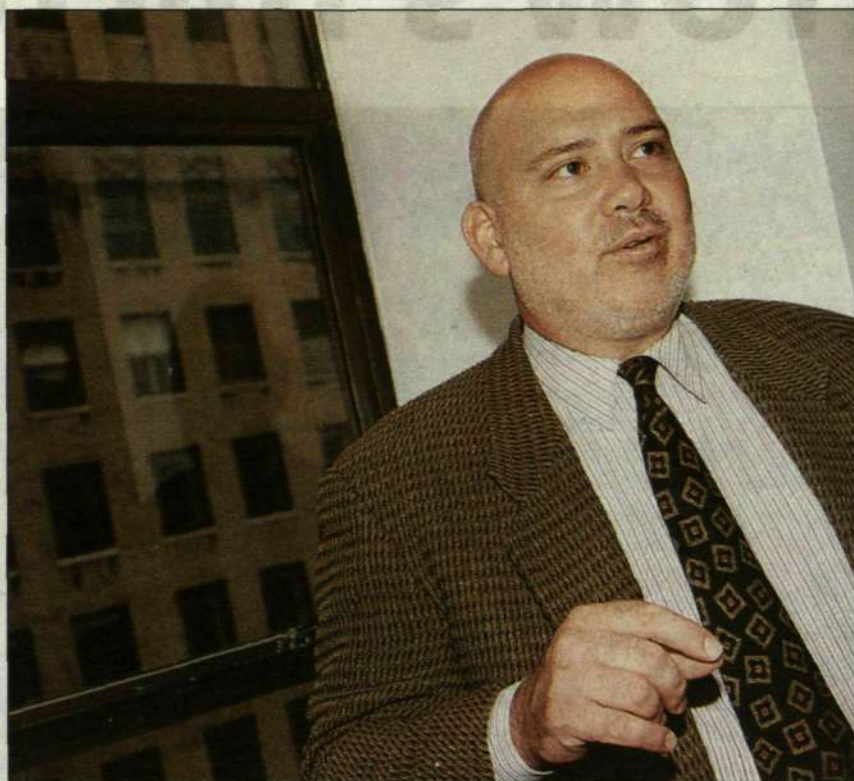
In the heart of New York's finance and media district, popularly referred to as Silicon Alley, Ericsson will soon open a test laboratory for new Internet applications. The project is being conducted in close cooperation with New York City's Investment Fund. The new laboratory will be the East Coast's answer to Ericsson's Cyberlab in California, opened earlier this year.

Cyberlab East, as the new lab will be called, will enable Ericsson to offer innovators in the Internet and multimedia sectors an opportunity to test their commercial Internet applications under real market conditions.

While Ericsson's operations in California continue to develop Internet technicians, the New York facility will concentrate on developing innovative solutions that might be added to Internet services, including software able to transmit information and services for utilization on the Net.

Assist in the growth

"The strategic cooperation with New York's Investment Fund carried considerable weight in our decision to establish a Cyberlab on the American east coast. It provides a very solid start as we embark on this exciting project. We will also be able to assist in the growth of New York's



Anthony Knape is the project manager of Cyberlab East, which will be the American east coast's equivalent of Cyberlab in California. He plans to have 15 different development projects in progress simultaneously at the Broad Street facilities.

Photo: LENA WIDEGREN

media industry," explained Bo Hedfors, president of Ericsson in the U.S., at a press conference on October 21.

New York City's Investment Fund was established last year to create new job opportunities and support economic growth in the city. In addition to lending money for new development projects, the Fund offers a contact network comprising top business executives, technical experts, media representatives and other investors. It also has the resources to uncover the most promising projects and offer financial aid in the form of sponsorship. Cooperation with Ericsson complies completely with leading investors' and politicians' plans for the future of New York City.

"We welcome the international telecommunications giant to our city," said Rudolph W. Giuliani, Mayor of New York. "We believe Ericsson's presence will further accelerate the growth of Silicon Alley, which already includes 700 companies in the Internet industry. Silicon Alley companies provide employment for more than 18,000 residents of New York City."

Ericsson sees the new laboratory as a facility to conduct projects in cooperation with business partners and other outside interests. Independent companies will be afforded the opportunity to

use Ericsson's new laboratory facilities to research and test new products at a reasonable price.

Ericsson believes New York City, with its clout in the financial and media worlds, will lead the way in development of the next generation of commercial Internet applications. The city has become the hub of the Internet sector that supports a substantial part of new development in Internet applications. As a result, the decision to establish Cyberlab East in New York was virtually a foregone conclusion.

15 development projects

Anthony Knape, project manager of Cyberlab East, expects to have capacity in the new lab for 15 development projects conducted simultaneously, about half of which will belong exclusively to Ericsson. Cyberlab will also provide scope for some non-commercial activities, such as training and promising projects that lack financial resources for continued development. Under management by Ericsson, Cyberlab will be equipped with the very latest in data and telecommunications equipment.

According to present plans, Cyberlab East's first projects are expected to be started in the beginning of 1998.

LENA WIDEGREN

Philippines. In addition to coverage for the cities of Makati and Quezon, the new GSM network will be used as a demonstration facility to illustrate Lucent's capabilities with GSM 1800.

Motorola signs contract in China

Motorola signed a contract with Eastcom and ZTIEC of China recently for production and sales of equipment for a GSM network.

Under terms of the agreement, Eastcom will manufacture and distribute Motorola's latest base station models to operators in China.

Lucent builds GSM network in the Philippines

Lucent Technologies of the U.S. recently completed construction of the first GSM 1800 network in the

versions of Windows CE 2.0, its operating system for pocket computers. In addition to English, Windows CE is now also available in German, French, Italian, Portuguese and Spanish. The new version affects Ericsson Mobile Communications, which manufactures the MC 12 pocket computers. Microsoft has announced the release of a Swedish version of Windows CE 2.0 in the spring.

Ameritech acquires shares in TeleDanmark

Ameritech, a Bell company based in the American Midwest, recently acquired 42 percent of TeleDanmark for USD 3.2 billion. The stock purchase is the latest in a series of major acquisitions designed to restructure European telecom markets in preparation for deregulation in 1998. It will also provide Ameritech with effective control of the Danish operator.

Windows CE 2.0 in more languages

Microsoft has released several new

hello there!

How does it feel to be a millionaire?



Photo: ANNAKARIN BJORNSTROM

Roine Karlsson, an employee at Ericsson's production plant in Gävle, was recently awarded SEK 1,424,113 for a proposal. His award is probably the largest amount of money ever presented by Ericsson for an employee suggestion.

How does it feel to become a millionaire overnight?

"Unbelievable, this is incredible!"

"I was informed about the award a few weeks ago. It's been really difficult not to jump up and down and shout out the news. Today, October 29, the news was officially announced by the Company. My local manager, the production manager, technical director and foreman were all here to offer their congratulations. Both local newspapers in Gävle will carry the story tomorrow.

What did you discover?

"In the GSM radio base station, Compact, there were originally two power modules, both placed on the top shelf. I suggested they be converted into a single unit on the bottom. My proposal, I said, would make the product less expensive, require less cable running and it would be faster and easier to assemble. I never dreamed, however, it would be worth this much money. I was really surprised.

"I have worked in the Gävle factory for 13 years. I used to build racks for analog radio base stations, but I transferred to GSM when rack production was moved to Visby.

"The RBS 2000 project started in 1995, and I was one of a few fitters who worked on the first racks. A lot of problems needed to be solved in those days. One day while I was working on an assembly job, it suddenly occurred to me how this particular problem could be solved. I wrote down my suggestion and submitted it. My proposal was reviewed by the engineering design departments and, during the autumn of 1996, it was adopted lock, stock and barrel in production. It was a great feeling to see one of my suggestions become a reality!"

"I have since submitted several other suggestions. One of them is now being reviewed by our design engineers."

What will you do with money?

"I'll finish building the house we've been remodeling and renovating. Now I'll even be able to build a garage next summer. I'm also looking forward to taking the whole family, my wife and two children, on a well-deserved vacation, maybe to Greece, next summer.

BARBRO ALBREKTSSON

industry news

Tomorrow's microwave links

With point-to-multipoint technology, networks can be built more economically and more flexibly than with today's point-to-point technology. At Ericsson Microwave, a point-to-multipoint project has been in progress since the beginning of the year that will result in a finished product as early as 1999. The objective is that this technology will be used in mobile telephone networks and to provide companies with broadband voice and data communication.

In building a network using point-to-point technology, such as MiniLink, paths are established using two links focused on each other. Each new network path requires a new pair of links. The capacity of the link is also fixed and determined in advance.

A network built with point-to-multipoint methods consists of nodes and terminals. Each node serves a geographic area in which as many as 100 terminals can communicate with the same node. Such a system is less expensive, more flexible and requires significantly less equipment.

Developing a product family

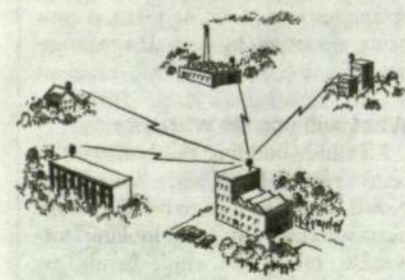
Ericsson Microwave has long been considering the development of a family of products containing terminals and nodes for point-to-multipoint networks. One obstacle has been that the technology required for implementing this concept has not been available, but this problem is being eliminated by the rapid development of so-called microwave monolithic integrated circuits (MMIC), which are specially designed integrated circuits for microwave applications.

"The primary reason why we have started developing point-to-multipoint technology, however, is that a market for these products has emerged with telecom deregulation," explains Dag Jungenfeldt, who manages the Microwave Access unit at the Microwave Radio division. For new operators who lack a fixed network, building a point-to-multipoint network is a very functional and inexpensive alternative.

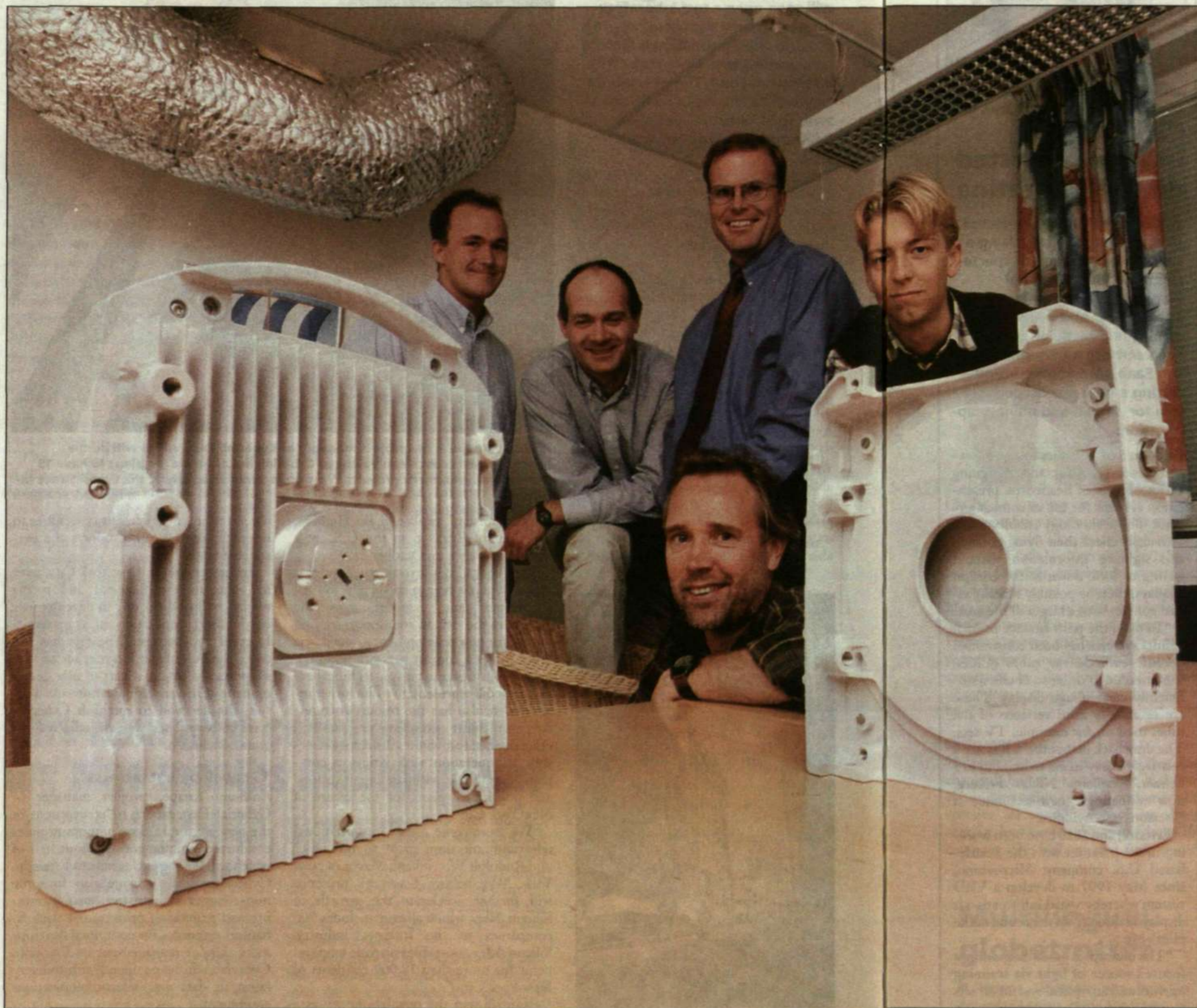
Tight schedule

The development of point-to-multipoint technology is taking place within the Microwave Access business unit. A finished product must be completed by 1999, and to meet this tight schedule, contacts are being built up with other units at Ericsson Microwave and with other Ericsson companies.

Dag Jungenfeldt foresees two major ap-



In a network built using point-to-multipoint links, a single node communicates with several radio terminals.



Members of the point-to-multipoint project group: Johan Mårtensson, Aldo Bolle, Hans Herbertsson, Mikael Henström and Dag Jungenfeldt (seated).

plication areas for point-to-multipoint technology: mobile telephony and distribution of broadband voice and data communications to business users.

"With respect to broadband voice and data communications, the difficulty lies not so much in building a backbone network of sufficient capacity," explains Dag Jungenfeldt. "That can be done with fiber optics with or microwave links. The problem is providing access to subscribers, to companies and homes. This is where point-to-multipoint technology is an excellent solution."

Direct capacity to the points

Within both mobile telephony and business communications, the most significant benefit of point-to-multipoint technology is the system's ability to direct capacity to the points where it is most needed at the moment.

One example is a corporate network for data communication in which a num-

Point-to-multipoint technology provides a more flexible network architecture

ber of companies are each connected to their own terminal and all communicate with the same node. Data communication demands high capacity under short periods. With a point-to-multipoint solution, the network can be dimensioned according to the average traffic load, instead of peak loads.

Significant market potential

When one of the companies is sending or receiving data, capacity is shifted to that link. Since allocation of capacity is instantaneous, each company can function

as if the highest capacity was available at all times.

"This is the greatest advantage of point-to-multipoint technology," says Dag. "This is also where the greatest technical challenges lie. In order to reallocate capacity at such high speeds, high demands are placed on both hardware and software."

There is significant market potential for point-to-multipoint technology in providing broadband service to the home. Today, both voice and data communications are carried on the telephone net-



Seven rural areas of the Czech Republic will gain access to Ericsson's fixed cellular telephone system for D-AMPS in Phase One of the project, which is now under installation. Photo: LIBOR ZAVORAL, PRESENS BILD

'Fixed cellular telephony' to Czech Republic

In the beginning of 1998, nearly 2,000 companies and private households outside Prague will gain access to long-awaited telecommunication services.

Rann Global Net, a telecom operator in the Czech Republic, has placed an order with Ericsson for a fixed cellular D-AMPS system to be installed this autumn.

The Czech Republic has two GSM systems today. One was delivered by Nokia and the other by Siemens in cooperation with Motorola. The D-AMPS system for fixed cellular telephony now being installed is Ericsson's first digital mobile telephone contract in the country.

"It's also our first D-AMPS fixed cellular system in central Europe. In the past, Ericsson has delivered fixed cellular systems to Russia, Brazil, Malaysia and the Ukraine," says Maths Stanser, manager of Special Applications for the Cellular Systems - American Standards business unit.

Telephone density is relatively low in the Czech Republic. About 25 percent of the population has access to tele-

phone services, but coverage in rural areas is only 10-11 percent. The need for telephony is considerable, obviously, and Rann Global Net's investment in so-called "fixed cellular" will support a rapid increase in telephone density, since no excavation work will be needed for cable installation. The Czech operator's framework agreement with Ericsson, which is valued at approximately SEK 400 million, extends over a period of five years.

"Phase One includes coverage for about 10,000 subscribers in seven rural areas outside Prague," explains Lars Broman, customer project manager for the Czech contract. "Shipments of equipment have already been started, and the network will serve at least 2,000 subscribers by the end of December.

Limited mobility

The cell planning, installation and launch of operation for fixed cellular networks are the same as conventional mobile telephone systems. The biggest difference is that fixed systems include radio units contained in terminals mounted on walls in subscriber homes or offices. When subscribers make calls, they use conventional telephones connected through the "box on the wall" to the mobile telephone network. The wall terminals are manufactured by the Indelec Division of Ericsson Radio S.A. in Bilbao, Spain.

"We will use different types of terminals in the Czech Republic, single-line units for

one line and multi-line terminals for up to 95 connections. It's like a small switch that is highly suitable in apartment buildings, for example," Lars Broman continues.

"Although we are delivering a fixed cellular telephone network, there is some scope for limited mobility, since the network can be used as fixed/mixed,

Central Europe's first fixed cellular telephony D-AMPS installation

a concept that allows subscribers with cellular telephones called Walk-a-Phones to move freely within their mobile telephone cells, which may cover an entire city," explains Maths Stanser.

Important reference

Regions in which Ericsson's fixed D-AMPS system is now being installed include many small and medium-sized companies with a glaring need for functional telecommunication services. When the network is placed in commercial operation, Czech companies in the coverage areas will be able to use all services offered by the D-AMPS IS-136 standard, including fax transmissions and data communications.

Rann Global Net plans to focus strongly on private industry in its system marketing efforts.

"For Rann Global Net, the Czech Republic contract represents a door into central Europe, an area in tremendous need of telecommunication services. By the same token, it could also create opportunities for Ericsson's fixed D-AMPS system in a new and highly interesting market," says Maths Stanser.

GUNILLA TAMM

Photo: MAGNUS GOTHANDER/KAMERAREPORTAGE

work's copper wires, and although developments are in progress to increase network speed, radio communication would be significantly faster. With a point-to-multipoint network, Internet access from the home would be nearly 1,000 times faster than today. However, Dag Jungenfeldt is careful to point out that exploiting point-to-multipoint technology for home services is not yet commercially viable. The cost of the technology must first be reduced substantially.

"Point-to-multipoint technology could become a tremendous growth area for Ericsson Microwave. This product area has the potential to become as big as MiniLink, but because we are entering a market that hardly exists today, it is difficult to predict the future. There are similar development projects in other parts of the world, but we are unique in focusing our effort on such a flexible and dynamic system."

NICLAS HENNINGSSON



Maths Stanser (left) and Lars Broman work with fixed cellular networks for D-AMPS. Photo: BJÖRN SEGER



Ericsson was represented when the Business Leadership Academy arranged a seminar in October. The aim of the academy is to promote future leadership excellence. From left: Jan-Mikael von Schantz, Vice President Human Resources, Telia AB, Britta Kronekvist, deputy sales manager, Ericsson Telecom Sweden, Antonia Ax:son Johnson, Axel Johnson AB, and Chairman of the Business Management Academy Foundation, and Anna Thulin, project manager, Telia AB.

Photo: PETER NORDAHL

Young leaders make demands

They're young, they're ambitious and they make demands in their work situation. They are the new generation of managers now being groomed for corporate success in the next century.

When Sweden's NLA (the Business Leadership Academy) was planning to implement a project focusing on management in the future, it was initially believed that the main difference would be between the sexes. Instead, the Academy found that it was between management generations.

The new managers were born in the 1960s or 1970s and their experience differs significantly from current corporate leaders, most of whom were born in the 1940s. It is important now for companies to have the courage to allow these young managers to use the energy and skills at their disposal, says Britta Kronekvist, one of the four participants from Ericsson in the NLA's "Research and Management Development Project in the 21st Century."

Career and leisure time

"When we presented the conclusions of the group project work, two main points emerged, balanced lifestyles and flexible solutions. We want the opportunity to engage in career jobs while also having leisure time. We all have different interests and needs, which means that it's important for each working situation to be customized to suit the individual."

Britta Kronekvist, born in 1965, works within Ericsson Telecom Sweden as

deputy sales manager serving two Telia companies. She thinks there are major differences in the values of people born in the 1940s, compared with her own age group.

"We are individualists and are more interested in quality than in quantity. It's not how many hours you spend at work, it's what you accomplish. We want both power and independence. If you provide us with clearly defined goals and working parameters, and the authority to make our own decisions within this framework, we will feel more involved and become more motivated, as managers, to involve and motivate others."

Britta Kronekvist believes that young leaders can make a special contribution because of their experience in handling

large volumes of information and their ability to see opportunities and make decisions.

Wide range of opportunities

"Our generation has grown up accustomed to choosing from a wide range of opportunities, to having individual goals and to having to make our own decisions. At the same time, we are also used to working as part of a group from the kindergarten level."

Although Britta Kronekvist considers Ericsson to be a leader among Swedish companies when it comes to meeting the younger generation's demands in the areas of life, work and leadership styles, she feels that a lot more remains to be done.

"Dare to take the consequences of all the fine concepts and policies which have been formulated," she urges. "Give those of us from the 1960s and 1970s the opportunity to advance and you will be able to harvest the fruits of a fast-moving, flexible organization that is capable of meeting its customers, and its markets, on their own ground."

LENA GRANSTRÖM



Britta Kronekvist, deputy sales manager for a unit within Ericsson Telecom, belongs to the younger generation of management.

Foundation to promote leadership excellence

■ The Business Leadership Academy was founded by Sören Gyll, former president of Volvo, Antonia Ax:son Johnson, Chairman of Axel Johnson AB, and Arne Mårtensson, CEO of Handelsbanken. The Board consists of representatives from a number of leading Swedish companies, including Ericsson's CEO, Lars Ramqvist. The aim of the academy is to promote future leadership excellence. Part of the work includes the "Research and Management Development Project in the 21st Century," in which 50 young people, 25 women and 25 men, representing 16 companies, have participated in a program of seminars and group project work.



Daniel Boestad from Saab tries the new VRD technology.

Images projected directly on retina

An electronic image projected directly on the retina. Using a special helmet visor, or spectacles, new Virtual Retinal Display (VRD) technology now enables text and images to be displayed directly on to the eye's sensory membrane. Ericsson Saab Avionics is currently testing a new prototype system for civilian and military applications.

Ericsson Saab Avionics has spent several years studying and designing various forms of headborne presentation systems for use in combat aircraft. The technology enables pilots to visually check their flying position and sighting information without having to look down at the cockpit displays, thereby possibly missing visual contact with a target in the area.

"To date, the performance of such helmet systems has been constrained because cathode ray tubes (CRTs) were needed in order to obtain a sufficiently clear image display. These are essentially mini versions of the tubes used in, for example, TV sets. The drawback is that the CRTs are a relatively heavy items to build in to a helmet," explains Niklas Friberg, now evaluating a new technique at Ericsson Saab Avionics.

Ericsson and Saab have been working in cooperation with the Seattle-based U.S. company, Microvision, since May 1997 to develop a VRD system whereby visual information is displayed directly on the retina of the pilot's eye.

"The concept is based on guiding a focused source of light via scanning mirrors and an optical system directly into the eye. The technology is a derivation of the method used to diagnose eye diseases by photographing the fundus of the eye," continues Friberg.

VRD technology gives very high image quality and enables the technology to be miniaturized, with resulting low weight and minimal volume. Ericsson Saab Avionics is currently evaluating the new technology to determine if it meets the military requirements of combat aircraft, such as the JAS39 Gripen. Various civilian applications will also be assessed.

"For example, the technology could be suitable for certain portable monitoring systems," notes Friberg.

Microvision will deliver two trial systems during 1997. The first VRD system is monocular and in monochrome. It is this system which is currently being tested.

The second trial system, a full-color system based on an 800x600-dot resolution, will be delivered before Christmas and evaluated during 1998.

Ericsson launches own minicomputer

■ In mid-November Ericsson commenced the sale of its first pocket-sized computer, the MC12. Despite its small size and weight of less than half a kilo, the MC12 can be used to surf the Internet, write letters, send e-mail and create spreadsheets. Linked to one of Ericsson's latest telephones, the MC12 pro-

vides users with unlimited communication potential. The Ericsson MC12 is equipped with Microsoft's Windows CE 2.0 operating system for minicomputers and a pocket-sized version of such well-known programs as Word, Excel and Internet Explorer.

NICLAS HENNINGSSON

Ericsson's first mini-computer, the MC12.



portrait

"What's good for the end-user is good for Ericsson." That's basically Helena Lindskog's motto. She believes that her views go against the grain of what is generally accepted at Ericsson. "I view everything as an end-user, first and foremost," she says.

Helena's own point of view

We can relate everything we do, develop and sell to ourselves. Everyone

can be an inventor or a tester. Imagine the possibilities that would come to light!

In her previous job as technical manager for the Stattel delegation, which handled the Swedish government's purchases of telecom and computer services, Helena came to represent up to one million end-users. Last year, she returned to Ericsson, where she had worked for 14 years before joining Stattel. She was awestruck by the differences between how things are now and how they used to be.

Differences

However, it wasn't Ericsson that had changed, but she herself. She had been viewing everything from a customer perspective for several years. Now she is sharing her experience throughout the company. She believes that truly under-

standing the end-user is the key factor for success.

Helena Lindskog is somewhat of an "industry guru." She is involved in telecom issues within the EU and is frequently engaged as a lecturer at conferences, colleges and universities, both in Sweden and abroad. She has managed to contribute a few editorial articles to Sweden's major daily business newspapers.

Strategic issues

Ericsson lured her back to the company from her Stattel assignment. For the past year, Helena has been working with strategic issues concerning future markets at the Infocom Systems business area's unit for Enterprise Networks.

"We must learn that customers don't care about how Ericsson is organized," emphasizes Helena, using business customers as an example.

They buy business communications solutions from the relevant section within Ericsson, but they also buy Ericsson products from distributors, as well as fixed and mobile services from operators, which are also often Ericsson customers. So the same end-user can encounter Ericsson from several different points of view.

Viewing situations from different perspectives at the same time is one of Helena Lindskog's typical traits. She shares several similarities with the Renaissance man. She is an engineer and knows her telecom, but she is also a humanist and has studied history, theology, theoretical philosophy and languages. Helena not only switches effortlessly between various disciplines, but she also seems to have integrated them. This is especially true today, when information technology has become a part of all aspects of life, she views the depth and breadth of her knowledge as a major asset. She has noticed that many technical disciplines harbor a complete lack of interest in the outside world, which she finds incomprehensible.

Lack of understanding

At Ericsson, this can translate into a lack of understanding for how external events affect the work done internally. As a guest lecturer at technical colleges, she has noticed the same phenomenon – those who choose a technical education simultaneously choose to disregard other perspectives.

"Telecom has become a part of our everyday lives, even in aspects that were previously unthinkable. Streamlined technology is of course needed, but the purpose behind the technology should



Photo: PETER NORDAHL

never be forgotten. We are on our way into the infocom industry, where content and usage areas will be at least as important – if not more important – than the technology itself," she explains.

Ideas to the contrary

Helena has initiated a number of activities during her year at Enterprise Networks. Most of them concern shifting focus from technology to customer benefit, an area in which there is still much that can be done.

"Nearly everything I propose is contrary to the beliefs within the organization," she says. "It must become more legitimate to come up with ideas that go against the grain. There are many people who have good ideas that are worth consideration. One shouldn't have to fight in order to be able to think differently."

Helena mentions an example from Stattel's purchase of computer services in 1993. This was before the big Internet boom. A leading person in Swedish datacom circles contacted Helena and her colleagues. He identified Internet as a strong growth area to which it was worth adapting future volume and capacity. The delegation chose to listen to him.

"Our Internet purchase was unusually early. Hindsight clearly tells us that our line of thinking was right on target, solely due to the fact that we dared to let ourselves be convinced by a person with radically different ideas."

Remove territorial borders

Unfortunately, Helena sees several problems with the matrix of networks and activities at Ericsson. They often die out due to a lack of organizational acceptance, resources and assigned responsibility.

"We must actively begin removing territorial borders in order to better and

faster meet the needs of a growing market for 'hybrid solutions.' These solutions must contain components from several parts of Ericsson as a whole, such as a telephone switch and mobile telephones in the same offer."

She adds, "We need to have more meeting points, improved coordination and cross-communication throughout Ericsson."

Overall, Ericsson has much to gain from becoming clearer in its united front vis-à-vis the customers. It doesn't necessarily need to be seen as negative that different Ericsson branches offer solutions that compete with one another, but the customers should not have to decide which solution best fulfills their needs; that should be done by Ericsson.

"I have personal experience of this from when I was at Stattel. It creates substantial insecurity. If neither Ericsson nor the operator knows which solution is best, then how should I, the customer, know?"

What will Helena be doing in five years?

She would like to work with strategy issues within Ericsson, but her activities with the EU have also given her ideas of "selling" Sweden as a telecom and IT nation. Or perhaps she will realize her dreams of becoming a writer.

"Change doesn't scare me – quite the opposite. It's positive, since different people have different sources of motivation.

"My motivation is that I want to meet new challenges while being a valuable resource. I want to use the know-how and expertise I already have – and that which I gain in the future – in a positive way for the here and now. And I want to have fun, which will come automatically when all the other criteria are fulfilled."

KARI MALMSTRÖM

Multilingual globetrotter

■ Helena Lindskog was born in Poland 51 years ago. She came to Sweden in 1970 as a recent engineering graduate wanting to see more of the world. She then met economist Dag Lindskog, became Mrs. Lindskog and remained in Sweden. Helena speaks eight languages and has always made sure she could make good use of them. When she first joined Ericsson in 1975, she quickly became active on the international scene. She traveled to all corners of the globe participating in product presentations, seminars and customer visits at local companies.

She still enjoys traveling, in addition to reading and participating in outdoor life with her family. Encouraged by her son, who is now 12, she tried her hand at downhill skiing a couple of years ago. She took up horseback riding this year and plans to finally learn how to ride a bike next year. Helena is also an avid swimmer, which she believes promotes clear thinking.

Key customers have their own ambassadors

A number of large and important customers are represented in many different countries and markets. To give these customers the service that they demand, Ericsson has established a new function called Global Account Management. These key persons are charged with ensuring that Ericsson really functions as a single company.

A Global Account Manager devotes all his time to one internationally active Ericsson key customer. He is the customer's lobbyist within Ericsson, while acting as Ericsson's ambassador to the customer. He is located near the customer company's head office and visits the customer frequently.

This is a role that demands a great deal on the part of the manager. He — most of these managers are men — should be a skilled diplomat and have a sharp eye for business and finance. Other necessary skills include being an excellent negotiator, political and cultural awareness and international experience, as well as the ability to express one's self clearly in speech and in writing in several languages. Extensive knowledge of Ericsson is of course also essential.

A Global Account Manager does not work alone. He is assisted by a steering committee and also experts in business development and legal affairs, as well as a secretariat, at his disposal. Equally important, the Global Account Manager is assisted by the president of the local company, who is an important figurehead for the customer.

A need for new roles

Very dynamic market conditions, as well as the increasing globalization of customers and their business, have created a

need for new roles and new work methods. When several international Ericsson customers form a consortium to conduct business in one country while having other partners in other markets, a complex situation arises.

If the customer also needs products and services from all of Ericsson's product areas, managing the customer account becomes even more difficult. It is for these situations that Ericsson has Global Account Managers.

"Important Ericsson customers in the U.S. market, such as Southwestern Bell, Air Touch, AT&T, Bell South and Unisource, are undergoing tremendous growth and becoming multinational companies," says Bo Hedfors, president of Ericsson Inc. in the U.S. "In order to properly support these customers, we have to stay one step ahead and provide the right guidance in difficult business deals."

Started in 1993

A strategy plan from 1993 created the foundation for an organization of Global Account Managers, which was established in 1995. Today, Ericsson has some 30 customers who each have their own global account managers.

The responsibility of a spans across all business areas and includes all Ericsson products. The business objectives, however, are still set by the individual business units, and contracts are handled locally in the normal Ericsson manner.

Strong organization

Åke Persson is the chairman of the steering committee for the new organization. His group is responsible for the organization's structure and designates which cus-

tomers should be recognized as Ericsson global customers.

"This kind of operation is very complicated and takes time to build up. Being able to concentrate on our most important customers means that the Global Account Manager must keep up to date on all the customer's plans and activities. To do this, he needs a strong organization and access to all the knowledge available within Ericsson.

"Right now, we're creating an IT platform that will provide us with a custom-



The third annual conference of the new Global Account Management organization was held in May at Tynley Hall outside London.

tool for our work," relates Åke Persson. "Global Account Managers must be able to rapidly access the information that is most critical to their work."

At his office in Kista, Åke Persson is assisted by Christina Callmer, who works with market development and is responsible for the new organization's secretariat.

"The group has its own intranet and access to internal web sites and sales data at Ericsson companies all over the world," relates Christina Callmer, who adds that general market information is retrieved from Ericsson's Business Information Center (BIC).

"The system contains both open information to which all of Ericsson has access and a protected area for internal work. The public area may be accessed by all Ericsson employees who are curious about what we are doing. The system is called GAIN (Global Accounts Intranet) and is accessed via the Inside Ericsson page (<http://inside.ericsson.se>) on the Ericsson intranet. Simply click "Ericsson Facts" and then "GAIN." You will find a wealth of information about Ericsson's global customers," reveals Christina Callmer.

INGER BJÖRKLIND BENGSSON

New Ericsson product creates new intranet capabilities

Ericsson's new Public Intranet Service Network product and service platform provides completely new capabilities. For example, it is possible to create a virtual intranet with sophisticated services and high, flexible and reliable bandwidth and multimedia capabilities. Ericsson and Swedish network operator Telia have signed a contract to start commercial trials with up to 1,000 users. Future prospects for this unique project are bright.

During the autumn and winter, Telia and Ericsson will jointly conduct a commercial trial of Ericsson's new Public Intranet Service Platform (PISN).

"Our ambition is to offer multimedia services to the Nordic market at an early stage," relates Stig Persson, business manager for broadband and multimedia at Telia.

"We want to supply our customers with the very best communications tools," Stig Persson continues. "We see a rapidly growing interest for subscriber services that have the capacity to handle video, as well as traditional data communications and voice. Ericsson's platform provides this capacity in a very flexible manner."

"This project constitutes a breakthrough in a new strategic area. This is a very early trial and the first of its kind in the world," notes Jack Eriksson, the manager at Ericsson Telecom Sweden who is responsible for the project with Telia.

The new platform was introduced at CeBIT this spring. The objective was to increase the ability of Internet operators to offer their customers advanced IP-based services.

The primary services being offered are virtual intranet services and telecommuting, which provides intelligent links between the customers various accounts. The intelligence consists of billing services, broadband Internet access, firewalls and support for such multimedia applications as picture phones.

"With this new platform, we will strengthen our position as the leading Swedish operators and the leading supplier of broadband solutions in the Nordic market," says Morgan Ekberg, vice president of Telia Telecom AB.

Same technology as the Internet

Ericsson Public Intranet uses the same technology as the Internet, which allows all standard applications to be used. The platform also contains func-

High quality multimedia communication

Public Intranet is included in a new range of IP-based service products that combine Internet and telecom technologies. This gives Telia the ability via an ATM broadband network to offer high-quality multimedia communication and intranet services for demanding business customers. The advanced security functions which are included allow the operator or supplier of Internet services to offer virtual intranets and extranets to companies in a cost-effective manner by sharing network and server resources. This fills a need in many companies to outsource their intranets so that they do not have to invest continuously in new technology and skills in order to be able to maintain and administer their intranets.

tions for flexible billing and high security. Telecom characteristics, such as high availability and resource management, are included, as are high-quality communications for multimedia. This means that telecom operators and Internet service providers can create powerful business concepts for their Internet services for both business and home users.

Attractively priced intranet

"The PISN platform offers Internet operators an opportunity to provide intranets as a pure service. They will also be able to offer new pricing alternatives for end-users," says Ewa Wahlborg, who is product manager for Internet solutions at Ericsson Telecom Sweden.

"Another important benefit is that it is easy to install, change or move a virtual intranet. Take a project organization, for example, which may need a temporary intranet for various groups of people. This is something that is hardly possible with traditional technology."

Multimedia functions can also be used to a significant extent. For example, there are already very advanced plans for telemedicine. One example is being able to see and remotely control microscopic projections or substances at a distance. Another is to use video conferences for sharing experiences through a real-time link.

Anders Hillbur, Multiservice Networks manager at Ericsson Telecom Sweden, points out that the platform is important in expanding Internet applications, for example, into multimedia applications and distance learning.

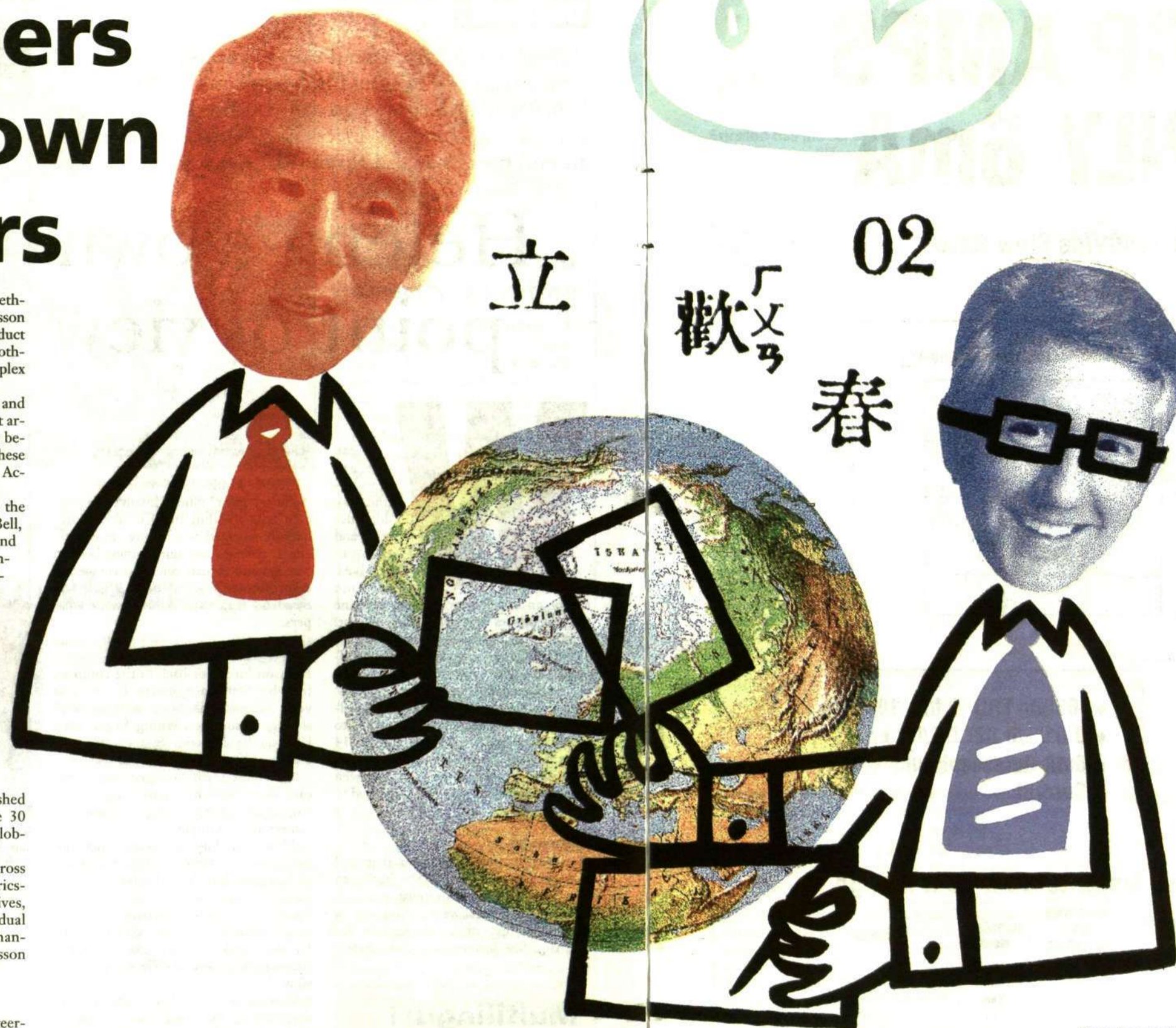
"It's difficult to justify an expansion of the network if services are lacking. With PISN, we are introducing the services, and through our collaboration with Telia, we are taking a big step forward in our efforts to develop broadband technology," says Anders.

Tomorrow's intranet is not a special implementation for which individual companies must take responsibility. It will most likely be a convenient and unremarkable service that companies can purchase or lease and develop in a flexible manner. Ericsson's PISN platform is the first step towards this goal.

RIKARD WESTMAN & JOSEPHINE EDWALL-BJÖRKLUND



Illustration: DANIEL EGNEUS



Influencing through contacts

Nils Grimsmo is the president of Ericsson Ltd. in the U.K. and, as such, the head figure for several of Ericsson's key customers in that country. Contact asked Nils Grimsmo if Ericsson's competitors have similar programs.

"Yes, our competitors are using the same methods and working just as hard. It's a challenge, and most contracts are won locally," explains Nils Grimsmo.

A Global Account Manager is not a decision maker, rather, he uses his position to influence the customer through contacts and relations and as a leader who coordinates activities and provides feedback on business conditions. Global Account Managers may work differently from country to country and from consortium to consortium.

In describing customer conditions in the U.K., Nils Grimsmo reports that "we currently have four customers of the type we consider global customers.

This type of business operation started early here, since our customers BT and Cable & Wireless had very strong global ambitions from the start."

How do Global Account Management operations function at Ericsson today?

"We have made a start, but much remains to be done," says Nils Grimsmo. "I see nothing special within the organization today that we are not addressing. It's more a question of needing to develop our insights into how the global market will function with the new organization. There are no patent solutions. A new kind of competence will gradually emerge."

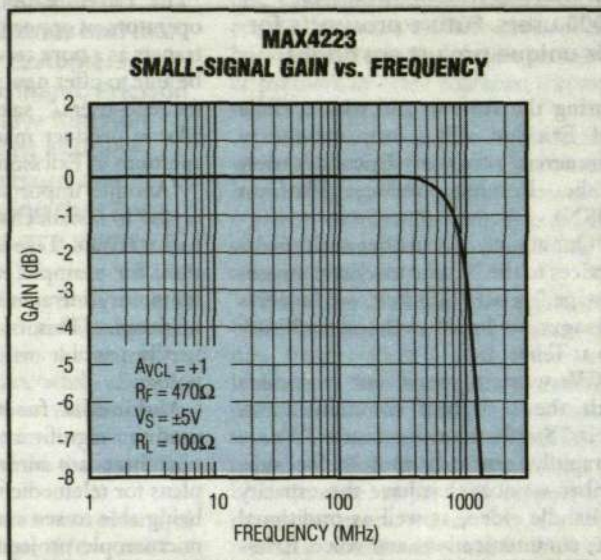
"We must develop our organization at the right pace, not too fast and not too slow, and learn how to manage global business situations. We are gathering experience today that will be even more important in the future," concludes Nils Grimsmo.

INGER BJÖRKLIND BENGSSON

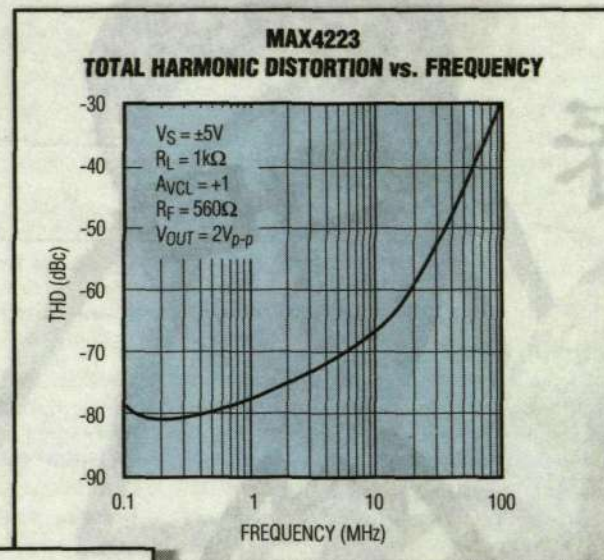
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MAX4223	1	1	1000	300	1100	8	-65	Yes	6-pin SOT23/8-pin SO
MAX4224	1	2	600	200	1700	5	-78	Yes	6-pin SOT23/8-pin SO
MAX4225	2	1	1000	300	1100	8	-65	No	8-pin SO
MAX4226	2	1	1000	300	1100	8	-65	Yes	10-pin μ MAX, 14-pin SO
MAX4227	2	2	600	200	1700	5	-78	No	8-pin SO
MAX4228	2	2	600	200	1700	5	-78	Yes	10-pin μ MAX, 14-pin SO



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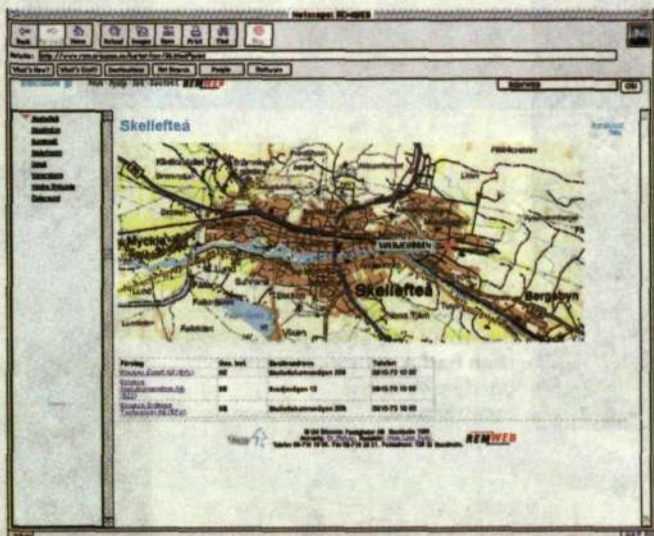
Find your way to Ericsson in Sweden

Ericsson has plants and offices in many different places throughout Sweden. To make it a little easier to keep track of all the locations, and help you find your way to the various sites, Ericsson's real estate company has introduced a new service on the intranet.

It features all Swedish facilities, with maps of surrounding areas and information on access routes, open hours, Ericsson companies in the various areas, their telephone numbers and other data.

Maria-Pia Dufvenheim is now working on the addition of pictures of all buildings at various sites in Sweden. Eventually, the system will be translated into English and supplemented by information about installations outside Sweden.

The version now available on the intranet is not completely finished. Maria-Pia Dufvenheim and Anna-Carin Bodin are the main persons working on



A new intranet service has made it easier to find your way to different Ericsson facilities in Sweden. The real estate company's web site shows maps, pictures, route descriptions and brief information on all Ericsson plants and offices in Sweden.

the map service. They welcome any suggestions, additions or corrections. With your help and a little more time, user value will increase.

The idea behind the new service is to help people scheduled

to visit Ericsson locations in Sweden access the destination on the intranet. They can then download and print area maps and other information to bring along on their trip.

PATRIK LINDÉN

Footnote: The web site address is: <http://www.rem.ericsson.se/> Search under "Nyheter och Information." Send your suggestions and additional information to be included in the map database via fax (+46 8 19 2021) or memo: REM. REMMADU. Address correspondence to Maria-Pia Dufvenheim.

Home base station renders mobile cordless

Ericsson is working on the development of a home base station that will function as a small radio base station for home use, converting your mobile telephone to a cordless phone linked to the fixed network.

The new concept is based on a small unit connected to your home telephone jack. The connector is equipped with a small antenna and works like a mini base station. When somebody dials your GSM number, the call goes through your home base station.

Guaranteed good reception at home is the only practical difference between the new concept and today's system. The greatest advantage, however, is when you make calls from your mobile telephone. The home base will automatically connect the call via the fixed network, and you will only be charged for a fixed network call. For practical purposes, you will have two telephone numbers. Your mobile telephone will work like a conventional cordless home phone with all the GSM telephone services it was designed to provide.

Home base station

"But the home base station can also be used to tell the network where you are, if and when you use personal telephone number services," explains Joakim Oscarsson, who is responsible for the new product, which is expected to be ready

for market launch during the second half of 1998.

Interesting details

Ericsson is the first company to develop the new technology, which will be initially targeted at the consumer market.

"It's too early for us to say how much it will cost. However, it would be reasonable to assume a price just above today's cordless DECT telephones for home use," Joakim Oscarsson continues.

In purely technical terms, the home base station includes several interesting details. The unit, for example, contains a channel selection function that enables it to look for available channels and frequencies. The function works continuously, adapting itself to change in the cell structure. Technicians call it adaptive frequency allocation and dynamic channel selection.

"A movie theater serves as a good analogy," says Joakim Oscarsson. "Just think about how you always look for an empty seat every time you go to the movies to see another film. You look around and choose the seat you think offers the best position. If you and someone else have selected the same seat, one of you will have to make another choice. That's approximately how the home base station works for channel and frequency selection. The unit also makes sure you go to the right theater. By that I mean it selects the frequency spectrum offered by your operator."

PATRIK LINDÉN

diary

Chaotic first week

Rob den Boer, who has been with Ericsson Communications Ltd. in New Zealand for six years, arrived in Nacka Strand a few days ago to start a new assignment. He is part of a team of engineers working on development of Internet-based Call Centre solutions by Ericsson Business Networks.



Rob den Boer, from Ericsson Communications Ltd in New Zealand.

Photo: THORD ANDERSSON

Saturday: I don't really know when Saturday started, but it was somewhere between Auckland and Los Angeles. We arrived at Arlanda Airport just outside Stockholm at 3:30. After 36 hours of air travel, the mind works a little slower than normal, but salvation was at hand in the form of a fellow New Zealander waiting by the exit door. We relaxed and placed ourselves in his capable hands. I realized during the taxi ride into Stockholm that this is the second winter I'll be experiencing this year. The apartment is a pleasant surprise, as we expected to sleep on the floor for the first few nights, but the place is fully furnished.

Sunday: 4:00 AM: Why am I wide awake? My body feels like a train wreck, but the mind is alive. I want to explore!

8:30 AM: In desperate need of coffee, we ventured out. This is the first indication of how simple things have suddenly become difficult. It took us two hours at the supermarket, just trying to work out what we were buying. We settled for a few traditional Swedish foods and as many recognizable brand names as we can find. Sunday ended very early. I have never suffered jet lag like this before.

Monday: Have you ever awakened with the feeling that your body has sunk deep into the mattress? Gravity feels twice as strong as usual and you wonder how sleep can make you so tired. Ericsson Sweden can survive one more day without me.

We set a realistic task of visiting Guest Services in the afternoon. The sun was shining through the windows, and the deep blue sky promised a warm day. Our mission progressed about three blocks before we beat a hasty retreat due to extreme cold. Several layers of clothes later, we tramped off on a second attempt.

Tuesday: Finally, the big day. I have sold my house, packed everything I own, traveled to the other side of the world and now I am about to discover what is expected of me. I arrived at work about 8:30 to find there are no members of my department in Sweden. My

manager is in Paris and all other staff members are in Los Angeles. I found my office. It's the one with my name on the door. There was a telephone and nothing else. I followed instructions to call people, but nobody was available.

Wednesday: For the first time since I arrived, I slept past 4:00 AM. Nothing has changed at work, except now I have an ID card. I proudly crossed out Task No. 1 on my newly found pad. I'm gaining confidence now, and I throw myself into the daunting workload that lies ahead. I still need a rubbish bin, an office key and a bank account.

Thursday: I met my manager today and things went well. I think I have some idea of what I should be doing, well not really. I have a project to start on, but without a computer things are quite slow. The temperature dropped to -3°C today. I've been told it goes down to -20°C. Apparently, it's not really too bad at -20°C because there's less moisture in the air. I find this difficult to believe. Must buy more warm clothes.

Friday: Almost one week down. Unfortunately, this place is becoming more alien to me. The company is so big that every small task becomes a large one. These tasks normally involve filling in forms which are in Swedish. The language barrier is very frustrating. You start to feel like a two-year old, learning to talk all over again. All week I have used one of two unisex "invalid" toilets. Opposite these are two doors, each with a single word in Swedish. I finally mustered up the courage to ask which is the gents.

First week's impressions: Stockholm is beautiful. The colors of the city glow in the blue skies that seem to have lasted all week. The people are very pleasant, to the point at which I crave to meet somebody with a strong opinion. Work conditions are beyond anything I have ever seen before. And, yet, I think I will reserve my opinion until later. Maybe I'm becoming more Swedish already!

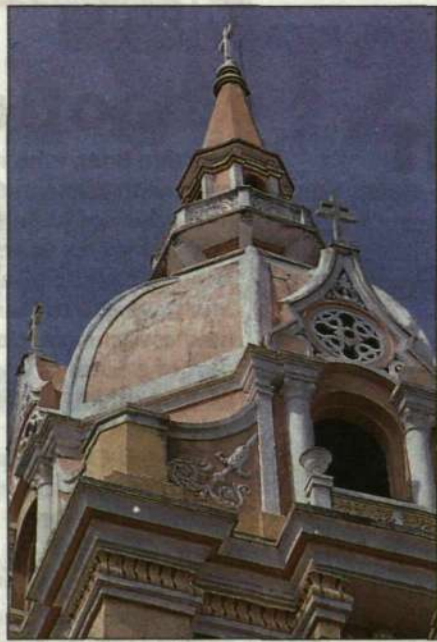
industry news Motorola and Bosch support broadband standard

Motorola of the U.S. and Bosch of Germany have allied themselves with Alcatel, Italtel and Nortel in support of the Siemens proposal for third generation mobile telephony system standards in Europe. Frames 1B, the German company's standard proposal, is

based on a combination of CDMA and TDMA technology. Siemens presented the proposal earlier this year to ETSI, the European standardization authority for telecommunications. The announcement of support by Motorola and Bosch was welcomed by

Siemens and other companies that support Frames 1B at a symposium on the future of GSM on October 23.

The endorsement of Frames 1B by the two companies leaves Ericsson and Nokia as sole supporters of a pure CDMA proposal.



Cartagena's architecture is dominated by a colonial style, with many Spanish influences. Every year the beautiful city attracts more than half a million visitors, partly due to the architecture.

In the rapidly growing market of Colombia cellular provider Celcaribe has chosen Ericsson as its supplier. Below, Larry Luxner describes Celcaribe and Colombia's cellular phone market. A country in which Ericsson has been active for one hundred years.

Celcaribe covers Colombias Caribbean coast

during most of the 465 years since its founding, the ancient walled city of Cartagena has endured Spanish conquistadores, hurricanes, pirates and civil war. That history has made it the jewel of Colombia's tourism industry, luring half a million foreigners a year to sample the city's colonial architecture, exotic nightlife and palm-fringed beaches.

Not coincidentally, Cartagena is also among the leading markets for Celcaribe, one of Colombia's fastest-growing cellular providers.

According to regional operations director Jorge Ignacio Eljach Campillo, Celcaribe covers seven departments along Colombia's Caribbean coast: Córdoba, Sucre, Bolívar, Atlántico, Magdalena, Guajira and Valledupar. Its 33,000 customers in the AMPS/D-AMPS network give it a slight lead over chief rival Celumovil, which has 30,000 clients in the same coverage area.

Biggest presence in Barranquilla

Celcaribe's biggest presence is in the industrial city of Barranquilla, Colombia's third-largest metropolitan area, which also happens to be its headquarters. There, it has 18,500 customers out of a population of 1.5 million. Next on the list is Cartagena, where Celcaribe has 5,500 cellular customers, followed by Santa Marta (2,600); Sincelejo and Montería (1,300 each); Valledupar (1,200); Riohacha (350) and Maicao (225).

"We began operations in August 1994, in Barranquilla,

Cartagena and Santa Maria," said Eljach Campillo. In addition to tourists from other parts of Colombia or overseas, "our clients are business people who need phones for work, as well as students and housewives." He says that "here, public telephones work fine, but you can't call a cellular customer from a public phone. It's considered a long-distance call."

USD 20 million in annual sales

Celcaribe is 83 percent owned by Millicom International. Local phone company Tele-Cartagena has another 10 percent, and the remaining 7 percent of the company is owned by private investors. Annual sales amount to around USD 20 million.

After having achieved a 242 percent jump in its client base last year, says Celcaribe President Carlos Recio Munck, the company will have invested USD 12 million during the first half of 1997 on expansion projects - much of that to be spent with Ericsson - with the goal of eventually covering 80 percent of Colombia's Caribbean coastal population. Celcaribe already offers international roaming services in the United States, Canada, Mexico, Bolivia, Chile, Ecuador, El Salvador, Guatemala, Paraguay, Peru, Venezuela and several Caribbean islands.

In addition, it has an agreement with two other cellular providers, Ocel (along the Pacific coast) and Comcel (in the interior), so customers of all three mobile networks can use each other's lines.

"Many people from the interior come here on vacation," says Eljach Campillo. "Celcaribe charges their companies, and those companies charge the customers directly."

At present, 100 percent of Celcaribe's cellular infrastructure is supplied by Ericsson. Helena Ujueta, Ericsson's regional sales manager in Barranquilla, says Celcaribe has two AXE switches and 43 base stations. One is an RBS-884 in Barranquilla; the rest are RBS-82s scattered throughout the company's coverage area. She said a new, USD 10 million contract with Ericsson calls for the installation of seven RBS-884 base stations and the expansion of digital lines to 50 percent of Celcaribe's total system; at present, digital accounts for only 20-25 percent of the system.

About 90 percent of the phones used by Celcaribe are Ericsson IS-100 and IS-136 handsets. "Celcaribe started six months after Celumovil. The first year they had 19 percent of the market. Now they have 53 percent," Ujueta explained. "Why? Better coverage, service and voice quality. Prices are slightly more expensive, but generally, people say it sounds better." Asked why Celcaribe chose Ericsson infrastructure, Eljach Campillo said simply: "They have the best technology."

A history dating a long way back

Michael Kühner is vice-president of Ericsson de Colombia S.A., which has been operating in this South American nation for over 100 years. Its history dates from 1896, when Ericsson sold 50 telephones to Empresa Colombiana de Teléfonos de Bogotá. In 1937, Ericsson sold its first automatic switch for 500 lines in the country, and in 1948, the company finished installing 130,000 automatic lines in Bogotá, Colombia's sprawling capital city. In 1981, the first AXE switches were installed, in the city of Medellín.

Ericsson, which began cellular operations in 1994, today has 400 employees - a quarter of which work in the cellular division. Kühner says 50 percent to 60 percent of Colombia's 500,000 cellular users live in and around Bogotá, with the Caribbean coast accounting for another 25 percent and the Pacific coast the remaining 25 percent. With Celcaribe alone, Ericsson has signed five cellular infrastructure contracts. Kühner says the company installs the equipment and provides training and 24-a-day support from its Field Support Center in Bogotá.

Fixed lines are expensive

"Today Colombia is a digital market. They run on the latest standards," said Kühner. "There are two reasons this market is so strong. First, the fixed network is not up to date. Also, it's very expensive to get a fixed line, around USD 600. Here, you have to wait around half a year for a phone. So the cellular industry is a hot market. The rapid buildout of networks is slowing down, and now operators have started to do market segmentation. Now they have to cover small towns."

In the beginning, he said, it cost USD 1,500 just for a cellphone and activation. Now that cost has dropped to USD 125. Average monthly bills still come to USD 100-180 a month, which is higher than Colombia's monthly minimum wage.

Kühner concedes that "snob appeal and status" still have a lot to do with cellphone ownership, but added that he's seeing more and more business usage.

"It's very common here to walk in a restaurant and put your phone on the table so everyone else can see you have a



Cartagena's port is one of Colombia's tourist attractions. Furthermore, Cartagena is one of cellular provider Celcaribe's strongholds. Celcaribe, Colombia's fastest growing cellular provider, covers all of Colombia's Caribbean coast and has chosen Ericsson as its supplier.

Tourists enjoy the Caribbean beauty of Cartagena. Thus, the networks are heavily strained during the tourist season.

cellphone," he said. "If normal communications were established, however, it would not be a status symbol. People are now buying phones for security, in case they're robbed or in an accident."

Monthly average tariff USD 70

Eljach Campillo says Celcaribe's average monthly tariff is equivalent to USD 70, which includes 30 minutes of airtime. Another plan, for USD 95, includes 90 minutes of talk, while the USD 190 plan gives customers - mainly business users - 325 minutes worth of conversation. The cheapest plan costs USD 32 and lets customers receive calls only. "You can make calls with this plan," he says, "but this raises the price."

Cartagena's cellular market will undoubtedly continue

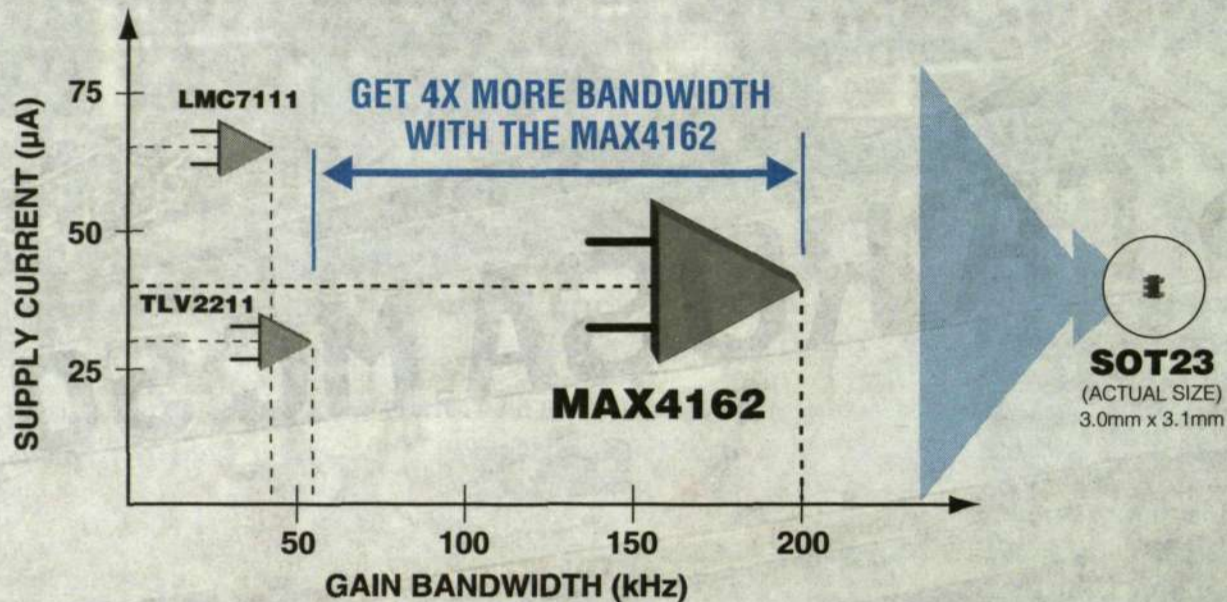
growing as the city positions itself as an important destination for both tourists and international business travelers. The city's convention center has already hosted many world-scale events, including a 1992 anti-drug summit led by former U.S. President George Bush and a 1996 gathering of non-aligned world leaders that attracted everyone from Fidel Castro to Yasser Arafat.

In 1995, around 500,000 foreign visitors came to Cartagena, 40 percent of them from Western Europe. As part of efforts to grab a bigger slice of the Caribbean cruise-ship market, Cartagena wants to build a duty-free shopping center as well as a new passenger terminal. The city now gets 100,000 passengers a year, though this could jump to 234,000 by 2000 and 548,000 passengers by 2015.

Text and photo: LARRY LUXNER

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MAX4163	2	40	200	2.7 to 10.0	-0.25 to 3.25	0.005 to 2.995	10	8-pin SO/ μ MAX
MAX4164	4	40	200	2.7 to 10.0	-0.25 to 3.25	0.005 to 2.995	10	14-pin SO, 16-pin QSOP

[†] $V_{SS} = 0V$, $V_{DD} = 3.0V$. Rail-to-Rail is a registered trademark of Nippon Motorola Ltd.



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On tour with Kropp

Ericsson Mobile Communications has signed an agreement with Göran Kropp, the Swedish adventurer who recently climbed Mt. Everest, to sponsor and support a lecture tour this autumn.

Entitled "I did it," the tour will focus on Göran Kropp's bicycle trip from Sweden to Nepal, his subsequent high-risk climb to the peak of Mt. Everest and his bicycle trip back to Sweden, including interest-

ing film footage of his once-in-a-lifetime endeavor. During parts of his tour, Göran Kropp will be joined by Ang Rita Sherpa, a man who has climbed Mt. Everest more times than anybody in history. Ang Rita Sherpa's feats include 10 scalings of the mountain, without oxygen supplies. The tour started November 4 and will continue through Sweden's 33 largest cities, in addition to stops in the Norwegian capital of Oslo as well as Copenhagen and Århus in Denmark.

Östersund becomes center of electronics

With financial aid totaling more than SEK 40 million over the next four years for an electronics research school at the college in Östersund, Sweden, the groundwork has been laid for a powerful future center of electronics.

Ericsson will invest SEK 20 million in the project, with remaining funds allocated by EU, the college, county government authorities and the Municipality of Östersund.

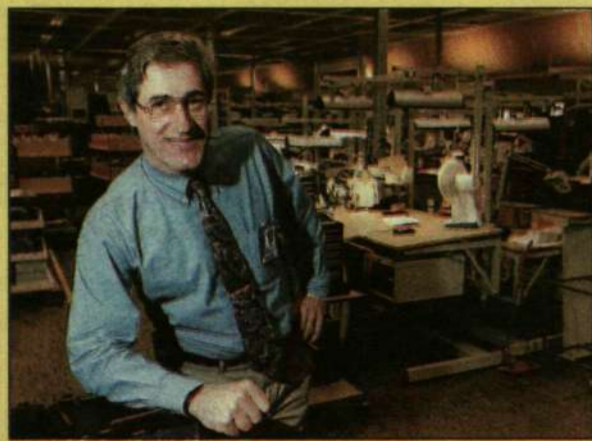
The project will improve overall skills of the college and electronics companies in the area. For strategic business purposes, electronics constitute a highly important area of technology. The complexity of future high-tech products will increase sharply. It is extremely important, therefore, to start working now to develop new design and engineering methods, construction methods and production technologies.

Major factors behind present development trends include shorter commercial life cycles for products, shorter project lead times, higher complexity and quality, demands on lower cost per function and reduced environmental impact.

Efforts are now being made to recruit qualified professors and lecturers with suitable backgrounds. Several positions will also be made available for electronic engineering doctoral students. The positions will be announced later this autumn in Östersund and Sundsvall. An acting professor from Ericsson has already been appointed.

The college cities of Östersund and Sundsvall will cooperate closely in a manner similar to the coordinated design and production departments of Ericsson Utvecklings AB, which includes the Östersund factory. The Royal Institute of Technology (KTH) in Stockholm will also render support through its professorial department of electronics.

GUN LENNEMALM



Karl-Ivar Löthmyr, Ericsson's local manager in Östersund, says competition in the electronics industry today is extremely intense. Continuous new contributions of skills and know-how are needed to stay abreast of market competition, he says.

Photo: PEDER MAJIET

Ericsson mobile telephones subject of TV documentary

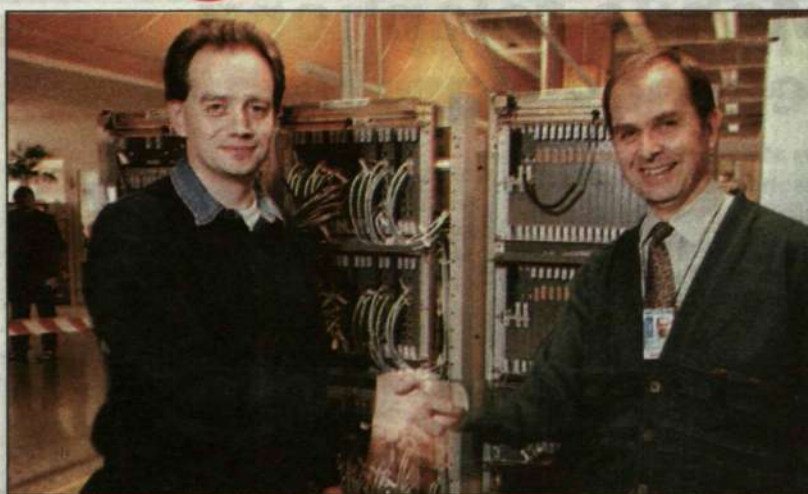
The history of mobile telephony in Ericsson will be highlighted in a series of TV documentary films produced by Swedish Television.

This autumn, Swedish Television plans to air six documentary films featuring leading pioneers in Swedish history. According to Åsa Eriksson, one of the persons responsible for the project, "Swedish Lights," will focus on inventors and visionaries, explorers and developers, creators and thinkers, all of whom have contributed to Sweden's development and solid reputation.

In one of the films, which is focused on the future, Ericsson is portrayed as a company that is paving the way into tomorrow's world. Nils Rydbeck, the creator of Swedish mobile telephony, has a prominent role in the film.

"We tell stories about how a group of young guys, under the direction of Nils Rydbeck, started manufacturing mobile telephones for private consumers," says Åsa Eriksson.

The program about Ericsson and Nils Rydbeck will be broadcast on Swedish TV 2 on November 8 at 6:15 PM.



Tage Modin (right) was all smiles when he presented the first functional node to Lars Ölmén, who represented the European Standards business unit of Ericsson Mobile Systems.

Photo: PEDER MAJIET

The first node from Östersund

At 1:27 p.m. on Friday, October 17, Tage Modin, Manager of the Node Product Center of Ericsson Utvecklings AB in Östersund, presented the first functional node using a Base Station Controller, a new product, to the Mobile Systems European Standards unit in Linköping.

The presentation by Tage Modin, along with the acceptance by the customer, marked the culmination of more than 18 months of hard work and the achievement of the Node Product Center's initial objective: delivery of the first fully functional node.

The customer was represented in Östersund by Lars Ölmén, who declared:

"I am really impressed by the determination and expertise displayed by the

product center during the time I have been in contact with Östersund. On behalf of the European Standards business unit in Linköping, I can honestly say the first BSC node is so good that I intend to take it with me to Linköping when I leave."

After shaking hands with Lars Ölmén, Tage Modin's smile shone brighter than the sun outside as he thanked all his employees.

"You have done an outstanding job in developing the material for these nodes, and I'm referring to every employee here in Östersund and our colleagues in Älvsjö. I have never been involved in such a total commitment. I thank you all for your contributions," Mr. Modin said.

As part of the festivities, all employees were invited to cake and cider to celebrate their delivery of the first functional node from Östersund.

GUN LENNEMALM

Mexico buys from Ascom and Ericsson

Ericsson's business unit for transport networks and cable, in cooperation with Ascom Transmission Ltd. of the U.K., recently delivered 10,000 Umux systems to Mexico's national telecom company. Umux stands for Universal Multiplexor, a system with the capacity to process both data and telephony. Telmex of Mexico will use the equipment to modernize its network.

Norwegians know the Ericsson name

In a recent survey to study public awareness of mobile telephone trademarks and brand names in Norway, Ericsson was ranked No. 1 with a 73-percent market awareness rating among Norwegian consumers, followed by Nokia and Motorola, with 70 and 67 percent, respectively. In another survey to determine public awareness of various products and trademarks, decision-makers in Norwegian industry placed Ericsson in second place behind Aftenposten, Norway's leading daily newspaper. Public opinion polls of Norwegian consumers also showed that Ericsson is No. 1 in Norway, based on product quality criteria.

Ericsson Stadium license plates

Ericsson in the U.S. has sponsored the home field of the National Football League's Carolina Panthers in Charlotte, North Carolina for the past several years. The arena has been officially renamed Ericsson Stadium and generated extremely favorable publicity.

The stadium logo is now used on license plates in North Carolina, and Ericsson plans to develop additional PR products for employees and Panther fans.

Remaining home games for the Carolina Panthers at Ericsson Stadium this season will be played on the following dates: Nov 30 against the New Orleans Saints; Dec. 14 against the defending Super Bowl Champion Green Bay Packers and Dec. 20 against the St. Louis Rams.





Mobile telephony reaches Nordtomta

Lars Magnus Ericsson has every reason to rest easy in heaven. Today, it's even possible to make GSM telephone calls from Nordtomta, the family home of the Ericsson founder, in the Swedish Province of Värmland.

As an ironic twist of fate, the village of Vegerbol and Nordtomta, the Ericsson family farm, were among the last places in central Sweden to receive GSM coverage. A 60-meter mast in Karsbol now makes sure signals are transmitted to and from the childhood home of Ericsson's found-

ing father – 151 years after the birth of Lars Magnus Ericsson.

"Transmissions were unpredictable for a while, since a nearby mast was right on the boundary line. Everything is now working perfectly," explains Karl Göran Morén, who is responsible for Telia's expansion of transmission masts in the provinces of Värmland, Dalecarlia and Närke.

NMT coverage has been available for many years, and Nordtomta and Värmskog have now been equipped with AXE since May.

NILS SUNDRÖM



Nordtomta, the family home of the Ericsson founder, in the Swedish Province of Värmland.

Download James Bond

Ericsson's Mobile Phones and Terminals business area has created a James Bond web site for the upcoming film, *Tomorrow Never Dies*. The address is: <http://bond.ericsson.com>.

The site features a variety of games with audio comments by Q, a Bond/Ericsson screen saver, interviews with Pierce Brosnan (Bond) and Desmond Llewellyn (Q), instructions on how to program your telephone to sound like the Bond film signature tune and much, much more.

"Our objective with the site has been to portray James Bond in a manner consistent with global perceptions of the character, summarized perhaps as high-tech, ultra-modern and independent, coupled with a clearly defined Ericsson profile," says Karin Sundin, webmaster of the James Bond site.

In *Tomorrow Never Dies*, which will be released soon, Ericsson's Concept telephone plays a major role that features a broad range of highly creative

gadgets and capabilities. Ericsson employees should feel an extra sense of pride when they watch James Bond use the telephone for remote control of his car from the back seat.

At the new Bond web site, Q describes the telephone and its various technical refinements and gadgets, and Mats Lindhoff of Ericsson in Lund explains the behind-the-scenes work to develop a prop for one of the world's best known film characters.

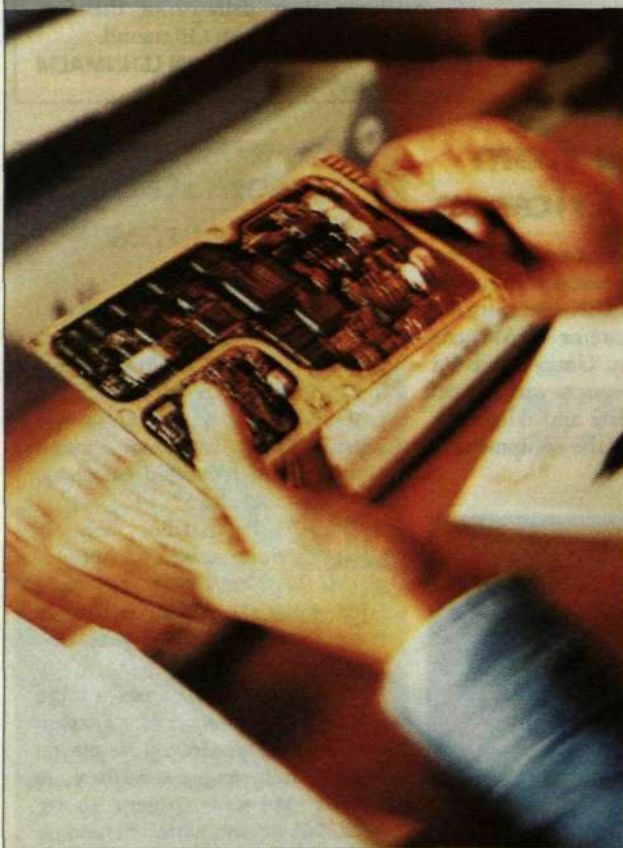
"The Internet is an excellent tool for Ericsson to capitalize on the rewards of our cooperation with the James Bond film producers. Bond is extremely well known in all parts of the world, and the Internet is a global medium. We expect to receive many hits," Mats Lindhoff says.

Tomorrow Never Dies will begin its premiere tour in different parts of the world in December 1997 and continue through March 1998. During that time, the site will be updated in parallel with a variety of Ericsson/Bond activities planned worldwide.

Ericsson expanding in Montreal

In the beginning of October, Ericsson opened its third development center in Montreal on Décarie Boulevard. The new facility will provide employment for 300 persons working in development and testing. Ericsson Research Canada has grown rapidly. In 1996, the unit had fewer than 50 employees, compared with more than 1,000 today. Pierre Bourque, mayor of Montreal, spoke at the inauguration ceremony and welcomed the input of international companies like Ericsson to his city. Ericsson in Canada has approximately 1,350 employees.

This is the second of six advertisements to be published consecutively in Contact.



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Focus on new operators

An open house was held at Telefonplan when the new System Supply & Support department of Ericsson Telecom Operations was inaugurated on October 15. With about 120 employees, System Supply & Support will produce and supply network solutions for new, global telecom operators in all parts of the world.

Operations will be focused primarily on supplies of AXE applications. Total networks that include IN services, access products and a variety of integrated system solutions are accounting for a growing percentage of deliveries. Anders Igel, Senior Vice President of Infocom Systems, was guest speaker when the so-called Drive Building was inaugurated.

"Speed is the ultimate objective in all our endeavors," Anders Igel said.

He strongly emphasized the importance of improved profitability for the Infocom Systems business area. It's not just a matter of increasing sales, he said, rapid deliveries to customers are even

more important. In this respect, the Supply Center's function is critical, perhaps the most important element in providing optimal service to all new Ericsson customers.

"New operators are emerging everywhere," Mr. Igel continued. "The wave of deregulation is spreading like wildfire in all parts of the world. Europe is the main focal point today. By January 1, 1998, all member nations of EU will have deregulated telephony markets."

The telecom market's new operators are highly business-minded. They turn to suppliers who understand their business concepts and, based on comprehensive market savvy, are able to deliver customized total solutions, an Ericsson specialty.

"Several new operators became Ericsson customers shortly after they established business operations. But we have to work faster and smarter to meet the competition," Mr. Igel said. That's where the experts here at the new Supply Center will enter the picture.

THORD ANDERSSON



Anders Igel emphasizes the importance of speed. Lead times have to be reduced as much as possible. Our highest priorities are always customer demands.

Photo: THORD ANDERSSON

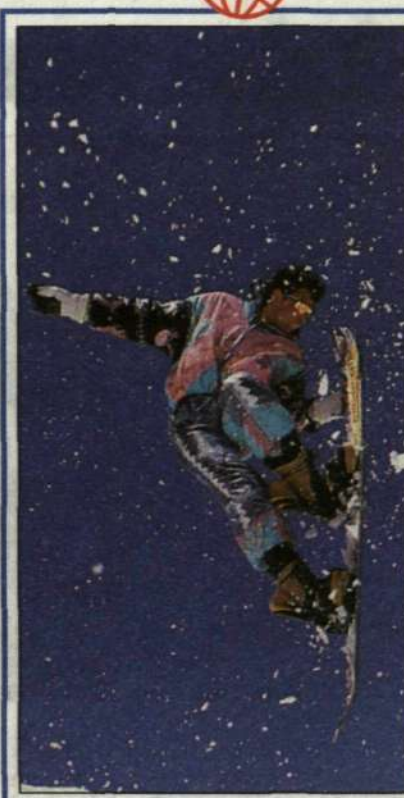


Photo: JEAN NERVA

In Norway on the board

Ericsson in Norway has entered a sponsorship agreement with the Norwegian Snowboard Association. Negotiations began in the early summer to find the right framework. The objective of Ericsson's sponsorship is to help develop its trademark and create internal and external meeting places. For example, the **norway** company plans to bring customers and retailers to the slopes to watch various snowboard races. The cooperation is also intended as a primary tool to support the company's own organization.

The choice of snowboarding was based on the Norwegian subsidiary's desire to cooperate with a growth sport, an area with the potential to become a national pastime among winter recreational activities.

First visible effects of the sponsorship agreement will be reflected in the Norwegian company's launch of Ericsson's new GF768 mobile telephone.

Ericsson creates Japanese web site

Ericsson's three companies in Japan have joined forces to create the first Ericsson web site in Japanese. The site serves as confirmation that Ericsson is in the Japanese market to stay.

"If this had been 50 or 100 years ago, we would have erected a statue in honor of

Japan Morgan Bengtsson, President of Ericsson in Japan.

Today, we establish a web site instead. The symbolic value is the same, however. Ericsson is here to stay," said Morten Grauballe, project manager, when the site was opened early in

October. Among the applications, will be gathering questions and reactions from end-users. It will serve as a valuable tool for Ericsson in Japan.

Morgan Bengtsson officially opened the web site in an inaugural ceremony recently, when he flipped the switch to the server. The web site endeavor will be followed by Ericsson's first Japanese language TV commercials. Ericsson in Japan plans to launch its first mobile telephone for the Japanese PDC standard in the beginning of 1998.

You can access Ericsson's new Japanese web site at the following address: <http://www.ericsson.co.jp>

New training center for Japanese PDC system

Orchestras playing and ribbon-cutting ceremonies – that's the norm for most inaugurations of new facilities in Sweden. So beginning a ceremony with a phone call from a mobile telephone is rather unusual, not to mention unique, since it was carried by the Japanese PDC system.

Nevertheless, that was the scenario recently when Mats Köhlmark, manager of the Cellular Systems – Japanese Standards unit of Ericsson Radio Systems, inaugurated its new PDC training center in **stockholm** Marievik, outside Stockholm.

Japan is the world's fastest growing market for mobile telephony, with more than 5.2 million new subscribers during the first six months of 1997. Today, Japan has more than 24 million subscribers. In only three years, Ericsson's customers in Japan have added more than 2.7 million subscribers to their networks. GSM is the world's largest digital mobile telephone

standard, with the PDC standard in second place.

Japanese customers place very stringent demands on suppliers, so it's extremely important for employees of the Japanese Standards business unit to command cutting-edge knowledge to meet customer demands. The potential to broaden their skills and expertise has been improved considerably by the new internal training center.

"We have our own floor here in Ericsson Telecom's training center at Marievik, where we have installed a fully equipped CMS 30 for the PDC system," says Jan-Olov Bengtsson, manager of internal training for the Japanese Standards business unit of Ericsson Radio Systems. "We have now upgraded our training capacity from strictly classroom teaching facilities to practical courses with the same equipment our Japanese customers have. In terms of software and hardware alike, we've got the very latest equipment available on the market," Mr. Bengtsson concludes.

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Inventors of the Year Honored

Near the end of October, CEO Lars Ramqvist presented Ericsson's Inventors of the Year awards for the third consecutive year to employees who have made special contributions in the form of inventions and patent operations in radio communications.

This year's awards were presented to three researchers with different engineering and geographical backgrounds: Greg Bottomley of the U.S. in mobile telephony, Jaap Haartsen of the Netherlands in mobile terminals and Lars-Göran Petersen of Sweden in switching techniques.

"The diversification of this year's awards illustrates the growth of patent operations within Ericsson, but it also serves as an indication that radio technology now permeates throughout all phases of Ericsson operations," said Göran Nordlundh, in charge of intellectual property issues in the Mobile Systems business area.

Two characteristics

Persons honored as Inventors of the Year shall have contributed to several important patents during the past two years and demonstrated instrumental efforts to support general patent operations.

Greg Bottomley of the RTP research center in the U.S., for example, has provided Ericsson with countless valued patents in the field of demodulation and decoding for mobile telephone systems, in addition to strenuous efforts in support of inventions by his colleagues.



Lars-Göran Petersen (left) and Greg Bottomley (right) accept their Inventors of the Year awards from Lars Ramqvist. This year's third winner, Jaap Haartsen (insert) was not able to attend the awards ceremony.

Photo: ANDERS ANJOU

Jaap Haartsen, who had worked for six years at the Mobile Phone Center in Lund, has similarly contributed several inventions of vital importance to mobile telephony, while also working diligently on critical formulations of patent applications.

Lars-Göran Petersen, who works with mobile telephone systems for the Japanese standard, has received several important patents in the field of switching, particularly in ATM digital transmission technology, which may prove highly valuable in pending standardization work on the new wideband system.

In addition to presentations of certificates to the winners, the prize also includes beautiful pieces of crystal artwork

and Ericsson shares valued at SEK 50,000.

"We have noted a much broader spectrum of candidates nominated for Inventor of the Year honors," Göran Nordlundh continues, adding that Ericsson patent operations are in the midst of a sharp upswing, resulting partly from the strong support of executive management.

"I might mention, for example, the number of patent applications filed by Ericsson today is 25 times higher than 10 years ago. Ericsson also ranks near the top of the patent barometers published regularly in Swedish daily newspapers," Mr. Nordlundh concluded.

LARS CEDERQUIST

New center for training opens in Jakarta

Ericsson in Indonesia recently inaugurated a new technical training center for employees and customers. The 1,000-square meter facility is situated near Ericsson's offices at Pondok Indah in Jakarta.

The new R&D center was officially inaugurated in mid-September by Mr. Jonathan Parapak, general secretary of Indonesia's Tourist, Postal and Telecommunications Ministry.

Courses planned for the facility will be designed to enhance customer knowledge of Ericsson systems delivered to Indonesia and how they are best utilized. Training capacity at the new R&D unit is about 35,000 student-days per year.

The new facility will also serve as a branch office of Ericsson Academy in Malaysia for training programs in the field of access network products.

Ericsson in Indonesia has also initiated programs of cooperation and sponsorship agreements with several universities and technological institutes in all parts of the country, including the University of Indonesia (IPMI), the Institute of Technology in Bandung (ITB) and Surabaya (ITS) as well as STT Telkom in Bandung.

"UN Day" celebrated at Nose Cone Radar

UN Day was celebrated recently with special attention devoted to the work and contributions of the United Nations in all parts of the world. At Ericsson **Mölnådal** Microwave in Mölnådal, however, UN Day has another special meaning. For the second consecutive year, employees of Airborne Radar (a division designated FN = UN in Swedish) celebrated their own brand of "UN Day."

Lars Karlén, manager of the Airborne Radar (FN) Division of Ericsson Microwave, hatched the idea last year to establish UN Day, October 24th, as his division's own special day. It has quickly become a day when employees get together to talk and listen to interesting presentations related in some way to the Airborne Radar Division's business operations.

"UN Day" was held this year at the Chalmers Institute of

Technology in Gothenburg. After lunch, employees gathered to listen to a presentation by Torbjörn Hammarberg from Ericsson Microwave's personnel department, who talked about creating motivation and job satisfaction in a team concept.

Under the same theme, Mr. Hammarberg stressed the importance of communicating and encouraging each other, and he drew knowing laughter when he discussed how wrong it can get when increased responsibility does not carry a corresponding increase in authority.

"I have known project managers in charge of projects with budgets in the range of tens of millions of Swedish kronor. But the same persons are not authorized to sign for donuts for their employees. That requires the approval and signature of their immediate supervisors."

Persons working in the Development Environments unit (designated FN/K in Swedish) celebrated "UN Day"



Lars Svensson, Magnus Karlsson and Stig Agner, employees of the Development Environments unit, show off their Dilbert ties.

Photo: NICLAS HENNINGSSON

in still another special way of their own. They all came to work dressed in white shirts and ties strengthened by wire

and bent upwards in an arc.

"We want to look like Dilbert (a techno-geek comic strip character), who has become a

sort of mascot for the unit," explained Lars Svensson, originator of the "dress code" idea.

NICLAS HENNINGSSON

Three weeks a year lost to computer malfunctions

Three weeks of effective working time are lost every year because of computer malfunctions and downtime, according to a survey of 400 major European corporations by SCO, a lead-

ing software company.

An hour and a half is wasted every week, accordingly, because of computer malfunctions. The survey has no direct link with Ericsson, but it's still inter-

esting to consider the validity of its finding for Ericsson's purposes. In the survey, SCO also worked with the assumption that approximately half an hour of every work week is lost to pri-

vate use of computer facilities by employees.

It's a good thing computers save as much time as they do, allowing us to find time for all this peripheral activity.

Bringing the world closer together with multimedia

Multimedia Workgroup System was a major attraction at Ericsson's display stand during the recent Telecom Interactive Exhibition in Geneva. The system offers cost-efficient, fast, high-quality multimedia communications both in local networks and in interaction with the rest of the world

"Our solution for multimedia communications is functioning satisfactorily at various installations in Sweden, Germany, France, Belgium, Italy, the U.K. and the U.S. We are also looking at several new and highly interesting customers," says Giacomo D'Amato, product marketing manager for the system.

Ericsson's Multimedia Workgroup System is not much different from conventional computers with Internet capabilities. A small camera mounted just over the screen is the most distinctive difference. Virtually anything and everything can be transmitted, from intricate drawings, engineering blueprints and prototypes to a view from the window and, naturally, your own image to the person with whom you are communicating.

Package solution

"Being able to see the person you are communicating with is more important than you might think. Particularly when you're communicating over cultural borders, it's essential to be able to use gestures and facial expression," continues Mr. D'Amato, who knows from personal experience. He is a native Italian who has

worked in Sweden for the past three years.

Marketing efforts for the Multimedia Workgroup System are concentrated primarily on a package solution sold via distributors, such as telecom operating companies, as well as system integrators.

"Telecom operators have shown keen interest in the system, partly because of its strong market potential and partly because it generates ISDN traffic, both of which serve the commercial interests of operators," Giacomo D'Amato says. "We are now in advanced negotiations for distribution contract agreements with several large operators in Europe and the U.S."

Moderate competition

The increasingly important question of trademark strategy and branding still remains to be solved satisfactorily, however. The part of the system that end-users actually see consists of purchased standard products that do not carry the Ericsson logo.

"This is primarily a network solution," says Niklas Forsén, the product manager of Multimedia Workgroup System. "Competition in the network sector is moderate at best. In addition to Ericsson, only a handful of other companies have concentrated on isoEthernet. However, many suppliers have entered the arena on the client side, with various offers for end-users. It's only natural, therefore, that we have selected to purchase the client parts of our solution from outside suppliers, rather than develop our own products."



Giacomo D'Amato demonstrates how easily Ericsson's Multimedia Workgroup System can be used to maintain close contacts with colleagues in all parts of the world. Its interaction potential with ISDN and Ethernet makes the Ericsson system unique in today's marketplace.

Foto: MATS LUNDQVIST

Medium-sized and large organizations that want to work closely despite geographic diversity are a major target group for the system. A local office does not have to be a particularly large unit to motivate this type of investment," Niklas Forsén continues.

"Ericsson is a good example," says Giacomo D'Amato. "Management per-

sonnel here in Nacka and many other units have invested in the solution. It enables them to conduct management meetings and project group conferences totally independent of where people may be stationed. We have already benefited a great deal from our Multimedia Workgroup System."

KARI MALMSTRÖM

"Create the Future!"

AXE Research and Development is looking for new co-workers.

System and software designers to work with AXE Application Architecture.

AXE Research and Development is responsible for the Application Modularity Concept, the concept on which almost all further application development in AXE is based. This includes the generic architecture, high level design rules, PC-AXE 106 and other coordination between AXE 106 systems.

In order to strengthen our efforts to investigate the future application architecture of AXE, we need to grow with a number of competent people, system engineers and software designers.

The future architecture must support "openness" and wider scope of applications

based on AXE. Part of the work will be done by prototyping in a heterogeneous system environment. This includes evaluation of standards like CORBA and of standard specification languages.

You should be interested to work with a wide perspective. We are interested in experience from AXE as well as knowledge of other system environments including areas such as UNIX, C++, Java.

If you are interested for more information, please contact:

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We would like to have your application by November 30, 1997 at the latest. Please send the application to:

AXE Research and Development

Birgitta Friis

Box 1505

S-125 25 Älvsjö

Ericsson's 100,000 employees are active in more than 130 countries. Their combined expertise in fixed and mobile networks, mobile phones and infocom systems makes Ericsson the world-leading supplier in telecommunications. www.ericsson.se/SE/

ERICSSON 

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. 17 1997

Updated November 3

in sweden

Ericsson Radio Systems AB, Kista

RMOG HW Services is responsible for provisioning of spare parts and repair services for all RMOG products. This include product management as well as supply. In order to meet future demands we need to strengthen the organisation. For that reason we have established a new unit for SUPPLY MANAGEMENT from Nov. 1.

MANAGER - HW SERVICES SUPPLY MANAGEMENT

● Responsibilities: Co-ordination of the global supply organisation including Regional Logistic Centres and Repair Centres. Develop and maintain process management for Hardware Services Supply. Establish and follow up targets for quality, lead-times and costs. Maintain the spare parts assortment. Optimise spare parts stores. Administration of spare part orders. Forecast repair volumes and the need of spare parts.

The unit will consist of around 12 persons. Requirements: Knowledge in and working experience from logistics. Managerial skills. Working experience from Customer services is preferable.

Contact: Göran Kördel, tel. +46 8 757 5708, memo-id ERAC.ERAGK or Jan Strömberg, tel. +46 8 757 0677, memo-id ERAC.ERAJASG Application: Ericsson Radio Systems AB, LY/HA Karolina Lunning, 164 80 STOCKHOLM

Ericsson Radio Systems AB, Kista

MANAGER - CMS8800 PRODUCT MANAGEMENT, NETWORKING AND DATA PRODUCTS

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are the market leader for cellular telephone systems and services based on D-AMPS/AMPS. Today, over 50% of the world's cellular subscribers are served by D-AMPS/AMPS systems.

● Would you like to drive the exciting merger of Internet and wireless communication technologies? Wireless Internet and Intranet access are expected to be the next major steps in the evolution of wireless services. Wireless industry analysts suggest that soon every digital wireless phone will provide both PSTN and web access.

In the Cellular Systems - American Standards Business Unit, we have recently launched a product for wireless IP. It is based on the Cellular Digital Packet Data standard for packet switched radio access and is integrated in our D-AMPS/AMPS products. We are currently working to provide wireless IP services on circuit switched connections. To be successful we need to have good knowledge also in end-user applications and total solutions. Not only to be able to understand how our products will be used, but also to be able to respond to customer requirements for guidance on how to provide attractive end-user solutions.

The unit consists of around 8 persons and are responsible to assure that we have a competitive and profitable product portfolio. The unit will consolidate market requirements, define product strategies, product plans and main product requirements.

You will also be responsible for technical sales support for our products. The sales support role implies customer presentations and preparation of proposals, all in close team-work with our global marketing and sales organization.

In this position you will have extensive international contacts with many opportunities to travel.

We are looking for a person that has good leadership capabilities and initiative, is people oriented, and result and customer focused. Experience from telecommunication or from data communication is required.

Contact: Lars Hagberg, phone +46 8 757 58 98, memoid: ERA.ERALHAG Application: Ericsson Radio Systems AB, AH/H Anette Spångberg, 164 80 Stockholm

Ericsson Radio Systems AB, Kista

QUALITY COORDINATOR - QUALITY ASSURANCE TOTAL PROJECTS

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

To secure good quality within the total projects for development of the wireless network products a project independent quality function is needed. This job will involve many international contacts.

● The quality coordinators role is to: support the project managers in quality questions and methods. lead TG assessments. perform quality audits of the projects.

You should have experience from modern quality work, project management. Experience from the different functional areas within product development would be highly advantageous.

You should also have an analytic and creative mind and also a customer oriented way of thinking. Fluency in English is required. You will be placed in the Operational Development unit within Product Unit Wireless Networks.

Contact: Eva Malmberg, phone +46 8 757 0180, memoid ERA.ERAEM Application: Ericsson Radio Systems AB, ERA/AH/H Anette Spångberg, 164 80 STOCKHOLM

Ericsson Telecom AB, Public Networks Switching, Systems Roll Out, Performance Improvements

PROJECT QUALITY MANAGER

The unit Systems Roll Out is running a number of big multinational development projects aimed at generating new products for Public Networks applications. Our aim is to be No 1 in our area. Within Systems Roll Out the unit Performance Improvements(PI) is responsible for Quality Management(QM), as well as Process Improvements and Software Metrics. We are 19 persons in the unit PI, whereof 9 are in charge for QM.

● We are now looking for persons to join the QM function as Project Quality Manager.

The main objective of the QM function is to ensure that the right quality is achieved within our total projects. You will be part of a group working actively in total projects to set new and higher standards for the quality.

Your tasks will be to: plan, manage and follow up quality activities in the project, e.g. prepare the Quality Plan, conduct audits, prepare quality predictions based on measurements (PQT and others) etc. realise the Opportunity for Improvements (OFI) process within the project, plan and perform risk analyses in the project, improve our way of working.

You are expected to be a Master of Science (or similar) in CS/EE, with knowledge of Statistics and/or Quality Practices, as well as of Ericsson SW methods. You have 3-5 years of experience in Project Management within the Ericsson organisation as well as experience with , international work.

Furthermore, you should have good communication skills and have natural abilities for team work.

We offer you a challenging work in an international environment with opportunities to get future engagement within the improvement and project management area. We are located at Telefonplan (TN building) in the beautiful Stockholm. We invite both ETX internal applicants and applicants from Ericsson abroad.

Contact/Application: Stig Leitner +46 8 719 20 77 ETXT.ETXSLR QM team, Nils-Johnny Kristensson +46 8 719 32 14 ETXT.ETXNJK PI

Manager, Susanne Norström +46 8 719 06 59 ETXT.ETXSUNO Human Resources, Göran Lönnqvist +46 8 719 56 75 ETXT.ETXGLQ CF representative, Miguel Romero +46 8 719 13 45 ETXT.ETXMAR SIF representative,

Ericsson Radio Systems AB, Kista

SENIOR AREA MANAGER

- USA, THE PLACE FOR THE BEST

Cellular Systems - American Standards one of the fastest growing business units within Ericsson Radio Systems. We are the market leader for cellular telephone systems based on American Standards D-AMPS/AMPS. Today, almost 60% of the world's subscribers are served by D-AMPS systems.

The US market for cellular systems is the most competitive and challenging in the world. All of our competitors are American companies, so why not join us beating them on their home turf. Ericsson is the market leader in the US and we need to strengthen our sales support to the US market.

● We are now looking for 3 Area Managers in the Sales Support unit that can take on the challenge of further develop our business in the US. We can offer an interesting job in an expanding business.

Your main responsibilities and tasks are:
• Work together with our local offices securing sales to existing and new customers. • Marketing and Sales activities towards the regions and Dallas. • Support EUS in vendor financing issues. • Frequently visit customers, prospects and regions. • Establish and update Tactical Market Plans for the markets.

You have completed university degree (B.Sc., M.Sc. or similar) and you have at least 5 years of working experience from sales and marketing, preferably within telecommunications. You are fluent in English and have excellent interpersonal and communication skills enabling you to build good relations.

You will be working in a team of experienced and highly motivated sales support people and we can promise you a job that will develop and enhance your skills in business management.

Contact: Göran Finnman, Phone +46 8 4047381 Memo id: ERA.ERAGFIN Email:goran.finnman@era.ericsson.se

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER

- SALES SUPPORT WIN

D-AMPS/AMPS systems today serve over 50% of the world's subscribers. Our mobile telephone system, CMS 8800, is the world's most sold system, all standards considered. The success of CMS 8800 Wireless Intelligent Network (WIN) has been overwhelming. Demand for market support is increasing and we need more people to help us making this a continued success.

● We are now looking for a Product Manager Sales Support WIN within the Product Unit HLR/SCP & IN Services. You will in this position be involved in: Developing the business for CMS 8800 WIN together with the MLCs/LCs. Responding to RFQs/RFPs from customers for CMS8800 WIN. Supporting the customers and the MLCs/LCs on marketing and technical issues related to CMS 8800 WIN. Making proposals for applications and product improvements in the CMS8800 area. Make product presentations and participate in customer meetings.

The required skills and experience for this position are: Business oriented. At least two years of experience with Ericsson. Good knowledge of telecommunications. Knowledge of AXE 10 (preferable). Strong communication and presentation skills. An academic degree. Knowledge of Spanish or Portuguese (preferable).

The position will require extensive international travelling.

Contact: Charlotta Sund + 46 8 404 3558, memoid ERA.ERACSUN Application: Ericsson Radio Systems AB, AH/H Anette Spångberg, 164 80 Stockholm

Ericsson Business Networks AB, Enterprise Networks, Nacka Strand, Sweden

SERVICE SALES

- ENTERPRISE SERVICES

Services is a rapidly growing area within BU Enterprise Networks. In the 2005 scenario, Service Revenue will be equal to 'product' revenue. Now you can take part of this challenging development!

Service Sales is a unit under Service Sales and Projects, within Enterprise Services. Our mission is consolidated responsibility for Service Sales exceeding 2 BSEK 1998 in all (M)LCs.

● In Service Sales, you have the responsibility for establishment and development of Service Sales in Local Companies. There is also an opportunity for you being more oriented towards direct customer contacts.

Qualifications: You have a proven track record of sales and/or marketing. Probably you have an academic degree in business management or equivalent.

You possess a high level of communication and customer relation skills. Fluency in written and spoken English is required.

The work entails frequent international contacts and travel.

Contact: Tibor Lakatos, +46 8 422 2293, EBC.EBCLTS or Marcus Eriksson, +46 8 422 1599, EBC.EBCMRC Application: Ericsson Business Networks AB, EN/H, S-131 89 Nacka Strand, Sweden

Ericsson Radio Systems AB

AREA SUPPORT MANAGERS - RMOG COMPLEMENTARY PRODUCTS SYSTEM SUPPORT

Within Customer Services, the unit 'System Support' for Digital System (GSM, TACS, NMT) has the responsibility for the co-ordination of the Global Support Organization. This includes also the support of Complementary Products. The area 'Complementary Products' consists of an increasing number of third party products which complements or extends the functionality of the CME 20 or CMS 40 core systems. Those products, that have been certified and industrialized by Ericsson, are sold, supported and invoiced by RMOG. Examples of systems in this area are: Voice mail, Billing systems, SMS, Datacom, Pre-paid, Digital cross connect, etc.

● Your work will be to manage and co-ordinate the following tasks in this area: the invoicing for support costs towards our local subsidiaries, budget estimates for each operator, the information flow to our local subsidiaries, coordination of support between the Complementary Products suppliers, negotiate and implement System Support agreements.

Advantage with: GSM experience. Fluent in English. Communication and interpersonal skills. Commercial sense.

The position entails extensive contacts with our Local Companies, Vendors and you must be prepared to do some traveling.

Contact: Scott Powell, phone +46 8 75 70 750, memoid ERAC.ERASSCOT Alberto de Castro, phone +46 8 40 49 224, memoid ERAC.ERAAALC Dag Ribsskog, phone +46 8 40 47 538, memoid ERAC.ERADRIB Chalotta Rydgren, Human Resources, phone +46 8 40 432 807, memoid ERAC.ERACHAS

Ericsson Radio Systems AB, Kista

Would you like to have a challenging role in our Global Pricing? Ericsson Radio Systems AB in Kista (Stockholm) is looking for

PRICING SPECIALISTS

Business Unit Cellular Systems - American Standards (RMOA) is responsible for cellular systems based on the D-AMPS and AMPS standards, which today serve more than 50% of the world's subscribers. Our mobile telephone system, CMS8800, is the most sold system in the world, and our markets around the world are growing rapidly.

The Pricing Group is responsible for RMOA's global pricing strategy and price management. The group is involved in defining pricing strategies, pricing of new products, deployment of pricing strategies and supporting the sales organization with pricing argumentation, business cases, price comparisons and advice. We now need to strengthen our resources and are therefore looking for new members:

PROJECT MANAGER PRICING

● In this position you will build up a clear understanding of our customers' business and the effects our products and services will have on our customers. Based on this understanding you will be held responsible for defining pricing strategies, coordinating pricing activities within the Business Unit, deploying the pricing strategies, and supporting the Business Unit with pricing argumentation and sales tools (business cases). If you are service minded, like to work with people and to get things done, this position might be something for you.

We are looking for a person with a good business sense, excellent analytical skills and an affinity with high tech products and services. Experience in a business environment, an university degree, and fluency in English is required. A high tech or financial background is an advantage.

PRICING ANALYST

● In this position you will analyze Ericsson's as well as competitors' worldwide pricing structures and price levels. You will build up an in-depth knowledge about market trends, underlying business, and technological differences in mobile networks. Your knowledge will be used to support management, the sales organization, and the pricing group with pricing information. Finding information, analyzing, and initiate the appropriate actions are key words for your daily work. You will work intensely with computer based models to create price and other comparison models and will be in close cooperation with sales representatives and the rest of the pricing group.

We are looking for a person with excellent analytical skills, a good business sense and an affinity with high tech products and services. A university degree, fluency in English and a service minded attitude are required.

Contact: Thomas van Bunningen, phone: +46 8 4049407; e-mail: thomas.van-bunningen@era.ericsson.se or Christer Bergmark, phone: +46 8 4048314; e-mail: christer.bergmark@era.ericsson.se Application: Ericsson Radio Systems AB AH/Birgitta Stavenow 16480 STOCKHOLM Sweden

Ericsson Radio Systems AB, Kista

RMOA GLOBAL ACCOUNT ORGANISATION

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are the market leader for cellular telephone systems and services, based on the American Standards D-AMPS/AMPS. Today, almost 60% of the world's subscribers are served by D-AMPS/AMPS systems.

AMISG is a new section within the AMIS (New Business) organisation. A Global Account is a Customer Account taking care of an Operators Global Business, that is the Operators operations outside their domestic market.

We have today 32 Global Accounts across Ericsson. They are common to all BA's and BU's. Some Accounts are purely BN activities, some RMOA, some RMOG and some represents several BU's

● We are now looking for three positions: A Global Account Manager (GAM) for Millicom, this is a RMOA Global Account. You will be responsible for all Millicom activities. The GAM is mainly a relationship Manager, but the relation shall of course end up with more business for RMOA. This position requires a Senior person with a good ability to build a strong relation with the Customer. Further it is important to have a general Telecom understanding and for this account a very good understanding of Cellular Systems. It is also of value to have a good knowledge of the Ericsson products (from all BA's)

Two positions: Manager, Global Accounts. You will be responsible for 3-5 Global Accounts from a RMOA perspective.

Qualifications and experiences: Sales and Marketing oriented. At least 3-5 years of International Marketing. A good knowledge of Ericsson. Fluent in English and preferable also Spanish.

It is difficult to explain the Global Organisation in this ad, applicants are most welcome to phone me or see me for more explanations.

Contact: Bo Mejner, Phone - 46 8 4043547 Application: Ericsson Radio Systems AB AH/H Birgitta Stavenow 164 80 STOCKHOLM

Ericsson Radio Systems AB, Kista

SYSTEM SUPPORT MANAGEMENT

Are you interested in working with System Support in a global perspective for the RMOA markets? We are today analyzing, planning and implementing methods of improvements towards the RMOA Global Service Organization (GSO) for System Support. This organization comprises our Technical Assistance Centers (TAC) and Field Support Centers (FSC). We also perform reviews of the TAC and FSC organisations as well as prepare and co-ordinate seminars for the (M)LC's concerned. In order to fulfill our commitments we need new members to our team.

● Candidates should have extensive experience in managing System Support or Customer Service issues within the Ericsson Group, Cellular in particular. A Master or Bachelor degree in

Engineering/Telecommunication or equivalent experience is needed. Travel is required as the position covers RMOA global organization and we take it for granted that you can communicate fluently in English, both verbal and in writing.

Contact: Jim Kirst, phone + 46 8 404 8325, memo ERA.ERAJAKI or Rolf Johannesson, phone + 46 8 404 38 20, memo ERA.ERARRRR Application: Ericsson Radio Systems AB AH/H Marianne Molin 164 80 Stockholm

Ericsson Radio Systems AB, Linköping

INDUS LEADER TO BSC/COLUMBUS

Opportunity for you that want challenges.

Ericsson Application Center for Mobile Switching and Radio Networks (unit ERA/JZ) at Linköping is a design center in Business Area Radio Communications.

● The Base Station Controller (BSC) is a part of Base Station System within GSM. The BSC is controlling the mobile switching and radio networks. The Indus leader is responsible for the indus subproject in the Columbus/BSC project. This subproject shall handle the BSC part of the FOA project. It means to participate in the customers FOA project and coordinate indus activities towards other nodes (BTS, OSS, DSA).

This is a great opportunity to influence the full scope of the INDUS activities within the BSC node. External and internal contacts will give you the possibility to travel and get an overall knowledge about INDUSTRIALIZATION of the BSS product.

You will get the opportunity to grow and learn new skills in a flexible and highly prioritized development project. You need leadership skills, AXE modification handling knowledge, communication skills and a lot of abilities to successfully complete the INDUS leader task.

After a successful completion of the INDUS leader task you will be in an excellent position to grow further within the organization.

Contact: Lennart Johansson phone: +46 (0)13 287358 email: erao11@lmera.ericsson.se Application marked 97-85C: LM/ERA/Z/MH Eva Lindkvist Hanna email: eraeval@lmera.ericsson.se

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER**- NETWORK DESIGN SERVICES**

● We are looking for a product manager of the Network Design Services for the CMS88 system with related products. The role is of strategic and global importance for development, im-

provement and maintenance of professional services offered and provided to our customers - mobile network operators. You will belong to the product management functional area of the Product Unit Service Solutions, and be a member of the Network Design service solution team.

We expect that you have several years experience working in the telecommunications industry of cellular systems; experience of network design at a telecom operator; or provisioning and management of professional services for mobile networks.

Your responsibility as the product manager for the Network Design services is to assure a global availability of the overall Mobile Network Design services, covering: Radio network design services. Access/Transmission network design services. Switching network design services.

You will be responsible along with our local companies for developing service solutions fulfilling our customers' needs and with regards to availability, consistency and profitability.

The network design service is a service area rapidly developing, why you will find that there are tremendous opportunities for you to develop both the design services, leadership and your management skills on an international arena.

Your personal profile: We are looking for a person possessing product management skills, being people oriented and having good communication skills. The role interacts closely with many Ericsson organizations and companies specifically in the areas of marketing & sales; service supply; service supply management; service development; and also with some customers. Operator experience from mobile networks is an advantage.

Contact: Håkan Rösth, phone +46 (08) 404 2645, MEMO ID: ERA.ERAHROS or Ulf Angelin, phone +46 (08) 404 4551, MEMO ID ERA.ER-AUANG Application: Ericsson Radio Systems AB, AH/H Anette Spångberg, 16480 Stockholm

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER

Network Features Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are the market leader for cellular telephone systems and services based on D-AMPS/AMPS. Today, over 50% of the world's cellular subscribers are served by D-AMPS/AMPS systems.

The product unit CMS8800 Product Management is responsible for product management and sales support for applications, switching and data products as well as overall responsible for the CMS8800 product line.

● Within this product unit, the section responsible for Network Features is now looking for sev-

Ericsson Review

The telecommunications technology journal

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ERICSSON 

eral persons who are willing to take on new challenges with us as product managers. In the work you will identify new solutions and products within Network Features, develop business cases to influence the development of any needed new products, and enhancements to existing products. You will also be the orderer of our development projects, ensuring that the projects result in competitive and profitable products.

Customer presentations and support of introduction of new solutions and products into the market are also part of your responsibility.

The job involves some traveling within Asia Pacific, North and South America and Eastern Europe.

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

Contact: Lars Hagberg, phone +46 8 757 5898, memoid: ERA.ERALHAG Application: Ericsson Radio Systems AB, AH/H Anette Spångberg, 164 80 Stockholm

Ericsson Radio Systems AB, Kista

PRODUCT MANAGER, WIRELESS DATA

● Would you like to work with the exciting merger of Internet and wireless communication technologies? Wireless Internet and Intranet access are expected to be the next major steps in the evolution of wireless services. Wireless industry analysts suggest that soon every digital wireless phone will provide both PSTN and web access.

In the Cellular Systems - American Standards Business Unit, we have recently launched a product for wireless IP. It is based on the Cellular Digital Packet Data standard for packet switched radio access and is integrated in our D-AMPS/AMPS products. We are currently working to provide wireless IP services on circuit switched connections. To be successful we need to have good knowledge also in end-user applications and total solutions. Not only to be able to understand how our products will be used, but also to be able to respond to customer requirements for guidance on how to provide attractive end-user solutions.

As a product manager your responsibility is to make sure that we have a competitive and profitable product portfolio. You will consolidate market requirements, define product strategies, product plans and main product requirements.

You will also be responsible for technical sales support for our products. The sales support role implies customer presentations and preparation of proposals, all in close team-work with our global marketing and sales organization.

In this position you will have extensive international contacts with many opportunities to travel.

We are looking for a person that possesses product management skills, is people oriented and has good verbal and written communication skills in English and Spanish. It is a great advantage if the applicant has experience from data communication or IT.

Contact: Lars Hagberg, phone +46 8 757 5898, memoid: ERA.ERALHAG Application: Ericsson Radio Systems AB, AH/H Anette Spångberg, 164 80 Stockholm

Ericsson Business Networks AB, Enterprise Networks, Nacka Strand, Sweden

PROJECT MANAGER - CUSTOMER PROJECTS

● Services is a rapidly growing area within BU Enterprise Networks. Customer Projects is a unit under Service Sales and Projects, within Enterprise Services. Our target customers are large customers of EN with international projects and complex national projects.

As a Project Manager you have the responsibility for organising and co-ordinating the activities and resources of Enterprise Networks and for meeting all contractual obligations. This involves: managing customer projects so that they are completed to time, quality, cost and specification, ensuring the customer is satisfied with the service and product, motivating the Ericsson resources who need to provide and install all elements of the product.

Qualifications: You have a proven track record of project management, and are experienced in project management tools, PROPS, MQR or similar. You possess a high level of communication and customer relation skills. Fluency in written and spoken English is required.

The work entails frequent international contacts and travel.

Contact: Tibor Lakatos, +46 8 422 2293, EBC.EBCLTS or Joakim Ström, +46 8 422 2456,

EBC.EBCJOST Application: Marcus Eriksson, Ericsson Business Networks AB, S-131 89 Nacka Strand, Sweden

Ericsson Business Networks AB, Enterprise Networks, Nacka Strand, Sweden

PROJECT MANAGER - CUSTOMER PROJECTS

Services is a rapidly growing area within BU Enterprise Networks. Customer Projects is a unit under Service Sales and Projects, within Enterprise Services. Our target customers are large customers of EN with international projects and complex national projects.

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Contact: Tibor Lakatos, +46 8 422 2293, EBC.EBCLTS or Joakim Ström, +46 8 422 2456, EBC.EBCJOST Application: Marcus Eriksson, +46 8 422 1599, EBC.EBCMRCES Ericsson Business Networks AB, EN/H, S-131 89 Nacka Strand, Sweden

Ericsson Radio Systems AB, Kista

WIDEBAND RADIO ACCESS NETWORK STANDARDIZATION

The Product Unit Wideband Network Systems develops Radio Access Network products for Wideband CDMA.

Recently we have received orders from the leading Japanese operators NTT-DoCoMo and Japan Telecom for experimental systems based on Wideband CDMA and ATM technology, promoting IMT-2000/UMTS. The new third generation system will, in addition to speech, support high speed data services with data rates up to 384 kbit/s, both circuit & packet switched, all to accommodate multimedia services.

● We are now increasing our standardization efforts and are therefore looking for experienced team members to work with Wideband CDMA Radio Network standardization.

You will strengthen our efforts in the following areas: Radio Network architecture & interfaces. Radio & Data Protocols. Radio Network Functions, Procedures and Algorithms (e.g. Handover, Power control and Overload control).

Experience with third generation mobile communication systems is an extra merit.

Contact: Tomas Sandin, +46 8 7573907, tomas.sandin@era-t.ericsson.se or Jan Häglund, +46 8 75772210, jan.haglund@era-t.ericsson.se

WIDEBAND CDMA RADIO INTERFACE LAYER 1

● We are looking for new team members with experience in Radio Interface Layer 1 signal processing.

You should have an interest in: logical/physical channel structures, encoding/decoding, interleaving/deinterleaving, spreading/despreading, modulation/demodulation, power control.

The work includes analysis, specification, evaluation and top level design of Layer 1 signal processing for Wideband CDMA.

The successful candidate has worked 2-5 years with the radio interfaces of second generation systems (e.g. GSM, PDC or IS-95) and has excellent writing skills. Experience with third generation mobile communication systems is an extra merit.

Contact: Tomas Sandin, +46 8 7573907, tomas.sandin@era-t.ericsson.se or Ingemar Sohlman, +46 8 75772210, ingemar.sohlman@era-t.ericsson.se Application: Ericsson Radio Systems AB, J/H S Ann Beer, 164 80 STOCKHOLM

Ericsson Telecom AB, Public Network, Switching, TN

SIGNAL COORDINATOR

● The System/Platform Management is looking for an engineer to be responsible for the Signal Coordination in our various projects.

The signal coordination ties together the blocks in the AXE switch, which contains blocks written in PLEX & High Level PLEX.

You will have a key role in our projects. This will give you excellent opportunities to gain competence and extend your contact network. You will work in a stimulating environment together with persons with high AXE-competence. A period of learning the job together with our Signal Coordinators will be offered.

You should be able to cooperate, communicate and work in teams. You must be able to 'create solutions' when time is running out. Competence in PLEX is a merit and it's recommended that you know how system design is done within Ericsson.

Contact: Pontus Tibbling, General Question, +46 8 7190652, +46 70 5766688, etxt.etxpoti or John Ludvigsen, Signal Coordinator, +46 8 7192337, etxt.etxjlm, qtxjml@otn.etx.ericsson.se

Ericsson Telecom AB

Voice over IP something for you?

Within PU Public Networks we are working actively with Internet access. One of our products is the Phone Doubler, which enables a user to receive and place phone calls while surfing on Internet. We are now expanding with further development in the area of IP- & telephony networks.

DESIGNERS

● The task is to design and test applications between IP & telephony network's. Our application is based on windows NT server and PC clients. You need to know and be experienced on C/C++. Knowledge of Windows NT, TCP/IP, and PC technology are also useful experience.

LAB RESPONSIBLE

● We have a Lab where we can do test & demos on internal as well as external networks. We now need someone to manage the lab, plan testing, install equipment etc. You need to know about AXE as well as knowledge about PC Networks.

FIELD TRY SUPPORT RESPONSIBLE

● We have the Phone Doubler installed in several countries and need a person who can co-ordinate and support locations with installations of our product. You need experience from management of Lan-networks and windows NT.

SOUND QUALITY

● Within the Sound Quality team we are working with Echo compression and different codec technologies. We are looking for a person to join the team with experience from signal processing and or practical work with codecs and echo compression.

Contact: Per Öberg, tel +46 8 7195412 e-mail: etxt.etxpoeb at memo.ericsson.se or Susanne Borg, tel +46 8 7196575 e-mail: etxt.etxsubo at memo.ericsson.se

International

Ericsson Eurolab Deutschlnad GmbH, Aachen

The System Test & Support Department EEDIX/S within our PAX System House is responsible for the central Product Line Maintenance of the CME20 Switching System software releases which are currently delivered to 80 operators. The departments activities include CME20 SS Maintenance and Customer Support, Industrialization of CME20 SS releases, Test Configuration Management and Methods & Tools development. We have an open vacancy for the position as

SECTION MANAGER

"CME20 SS Maintenance and Customer Support"

● The main responsibilities of the section are: coordinate, perform and follow up testing of corrections on CME20 SS products, test, document and deliver monthly correction load files to CME20 SS Support organisations, run the CME20 SS Help Desk, develop, test and maintain the implementation procedures for SS node upgrades, test and deliver of CME20 SS upgrade packages (CN-P) whenever required.

The primary objective is to guarantee that the section meets their customer expectations, the agreed goals and the needs of the company. The section consists of 25 persons organized in three groups.

The group managers report directly to the Section Manager. The section manager motivates and stimulates his/her staff in the personnel development. He reports directly to EED/X/SC, Department Manager Test & Support Department.

As a suitable candidate, you have a good knowledge of Product Line Maintenance processes and activities. You are familiar with processes and activities of our supplier (Design Maintenance, Industrialization projects), customer (Support) and partners. You should be initiative, cooperative,

stress-resistant and able to communicate your ideas and solutions effectively.

You have gained first experiences in a leadership position, have strong interest in people and show good communication and coordination skills. Furthermore, you should be able to motivate and be willing to continue to develop as a leader. The department and Human Resources will give you support for your individual development and all needed training.

Contact at latest 971130: EED/HR Doerte Kaulard, Memo-id:EED.EEDDKA, Tel.:+49-2407-575-163 or EED/X/SC Jan-Peter Meyer-Kahlen, Memo-id:EED.EEDJPM, Tel.:+49-2407-575-315

Ericsson Toshiba Telecommunication Systems, Japan

MANAGER

Expatriate administration, expatriate recruitment and transfer of competence. (long-term assignment)

The business for Ericsson in Japan is growing. At present we are 700 employees, approximately one third is expatriates. Presently there is three companies established in Japan, Nippon Ericsson NRJ (MLC) 230 employees, Ericsson Toshiba Telecommunication Systems ERJ (JV) 460 employees and Ericsson Mobile Communication EMJ (JV) 15 employees.

Today our main business is PDC (Japanese standard for mobile phone system) but we are entering the market for mobile phones and are developing solutions for 3rd generation of mobile phone systems. Work content will basically consists of three parts,

● Expatriate administration: You will be responsible for all expatriates related issues such as interpretation of GCE (General Conditions of Employment for Long-Term Service Abroad), housing, schooling, visa, induction etc.

Expatriate recruitment: You will be responsible for the recruitment of expatriates to ERJ and will be ERJ's interface towards LME/U (International assignments).

Transfer of competence: You will be responsible to ensure that a planned transfer of competence process is established and developed. You will assist line managers in their daily activity to plan and carry out transfer of competence from expatriates to local employees.

You will be assisted by two subordinates. You will also participate in the Ericsson Japan HR-network.

We want you to have adequate academic exam and at least five years experience from qualified work within the Human Resource area. It is preferable that you have experience from international recruitment. As a person you need to have a strong result orientation and good communication ability.

Contact: ERJ/PP/PC Michael Regner, NRJ.ERJMR or NRJ/PP/EC Nils Enstam, NRJ.NRJNREM Application: NRJ/PP/EC Nils Enstam, NRJ.NRJNREM

Ericsson Eurolab, Germany

Positions in Mobile Phone Development in Germany In Nuremberg, Germany, BT operates a Mobile Phone Development Center within the Ericsson Eurolab organization. This center concentrates on Mobile Phones for special applications, the development of GSM Cordless Telephony, and speech related technologies like voice recognition.

For the further buildup of this group we offer the following positions:

SW DESIGNER

● You design, specify, code, integrate and test SW for the control of system functions and the man-machine interface of mobile phones.

For this ambitious task we expect knowledge of Mobile Communication standards like GSM and DECT, and experience in the design of real-time SW, ideally in the area of Mobile Phones. It goes without saying that team spirit is our driving force.

SYSTEM- AND FIELDTEST ENGINEER

● You are responsible to plan, conduct, and evaluate complex tests of innovative functions of mobile communication systems, incorporating both network and terminals. These tests comprise as well tests within our own environment, from module testing down to field validation, as cooperation with our customers in the introduction of these new features in their networks.

Ideally you have a degree in informations and/or communications technology and several years of professional experience in product development or product management for communication systems or terminal products. Your profile is complemented by independence, management and organizational skills, ability to work under pressure, and excellent communication and cooperation qualities.

PCB-LAYOUTER

● Your tasks comprise the assembly of netlists, part-lists, and circuit diagrams and the design of complex printed circuit boards for mobile phones. This is complemented by generating production data and the preparation of product documentation.

We expect a degree in electrical/electronic design and several years of professional experience with complex PCB design flows and profound UNIX knowhow. Ideally you have worked with MENTOR and/or ECAD tools. Precise work and the willingness to work in teams complement your profile.

TECHNICAL ADMINISTRATION / CONFIGURATION MANAGER

● The work area comprises the structuring, control, and maintenance of our products and documents during development projects. You are responsible for the application of our product and documentation standards and work closely with other sites on improvements and maintenance of these standards.

You hold an applicable technical degree and have gained professional experience in the area of technical administration and documentation. You are familiar with database management and documentation tools. Furthermore, you are used to work independently, carefully, and with a focus on high quality.

These tasks require responsibility and independence, openness, ability to cooperate, flexibility and initiative. Due to the international status of our company excellent spoken and written English is a prerequisite.

Contact: R & D Centre Nuremberg, R & D Centre Nuremberg. Radio Communication, Radio Communication. Norbert Lechner, Martin Vogel. Human Resources, Department Manager. Application: Dial: 0911/5217-111 Dial: 0911/5217-102 Memo: EED.EEDNLE Memo: EED.EEDMVO

Ericsson Düsseldorf, Germany

More than 30% of all telecom investments in Western Europe will be made in Germany - a market is on the move.

The liberalisation in Germany offers very good opportunities for Ericsson for growth with new network operators. Ericsson has already been chosen by two national operators and by one dozen international carriers entering Germany. This success shall be sustained and be basis for future business.

The make the future become reality, we are now looking for the

MANAGER PRODUCT MANAGEMENT

● covering a vital part of the Infocom product portfolio Switching. IN. Radio Access. Telecom Management. Cable TV.

This position entails full product responsibility for these product lines within EDD and is situated within one of the Customer Units (Divisions). Requirement Handling, Product introduction, Network Performance, Product Evolution as basis for creating solutions which make our customers successful are major ingredients for taking this responsibility.

The future manager should have a background in Product Management or Provisioning. A thorough network in the Infocom organisation will make it easier to make things happen. Teamwork, communication skills and the ability to lead a dedicated team of product managers are a must. Previous experience in one of the product lines or an MLC would be appreciated.

Contact: Heike Ganz, memoid ed.eddhega, Human Resource Officer, Ericsson Dusseldorf, Germany.

Nanjing Ericsson Communication Company Ltd. (ENC)

MSC/BSC TESTING SUPERVISOR FOR SHORT TERM CONTRACT

● We are looking for Testing Supervisors due to a big GSM expansion in Shandong during this December to March 1998.

The Testing Supervisor shall control and supervise the Installation Testing work in according with applicable instructions.

Principle responsibilities are independently start-up and complete all function testing of new MSC/BSC, integration Testing of BTS 200 and BTS 2000, hardware expansion testing of MSC/BSC, prefer Trouble Shooting in CP and BSC.

You have a minimum of two years experience as Testing Technician on CME20.

Contact: Jessie Tianxuhong (GSM testing section Mgr) tel: +86-25-210 1188 memoid: ETC.ENCJETI or Ulrika Martinius (RMOG Resource Agency) tel:+46-8 404 2565 memoid: ERAC.ERAMSSS Application: Jessie Tianxuhong, memoid: ETC.ENCJETI, fax: +86-25-210 1199

Ericsson New Zealand

SWITCH PERFORMANCE ENGINEER

● A vacancy has arisen for a Switch Performance Engineer within ENZ Radio Systems, Network Engineering Group, based in Wellington, New Zealand.

Ericsson New Zealand has a close working relationship with its main customer Telecom New Zealand, who is very focused on network quality improvement and the implementation of new features

and services within its D-AMPS cellular network to gain competitive advantage.

The position is responsible for maintaining and implementing a network quality improvement programme for Telecom New Zealand's D-AMPS cellular network. This includes representing ENZ as its TPIP (Total Performance Improvement Programme) Champion and implementing performance audits according to TPIP concepts and processes, coordinating and implementing Switch Performance Reviews and other network performance audits of each MSC, provide troubleshooting specialist support for network problems, maintaining regular contact and a working relationship with Telecom NZ staff.

Interested persons should have the following specific skills and experience: CMS8800 MSC Specialist experience. Knowledge of Ericsson's global TAC and FSC support organisation. An understanding of PROPS project management processes. Good verbal and written communication skills. The ability to work both independently and as a member of a team.

Application: Ericsson Communications Ltd. Attention: John Kliffen P O Box 11-745 204-206 Thorndon Quay Wellington New Zealand MEMO-ID: ENZ.ENZJNKN

Ericsson Radio Systems AB, Linköping

INDUS LEADER TO BSC/COLUMBUS

Opportunity for you that want challenges. Ericsson Application Center for Mobile Switching and Radio Networks (unit ERAIZ) at Linköping is a design center in Business Area Radio Communications.

The Base Station Controller (BSC) is a part of Base Station System within GSM. The BSC is controlling the mobile switching and radio networks. The Indus leader is responsible for the indus subproject in the Columbus/BSC project. This subproject shall handle the BSC part of the FOA project. It means to participate in the customers FOA project and coordinate indus activities towards other nodes (BTS, OSS, DSA).

● This is a great opportunity to influence the full scope of the INDUS activities within the BSC node. External and internal contacts will give you the possibility to travel and get an overall knowledge about INDUSTRIALIZATION of the BSS product.

You will get the opportunity to grow and learn new skills in a flexible and highly prioritized development project. You need leadership skills, AXE modification handling knowledge, communication skills and a lot of abilities to successfully complete the INDUS leader task.

After a successful completion of the INDUS leader task you will be in an excellent position to grow further within the organization.

Contact: Lennart Johansson phone: +46 (0)13 287358 email: eraoill@lmera.ericsson.se Application marked 97-85C: LM/ERAIZ/MH Eva Lindkvist Hanna email: eraeval@lmera.ericsson.se

Ericsson Ltd, UK

4 DATA TRANSCRIPT ENGINEERS (ESO, OPERATIONS)

● Responsibility: The role holder will have two areas of responsibility switching (physical), cellular (logical). They will be responsible for the creation and adaptation of loadable exchange dependent data files for AXE systems by taking input requirements and translating them into MML data outputs.

Competency; Technical: Knowledge of radio principles, exchange data principles, UNIX based applications and generation small script, Ericsson procedures.

Business/Human: Must have a flexible approach to change, good interpersonal skills within the team environment, with other Ericsson departments and with the customer, needs strong analytical and problem solving skills and a focus on quality.

Ideal background/experience: 2 years experience of Data Transcript AXE 10 environment, or proven testing/support/switching experience. Computer literate. Willing to travel in UK or abroad if required.

Contact: Michael Chance

Ericsson Eurolab Deutschland GmbH, Aachen

AMC PROJECT ADMINISTRATOR

The AMC Project office has a dynamic group of overall project managers and administrators managing key projects at the core of all mobile applications. These projects encompass subprojects and associated projects in Holland, USA, Ireland, Finland, Sweden, Norway, England, Spain, Italy Germany and Greece covering a vast range of development areas at the leading edge of technology. The project office is located at Herzogenrath.

● The general responsibility of this position is to assist the main project manager and to see to it that the project adheres to the established working methods and economics routines. The main authorities are: structuring, planning, controlling and following-up of project activities, time resources & costs, preparing of project administrative documents

and reports, co-ordinating information as project minutes, librarian, Kick-off/out, news letters, binders, etc. contacts and co-operation with project members and other Ericsson personnel

As a suitable candidate you should have at least one year experience in project or line administration. Previous experience in the AXE-10 design process, related project management skills and knowledge of standard UNIX applications programs (EXCEL, Power-Point, etc.) is beneficial, too. Fluent in English and inspirational as a team member.

In this position you will need initiative, very good communication and co-operation skills as well as a good ability to work under pressure. Travelling to our co-operating subsidiaries will also be needed from time to time.

The project administrator reports directly to the AMC Project Office Manager.

Contact: EED/H/R Doerte Kaulard, Memo-Id: EED.EEDDKA, Tel.: +49 2407-575-163 or EED/U/OPC Imo Freese, Memo-Id: EED.EEDIWF, Tel.: +49 2407-575-469

Nippon Ericsson K.K., Tokyo

New positions at Nippon Ericsson for 3rd generation mobile systems

Ericsson is taking a very active role in the development of 3rd generation mobile systems, in ITU called IMT-2000. Since Japan is taking the lead in the development and standardization of IMT-2000, it is very important for Ericsson to be present in Japan and to actively take part in the Japanese activities. Earlier this year Ericsson has been selected as vendor to two operators in Japan who are setting up W-CDMA experimental systems, NTT DoCoMo and Japan Telecom. These will be the first IMT-2000 experimental systems for wireless wideband multimedia in the world.

The unit for Wideband Cellular Systems at Nippon Ericsson is responsible for Ericsson's product management and standardization activities in Japan related to IMT-2000, both with respect to the W-CDMA experimental systems and future commercial IMT-2000 systems, as well as the IMT-2000 standardization work.

The work in Japan is now expanding and therefore we are looking for the following highly qualified personnel to join our unit:

PRODUCT MANAGER - PACKET DATA (1)

● Responsible for packet data standardization and product management regarding packet data for third generation mobile systems in Japan. This position requires deep competence on packet data solutions for second generation mobile systems (preferably GPRS). Knowledge on TCP/IP is an advantage. We may recruit two product managers for this area, one focusing on air interface issues and the other focusing on network related matters.

PRODUCT MANAGER - CODECS (2)

● Responsible for speech and video codecs standardization in ARIB and product management for W-CDMA experimental systems and future commercial IMT-2000 systems. This position requires several years of experience from working with e.g. speech codecs, either development or standardization.

PRODUCT MANAGER - RADIO NETWORK CONTROL (3)

● Responsible for radio resource management related standardization in ARIB and product management for W-CDMA experimental systems and future commercial IMT-2000 systems. This position requires several years of experience from working with radio resource management for cellular systems e.g. PDC, D-AMPS, GSM or W-CDMA.

PRODUCT MANAGER - RADIO ACCESS SYSTEMS (4)

● Product Manager working with BTS issues for the W-CDMA experimental systems and future commercial IMT-2000 systems. This position requires 5 years of experience from MBS development or product management for PDC, GSM or D-AMPS.

PRODUCT MANAGER - RADIO INTERFACE, LAYER 1 (5)

● Responsible for radio interface standardization and related issues for the W-CDMA experimental systems as well as future commercial IMT-2000 systems. This position requires minimum 5 years of research and/or development of radio interface technologies and at least two years experience of W-CDMA.

PRODUCT MANAGER - TERMINAL RELATED STANDARDISATION (6)

● Responsible for the technical requirements for mobile terminal to be standardized in ARIB and related issues for the W-CDMA experimental systems as well as for future commercial IMT-2000 systems.

This position requires minimum 5 years of research, standardization and/or development of mobile terminals for GSM, D-AMPS, or PDC.

RESEARCHER W-CDMA (7)

● Researcher in layer 1 structure, receiver technologies and/or radio network algorithms. You should have several years of experience from research or development of radio interface technologies and good knowledge of CDMA.

PRODUCT MANAGER - SWITCHING SYSTEMS (8)

● You will be working with the core network part of the W-CDMA experimental system and future commercial IMT-2000 systems, as well as with core network standardization. This position requires several years of experience from working with mobile systems, preferably GSM. Competence on e.g. Mobility Management and Call Control protocols is valuable.

PROJECT MANAGER

- W-CDMA EXPERIMENTS (9)

● You will plan and execute the experiments together with our customer and the home organization. This position requires several years of experience from field experiments for cellular systems. Experience from work with radio network planning is highly valuable.

Contact positions 1-7: Håkan Ohlén, Senior Manager Phone:+81 3 3222 4361. Memo: NRJ.NR-JHOHL E-mail: hakan.ohlén@nrj.ericsson.se Positions 1 and 8: Thomas Rex, Senior Manager Phone:+81 3 3222 4348. Memo: NRJ.NRJTREX E-mail: thomas.rex@nrj.ericsson.se Positions 9: Mikael Halén, Senior Manager Phone:+81 3 3222 4399. Memo: NRJ.NRJIHA E-mail: mikael.halén@nrj.ericsson.se

Ericsson Eurolab Deutschland GmbH, Aachen

EED's PAX System House is looking for a

TCM TESTER/SENIOR TCM TESTER,

● The EED/X/50 section within our PAX system house is responsible for Product Line Configuration Management for CME20 Switching Systems. We provide test configuration management for CME20 design projects from feasibility through GA. Additionally, the section is responsible for support of testing in the simulated environment for CME20 test and design maintenance activities.

The Test Bed Integration group is responsible for the assembly, documentation and delivery of target machine and emulator testbeds for Product Area Switching (PAX) and AXE Mobile Core (AMC) development projects between start of function test execution (MS7) and General Availability (GA) of the CME20 Switching System Product Line. TCM test is integral to these projects to ensure reference and working dumps are available for projects under test with the correct software configuration.

The tasks will center on assembling reference dumps and function change of working dumps for CME20 test projects. Loading and documentation of CM's during INDUS and type acceptance phases is required, and CME20 operations and maintenance tasks are included in the duties related to support of the local test plant at EED. Trouble shooting of faults detected during dump assembly or function change is often necessary.

We are looking for someone with AXE testing experience. You should have the ability to work well on a highly motivated team and to work well under strict time pressure.

The position is to be filled as soon as possible. If taking this challenge seems interesting to you please contact your colleagues

Contact: Human Resources Doerte Kaulard +49 2407 575 163 Memo:eed.eeddka or Group Manager Stefan Poesch +49 2407 575 347 Memo: eed.eedstp

Ericsson Telecommunications Romania S.R.L - ETR

1 BSS SUPPORT ENGINEER

1 OSS SUPPORT ENGINEER

● We are looking for Support Engineers to our Field Support Center for a long term contract (1 year) in Romania. The Field Support Center was established in May 1997.

You have a good knowledge of support activities, providing emergency and day to day support to the customers, by answering their queries, providing solutions and visiting sites.

You will play an active role in providing support and advice to the local engineers and build up the local competence.

You have 3-5 years of AXE experience, good knowledge of GSM system and trouble shooting skills.

Contact: Walid Alsheikh, phone +40 1 336 5705, memoid ETR.ETRWAAL Application: Walid Alsheikh, memoid or fax +40 1 336 5708

contact

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

German "Nobel Prize" to GSM guru

There is no specific Nobel Prize for engineers, but to regard the prestigious German Eduard Rhein Foundation Technology Award as such would not be entirely wrong. The prize, which was awarded a few weeks ago, went to three individuals who have had a significant impact on the success of GSM. One of them is Jan Uddenfeldt, technical director at Ericsson Radio Systems. The other two recipients are Thomas Haug of Telia and Heikki Huttunen of Nokia.

view the prize as confirmation of a significant Nordic industrial achievement. It is also an honor for all of those who have worked with GSM development at Ericsson," says Jan Uddenfeldt.

The Eduard Rhein Foundation Technology award was established 21 years ago by the German scientist, engineer and inventor, Professor Eduard Rhein in Hamburg. Successful commercial products that have previously received the award include the micro-computer and the smart card.

"It's gratifying that the telecom industry, and particularly the successes of the Nordic countries have received such recognition," says Jan. His GSM contributions are mostly systems-related, while Thomas Haug was awarded for his work on the standardization committee and Heikki Huttunen for his work with the GSM telephone.

Doctor of Technology

Jan came to Svenska Radio AB (SRA), the present Ericsson Radio Systems, in 1978 as a recent Doctor of Technology from the Royal Institute of Technology in Stockholm. At this time, Sven-Olof Öhrvik, SRA's head of development, had begun working on digital mobile telephony.

"Working with him was a great inspiration. Many ideas were tested before the first test system was ready in 1984," Jan recalls.

However, he does not agree that he is the "father" of the GSM system.

"There were several of us working together. We did everything ourselves," he says, remembering the very first test in 1984. It was not very suc-



cessful, so we had to develop fundamentally new principles so that the TDMA system (Time Division Multiple Access) would function properly.

The Eduard Rhein prize recognizes GSM, but in fact, Jan Uddenfeldt and his colleagues have been just as active in developing the two other digital mobile standards, D-AMPS and PDC. Ericsson is also the only company that has developed systems for these three world standards.

Creative climate

Does the creative atmosphere that once prevailed when Jan joined Ericsson still exist? He doesn't need to think for more than a moment before he nods and answers.

"Despite the fact that the company is infinitely larger today, I believe that we have a creative climate. However, we must be on our guard so that bureaucracy doesn't expand unnecessarily, choking creative efforts. An excellent example that illustrates how we are not stuck in our organization is the altered technology organization put in place early this year. In a very short amount of time and with great success,

"It's gratifying that the telecom industry, and particularly the successes of the Nordic countries have received such recognition," says Jan Uddenfeldt.

Photo: ANDERS ANJOU

we reorganized radio base development, which affected about 1,500 employees. For many, this has entailed new and challenging assignments."

According to Jan, development tends to follow ten-year cycles. In 1981, the NMT system entered the scene, followed in 1991 by GSM. What can we expect in 2001?

"The difference between fixed and mobile telephony will diminish. The next generation of mobile systems will be able to handle Internet, multimedia and video. We are already on our way with a test system that is scheduled for delivery to the Japanese operator NTT DoCoMo early next year. It's essential that we always are on the forefront in terms of research and development," he emphasizes.

It is not difficult to understand that for Jan and his colleagues, the future after 2001 is already here.

GUNILLA TAMM

end line

History repeats itself

Well, it's happened again. Just like the last time. Right after the deadline for Ericsson employees to subscribe for convertible debentures in the company, the stock markets crashed. The same thing happened in 1987. And just like ten years ago, many of those who declared themselves ready to invest in the company's future growth and the expected value increase of its shares now must ask themselves, "What have I got myself into?"

Stay calm, say several colleagues with good memories. The stock market looked just as bleak on "Black Monday" in November, 1987, but five years later – when that year's convertibles could be exchanged for shares – the value of their initial investment had increased several times over. Even though the crystal ball can't yet reveal if the stock market trend will be as favorable this time around, most indications point to the convertible offer as being an opportunity rather than a "trap," as a few stray pessimists have been muttering under their breath lately.

Just look at Ericsson's earnings trend!

The company is experiencing record-breaking highs. With the fourth quarter left to go – traditionally the strongest for the telecom industry – Ericsson's profit for 1997 is nearly as high as for all of 1996! It was just Ericsson's bad luck that the stock market in Hong Kong should collapse the same day the interim report was published. Instead of a well-deserved pat on the back from the stock market, the company got its share of the general nervousness that had temporarily overcome the players on the world's trading floors.

Many of us stock market amateurs wonder why the so-called market can't keep a cool head. It's not particularly reassuring that world economic development hinges so strongly on how these insecure and easily frightened traders react on a day-to-day basis.

Since the initial collapse, news broadcasts teetered back and forth between standing ovations on Wall Street and despondent traders tearing their hair out. My advice is for all traders to go into therapy – it seems as though they need psychological reinforcement!

It can be stated, however, that the stock markets' computer systems – in many instances delivered by Ericsson – are up to par, even though the number of transactions is incredibly high. This is a good thing for traders, who earn a commission on each transaction. Perhaps we have neglected to inform them that without telecommunications and computer networks from Ericsson, there would be substantial dents in their commissions. Perhaps then they could show some thanks and allow our shares to step off the market roller coaster. But on the other hand, a roller coaster can be quite fun, as long as you're sure you can get off in one piece.



LARS-GÖRAN HEDIN