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Ericsson
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More than 3,000 visitors gathered at the Globe Arena in Stockholm on March 31 – a new record for an Ericsson Annual General Meeting. Several issues were examined: an upcoming share split, election of two new board members, discussions over voting rights for series A and B shares, and skepticism about the new London office. Photo: Lars Åström

Record attendance at Ericsson AGM

Ericsson's Annual General Meeting, held in the Globe Arena on March 31, highlighted a successful year and good prospects for the future. CEO Lars Ramqvist announced when he will turn his position over to President Kurt Hellström.

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Microswitch rental in the Asian republic of Kyrgyzstan will give their market a helping hand. Photo: Ulrika Nybäck

Switch rentals provide new options

Currently, one billion of the world's inhabitants have access to a telephone. Now Ericsson is focusing on the next billion those who do not yet have telephone access. Kyrgyzstan is one of the developing countries in

question. A new business concept, involving microswitch rentals to operators who, as yet, are unable to afford purchasing a new system, is helping them get started.

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NEWS

World's smallest satellite phone

Ericsson's new combination GSM and satellite phone, R190, has made its inaugural call via the ACeS satellite, which covers Asia and the Pacific Ocean region.

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Operators unit reorganizing

Roughly 550 employees will be directly affected by a new initiative being taken within the Network Operators business segment. The GSM Systems business unit and the WCDMA Systems project unit are being reorganized to strengthen the focus on GPRS and WCDMA.

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MINI-LINK BAS is an improvement over traditional radio links.

Broadband airs with new system

Ericsson spent three years developing a new solution to provide wireless broadband service. The system, called MINI-LINK BAS, is a point-to-multipoint solution. This means that several radio links can communicate with one transmitter simultaneously.

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3G technology under test

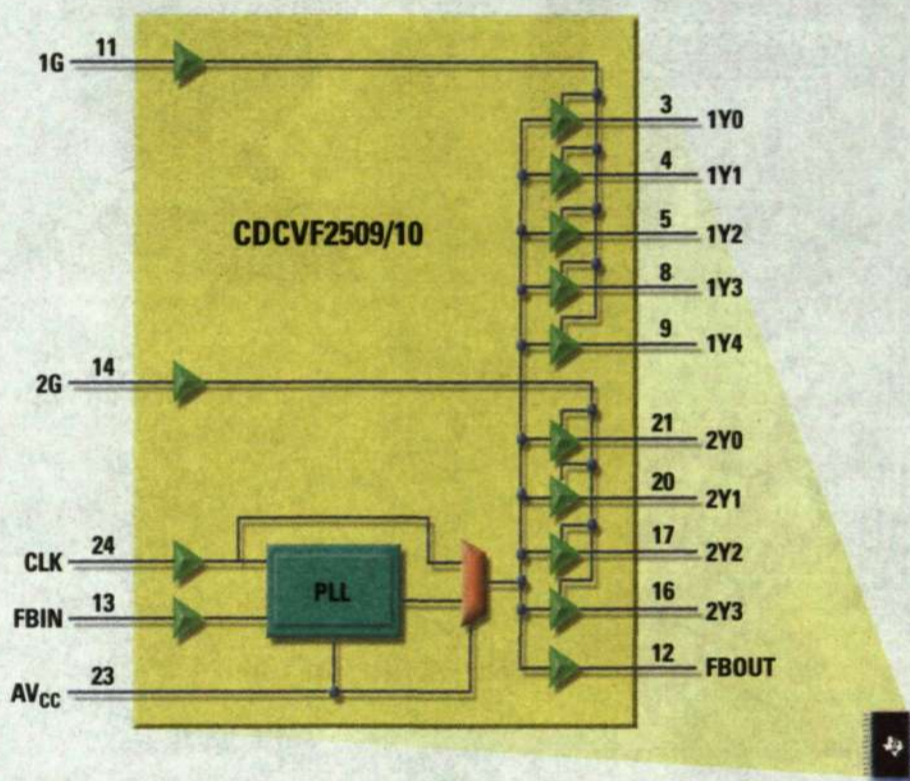
Ericsson Research in Montreal maintains an experimental WCDMA system. Of Ericsson's 17 experimental systems around the world, this one is unique in that it operates on the PCS 1900 MHz band.

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How do men and women differ in their mobile phone habits?

HIGH-SPEED, LOW-POWER CDCs EXCEED PC-133 BUS STANDARDS.



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Higher priority on 'being first'

Ericsson has to realign its priorities. Being first has never been more important than it is today, says Kurt Hellström, President of Ericsson. He also presents the company's goals for the next few years and explains how Ericsson will pay better for the most qualified personnel in different markets.

It was a little more than one month ago when Kurt Hellström announced Ericsson's newly formulated quest: "Be first. Be best. Be cost effective." It may seem self-evident at first glance, but a more clearly defined priority is expressed in this seemingly simplified objective.

"Ericsson has not always addressed timing with any significant degree of sanctity. Our culture has been predicated on doing everything we do perfectly, but it's been OK if we haven't always finished on time," says Kurt Hellström.

This pattern is one of the reasons behind some of the delays Ericsson has experienced in efforts to launch new products during recent years.

"At times, Ericsson focuses too strongly on technology. The same has been true of large national operators, which have been Ericsson's most important customers for many years. There has been a spirit of mutual understanding that technology is paramount."

"Ericsson has a very large number of highly skilled engineers. They represent one of our greatest strengths. Everybody, however, should be aware of this pattern so that we do not allow technology to assume total control. Customer value and innovation need more space.

"Today's realities are different, compared with just a few years ago. We serve other customers today, customers with different values and a completely different financial reality," continues Kurt Hellström, who has spent more than half of his professional career in Ericsson working with sales and marketing.

Ericsson is one of the world's leading companies in the Internet and telecom sectors. To become even better and develop important new products and services, it's essential that we get our priorities right, according to Kurt Hellström. And the most important factor, he says, is to be the first company on the market with new products and solutions. It is also important, naturally, for Ericsson to offer the best products and maintain its good relations with customers. And to survive and prosper over the long term, we must become more cost effective.

Customers are the primary focal point

"I read an article recently about WAP. Nokia was the only manufacturer mentioned by name. Ericsson's technology is at least as good, and we have introduced more WAP telephones. But Nokia was the first company on the market. There is a risk, accordingly, that Nokia will automatically be linked with WAP. In this respect, we still have a great deal to learn."

For people who have met Kurt Hellström, there is no doubt that customers are the primary



Be first. Be best. Be cost effective. These are Ericsson's new priorities, says Kurt Hellström, President of Ericsson. Photo: Lars Åström

ry focal point of his attention. He has very little time for internal bureaucracy and other forms of red tape that do not directly generate customer value.

"Attitudes characterized by such statements as 'we have always done it this way' are just about the last thing I want to hear."

He believes Ericsson employees need to be little more self-critical. Everybody should ask themselves if what they're doing is really necessary. Does it produce beneficial results? Does it create value for customers?

One example of simpler routines and less bureaucracy is the reduction in the number of reports. In the past, management received a very large number of highly detailed reports from different parts of the organization.

"Nobody has time to read everything, and it's difficult to absorb and retain large amounts of detailed information. We have to ask ourselves what is really important to know and understand. If some information is lacking, just ask somebody to provide it," says Kurt Hellström.

Nine months as President

Kurt Hellström has been President of Ericsson for nine months, and he has grown accustomed to the various aspects of the job. He says everything has proceeded more or less as he expected. He has become a public figure, a man constantly being approached by the media and recognized on the street.

"When I accepted the job as President of Ericsson, I was certainly not interested in the celebrity aspect, but I realize it's a natural consequence. People walk up to me in airports and hotels just to say hello. Some of them don't even know who I am, but they recognize me."

Despite his position as President of one of the largest companies in the world, and his celebrity status, Kurt Hellström's life does not revolve solely around Ericsson.

"Maintaining a private life is essential in order to handle a job like this."

He has established several clearly defined goals for Ericsson during the next few years. Ericsson will be number one in mobile systems, both in telephony and the mobile Internet. Ericsson will be number two in telephones and terminals. And Ericsson will be number three in MultiService Networks.

"In terms of mobile systems, we already are number one today, a position we intend to defend," says Kurt Hellström.

"Nokia and Motorola are ahead of us in terms of market share for mobile telephones and terminals. During the next few years, however, Ericsson will become number two in this market. The market for MultiService Networks has not yet reached full maturity, but we are competing today against the likes of Nortel and Lucent."

Some might think these goals are passive or defensive, and that Ericsson should strive to be number one in all three areas. But Kurt Hellström believes Ericsson's goals must be realistic.

"As soon as we approach one of our goals, we raise the bar a little higher. Goals should be achievable within reasonable periods of time."

Generally satisfied

Ericsson is a company that is watched carefully today by many different centers of interest, particularly the stock market. Since Kurt Hellström was appointed President, the company's shares have performed extremely well.

"I don't fully understand how or why stock

markets react in all situations. But our communication with the financial markets has definitely become clearer and more precise. The secret is to promise enough and then fulfill the promise."

Kurt Hellström is generally satisfied with Ericsson's present position. He doesn't lose too much sleep worrying about the company.

"Ericsson is characterized today by strong growth and, naturally, there are certain problem areas that need to be addressed. But if that were not the case, there would be no need for management. It is important that as we grow, we constantly remain aware of our position in relation to our customers and employees."

Mobile Internet services and third-generation (3G) mobile telephony are Ericsson's primary focal areas. Several years of development work are beginning to yield dividends. Ericsson, in fact, has booked the world's first 3G orders.

"Whenever a company is totally engrossed in a major project, such as the development of 3G, it is difficult at times to envision the end result. We faced the same phenomenon during the transition from analog to digital systems. There were many years of hard work before we could see the results. But when GSM was introduced, no company was better prepared than Ericsson. I believe we are seeing the same sort of transition with 3G," Kurt Hellström says.

"A large number of Ericsson employees have worked very hard on this development project. It is extremely gratifying to see their efforts bear fruit."

Salary based on performance

Kurt Hellström has several thoughts on the subject of goals for Ericsson's employees.

"We have conducted a study to examine Ericsson's salary standards in different markets. In many cases, the study showed that our salaries were at the lower end of the scale in terms of remuneration for top talents. We are now in the process of making appropriate changes."

Ericsson should have salary levels in the top one-quarter of the salaries paid to top talent in the respective markets. Salary, however, isn't the only factor to consider. The overall compensation package also includes stock options and bonus programs.

"Stock options are one alternative. In the US, for example, it's almost impossible to conduct any form of business today without offering the employees stock options."

Kurt Hellström wants as many employees as possible to be rewarded in relation to how they perform. He advocates a fixed salary plus variable bonuses and incentives that employees have the power to influence.

"But it's important that all goals are clearly defined and easy to gauge. Bonuses must never be looked upon as automatic payments that are routinely distributed to employees."

"I am convinced that most of our employees want clearly defined requirements and goals for their jobs."

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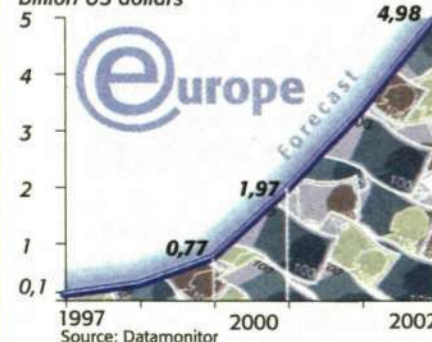
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DID YOU KNOW THAT...

private consumption at European websites is expected to double within two years

Internet purchasing in Europe 1997-2002
Billion US dollars



IN BRIEF

1993 convertibles should be cashed

► Those who loaned money for convertibles in 1993 – the loan was officially called Ericsson KV B 2 1993/2000 – need to request a conversion to B-shares at their bank no later than May 31.

The rules for convertible loans state that if they are not converted by May 31, the promissory note will be redeemed on June 30, 2000.

This means that if you have convertibles and do not redeem them within the appointed time, you will receive the same amount back that was invested, plus interest for the period February 15 to June 30 of this year.

In other words, you will not receive Ericsson B-shares.

Conversion can be requested at the bank or financial institution where the convertibles are registered or where you have your securities account.

Beewip broadband ready this spring

► Tele2 will begin offering its customers broadband services this spring, with the help of Ericsson's radio access system Beewip. Norwegians living in Oslo will become the first to surf at speeds of up to 3 Mbps using the Beewip system.

Radio communications are transmitted using packet data at a high frequency, 3.5 GHz.

"This is an exciting pilot project for us," says Henrik Ringmar, head of Tele2 in Norway.

The system is ideal for small to medium-sized companies.

See your friends on your cell phone

► Soon it will be possible to see the person you are talking or chatting with on your computer screen or WAP telephone display.

In a joint venture with White Pine Software, Ericsson will be implementing a video technology system for its iPulse solution. iPulse is Ericsson's communications portal that makes it possible to see where the person you are looking for is, such as at the computer or by a mobile phone.

"Using the CU-SeeMe technology, iPulse is at the cutting edge of options for continuous connections," says Harry Håkansson, of the Ericsson Interactive Communications product line.

MINI-LINK BAS now operational

► The first commercial system using Ericsson's MINI-LINK BAS has now been put into operation by the Nordic operator ElTele.

The new radio access system is optimized for IP services, offering speeds of up to 37.5 megabits per second.

With this point-to-multipoint system, companies can quickly and easily gain broadband access and create Internet and intranet connections.

Microwave links can handle broadband-intensive IP services and multimedia applications very effectively. Broadband capacity can be redirected in real-time to those connection points where it is needed most.

First call placed over new satellite network

Now it will be easier to place calls from uninhabited places in Asia and the Pacific Ocean region. The first call was recently placed over the new ACeS satellite, using Ericsson's R190 satellite telephone.

Ericsson's R190 is the smallest and lightest combination GSM and satellite telephone available on the market today, and will be launched during the second half of this year.

"Since the phone is just as small

as an ordinary GSM phone and even automatically switches between satellite communication and the GSM network, we believe that there will be a relatively large market, even if it is a niche phone," says Tord Nybleus, marketing manager for satellite telephones at the Consumer Products business segment.

In areas where the GSM network does not provide any coverage, the telephone will communicate with the new Asian Cellular Satellite network (ACeS), through a satellite situated high up in geostationary

orbit around the earth. When users enter an area that has GSM coverage, the mobile system automatically switches back to the land-based network.

"It's also possible to remove the snap-on satellite antenna when calling from an area with GSM coverage. Ericsson can now truly live up to its goal of providing people with the opportunity of communicating no matter where they are," says Tord Nybleus.

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Ericsson's R190 is the world's smallest and lightest satellite telephone. The first satellite call was recently made on a new network.

IT platform will increase sales

Within three years, half of Ericsson's products and systems will be sold over the Internet.

Consequently, Ericsson is developing a common IT platform for all communications and commerce – Ericsson.com.

Within the realm of the Internet, Ericsson has many faces – and too many of those websites look completely different.

That will soon change with the new IT platform, Ericsson.com, which is being created to present a uniform image to the outside world.

The first step in the e-business platform program is to create an operational, user-friendly sales platform.

Ingemar Bergman is the project manager for the program at the e-business unit at IT services in Stockholm.

"Using a homepage, which will have a straightforward navigational structure and a good search engine, customers will be able to easily find the appropriate unit, product, news or information that they are looking for," says Ingemar Bergman.

Share with everyone

According to Ericsson President Kurt Hellström, half of all Ericsson systems and products will be sold over the Internet by the year 2003.

The goal is for Ericsson's websites and systems to be integrated into a single platform, including Zopps, Infocenter, Developer's Zone, SAP R/3, literally everything.

"We can't keep reinventing the wheel every time. If one unit has developed a WAP service and a good testing method for it, then all Ericsson companies, and eventually all their customers, should be able to have access to it," explains Ingemar Bergman.

"Starting in June, market units will be able to develop services themselves using the platform for support."

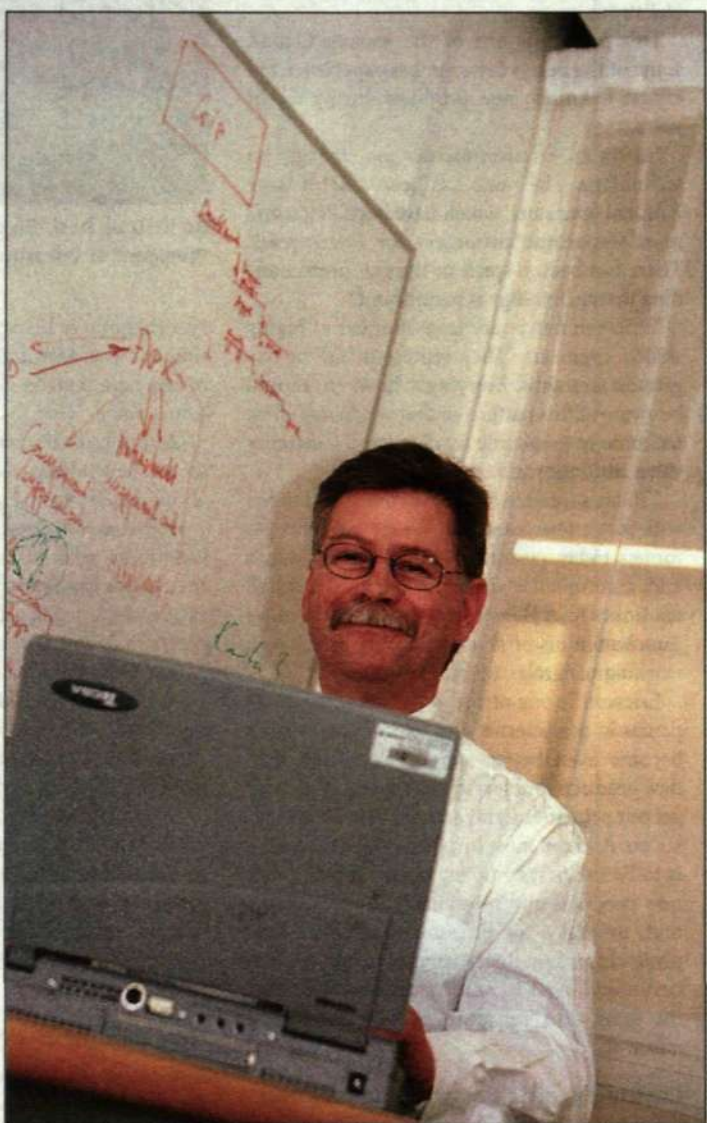
Currently, certain units are selling a large portion of their systems via the Internet, and as the program progresses, they will be incorporated into the new format.

Ready in two years

The platform is being developed in conjunction with IBM, and a preliminary version is already being tested and evaluated by the Enterprise Solutions business segment and some of its customers.

The new IT platform is expected to be ready in April 2002, although "ready" can be a relative concept in the IT world.

"We don't even know what kind of services will be in demand in 2002, but in order to be able to integrate all our websites and systems, and create a common user interface, I believe that we'll need about two years. To start with,



Within three years, half of all Ericsson sales will be conducted over the Internet. To meet that demand, a new IT platform is being developed as a portal to the company. Ingemar Bergman is one of the people responsible for overseeing the work. Photo: Ulrika Nybäck

Ericsson's established customers will be using the platform, but within two years, we believe that all customers who wish to purchase systems and products over the

Internet will be able to do so," says Ingemar Bergman.

Ulrika Nybäck

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Venture capital firm for mobile Internet in Asia

Asia is a hot market for mobile Internet. That's why Ericsson is forming a joint venture capital company together with Investor and Hutchison Whampoa to develop mobile telecommunications in the region.

The three companies are acquiring a majority interest in the Hong Kong listed company, Guoco Land Limited, in order to develop it into a venture capital company under a

new name. Altogether, the three companies are investing approximately SEK 1.5 billion (USD 177 million) in the new company.

"Mobile Internet is growing rapidly all over the world, and Asia will be a key area of development. We're very happy about this new collaboration and the chance to be able to develop new innovations and solutions at all levels in this new and exciting industry," says Ericsson President Kurt Hellström about the venture.

Hutchison Whampoa is Hong Kong's largest multinational company and a hot name in the Asian market. The collaboration with Ericsson and Investor means a strong alliance in the development of telecommunications and the Internet within the region.

There are more mobile phones than personal computers in Asia, and with the economic developments in the region, there are clear signs that mobile Internet applications will be a success.

Investor, Sweden's largest holding company, has also made other major investments in new technology recently. The company, together with ABB, is a key investor in the venture capital company B-business Partners, which plans to invest in e-business throughout Europe. Altogether, the new company will receive approximately SEK 8.3 billion in capital.

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Record GSM-order from China

Ericsson has received its largest order ever for a GSM expansion in China. The Guangdong Mobile Communications Co. Ltd. (GMCC) has signed a contract for the sixth expansion of its GSM system, ordering infrastructure equipment, software and services totalling SEK 5.4 billion.

Upon completion of the expansion project early next year, the capacity of GMCC's dual band GSM 900/1800 MHz network will exceed 18 million subscribers. This is the

largest GSM expansion project in China to date.

China picking up speed

"The order confirms the strong growth potential that exists within the Chinese market, and the size of the order is proof that investments are picking up speed again," said Ericsson President Kurt Hellström at a press conference held in Hong Kong, where the multi-million dollar order was announced.

Ericsson will be delivering a new version of the GSM system, R8, which is ready for GPRS and the

evolution to 3G. All equipment will be provided by Nanjing Ericsson Communications Company Ltd., Ericsson's largest joint venture in China. Deliveries will commence in April and continue throughout the rest of the year. In addition to infrastructure equipment, the contract also includes software and services.

First GSM system in 1993

Guangdong province has one of China's most advanced telecommunications networks. As early as 1987, GMCC ordered equipment from Ericsson for its analog TACS system.



China is expanding its GSM network again.

Photo: Lars Åström

In December 1993, the operator placed its first order for a GSM system, which Ericsson also supplied.

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E-business a success for operators

Operators will be the big short-term winners when wireless e-business takes off. It will, of course, also benefit Ericsson.

That became clear at a press conference in London this week with partners, customers and other players in the banking and finance industries.

"We're anticipating a significant increase in the future once the use of WAP services catches on," says Eivind Kristoffersen of the Norwegian operator Telenor Mobile Future.

During the conference, which was held at Ericsson's London office, Telenor explained its views on mobile Internet along with Visa and SEB, which demonstrated how the bank's WAP service operates – a service that was developed in collaboration with Ericsson. Representatives from the American bank Citigroup also participated in the conference.

The major short-term advantage for operators will be the payment structure in place for mobile phone calls. Per minute fees together with slow transmission speeds will translate into a significant source of income. Consequently, SEB has designed its services for consumers who have plenty of money but are short on time.

"The services will be expensive to use due to mobile phone costs," says Johan H Larsson, head of SEB's Internet bank.

As services become more efficient and an anticipated drop in mobile phone rates occurs, a broader range of consumers will be able to take advantage of the offerings.

A great deal of attention has been paid to the roles of various market players. According to Eivind Kristoffersen, however, this won't result in operators expanding their operations to become service providers as well.

"On the other hand, core operations will shift in a competitive market, and it will be important to keep up with the changes," says Eivind Kristoffersen.

New business models will evolve with future generations of mobile Internet.

"Nobody knows what kind of payment models will come along with GPRS, for example, but it is clear that mobile services will create a new Internet that will be bigger than the 'old' Internet," says Jan Lindgren, head of Mobile Internet Solutions at Ericsson Radio Systems.

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Mobile e-business will involve new business models for operators, according to Eivind Kristoffersen of the Norwegian operator Telenor Mobile Future.

Photo: Lars Åström

Get Insp(w)ired hits the road

Wireline Systems is inviting customers around the world to see its roadshow, Get Insp(w)ired.

The program showcases Engine – Ericsson's Next Generation Multi-Service Network for fixed telephone networks. Last week, the show made a stop in Madrid where it attracted 300 customers.

The music and dance event has been warmly received around the world by customers, journalists and analysts.

Following a Get Insp(w)ired show, the banking group Crédit Suisse First in Boston, in the US, upgraded its Ericsson forecast, while the Lehman Brothers analyst group wrote: "The new Engine portfolio offers a powerful building block."

Internet primary focus

The Engine concept consists of an unlimited number of building blocks designed to meet communication needs of the future – needs that the invited Spanish and Portuguese operators have only recently become aware of.

"The Internet will be the main focus in the future. For the younger generation, it's a natural component," says Luis Fernandez, Manager for Transport Technology at Telefónica.

"What we as operators need to do is to notice these needs and make sure that we can deliver everything from ordinary telephony to various Internet-based services that are in demand."

"We believe in the Engine concept, which we have already invested in,



Get Insp(w)ired is a lively, inspiring presentation about wireline telephone networks of the future. The show was recently presented in Madrid where it drew great attention from customers, journalists and analysts.

Photo: Björn Andrén

and from our experiences with Ericsson, I see them as a natural partner in the future as well," says Luis Fernandez.

An exciting journey

The lively dance and film show Get Insp(w)ired presents Wireline Systems and its new solutions along with the future needs of users, taking visitors on an historical and futuristic journey.

The show concludes with a demonstration of Engine and all of its components.

So far, Get Insp(w)ired has visited Paris, London, New York, Stockholm, Madrid and São Paulo. Several more locations are in line for

a visit, with Rome and Beijing/Hong Kong the next destinations.

Jonas Åblad

freelance journalist

WIRELINE NETWORKS

In January 1999, Ericsson and BT signed the world's first contract for a next-generation wireline network. Since then, several other Engine contracts have been signed. Included among them are contracts with KPN International Network Services, Telefónica, Dignet America and Telia Danmark.

Engine is a concept for next-generation wireline networks.

An Engine solution is a combination of circuit-switched and packet-switched products and services, effectively supporting operators which are making the transition to multiservice networks.

Organizational changes at Network Operators

The GSM Systems business unit and WCDMA Systems project unit, both part of the Network Operators business segment, are being reorganized.

Changes are being made to strengthen work on GPRS and WCDMA – the new generation of mobile systems.

Approximately 550 people will be

directly affected by the reorganization, which will take effect April 10.

Three new units will be formed: Strategic Business Solutions, headed by Per Nordlöf; the Core Network Mobile Systems product unit, headed by Roland Fors; and First Customer Projects WCDMA, with Mats Köhlmark as acting manager.

Core Network Mobile Systems, the new product unit, will report

directly to the head of the segment since it will be shared by several different radio accesses.

The other two new units will sort under the GSM Systems business unit.

All three of the new units will be staffed with employees from the WCDMA Systems, Circuit Switching Systems, and Packet Switching Systems product units, as well as em-

ployees from the Strategy and Systems Management unit within GSM Systems.

This new organization will also improve collaboration with Ericsson's local design offices.

Gunilla Tamm

networkoperators.ericsson.se/organization/changes/

Young investors at General Meeting

At the last minute, the venue was changed to the Globe Arena in order to accommodate nearly 5,000 registrants. Never before has there been so much interest in Ericsson's Annual General Meeting. In the midst of all the men and women in suits sat young representatives of a new generation of shareholders – two high school classes from Gothenburg who had traveled to Stockholm to learn more about Ericsson and the ups and downs of the shareholder world.

"Pros advise on best purchase! The ten safest shares!"

It is clear from the evening newspaper headlines that times have changed. No longer frowned upon, investing in shares is making a comeback, engaging the enthusiasm of ordinary citizens and sparking what some would say is a people's revolution. Revolution or no, it is impossible to overlook the enormous interest that investing has generated. Few nations have as widespread ownership in shares as Sweden.

The Young Share Investors Association tries to drum up interest in share investing among the younger generation. With 23,000 members and nearly 50 local chapters around Sweden, the association seems to be doing quite well.

Education is at the foundation of its operations. Courses on the fundamentals of share investing are offered to students in high school, providing them with insights into the potential benefits and risks of investing in shares. Every class that participates in the program is teamed up with a sponsor company. According to program director Håkan Lysander, interest in

the program is great among both companies and schools.

"We want to present the world of shares in a youthful and interesting manner. We've partially done that by choosing companies within the IT and biotechnology industries – areas that interest young people", he says.

Ericsson is one of the companies that have jumped at the opportunity. The company has cooperated directly with the Young Share Investors Association and through sponsorship of classes in Gothenburg and Kumla. As part of the company's cooperation with the schools, students were invited on a field trip to Ericsson and to attend the General Meeting.

"Sure, it's in our interest that young people are educated about investing in shares, but that's not the primary motivation for our involvement", says Helene Rickeby at Investor Relations.

"For us, it's mostly about spreading information about Ericsson, to get the younger generation interested in our operations".

Two of the classes that Ericsson sponsors attended this year's Annual General Meeting, both from the Sigrid Rudebeck high school in Gothenburg. Following the field trip to Ericsson, the 60 students sat down in the Globe Arena to listen to management's assessment of the company's situation.

"The course by the Young Share Investors Association was helpful. Today, it's important to know how to invest in shares. Shares have become something that concerns everyone, not simply those who have money", says student Louise Ridell.

As part of the investment course, students in classes sponsored by Ericsson assembled a fictitious share portfolio containing five compa-



Many young investors participated in this year's General Meeting. Among them was a class of high school students from Gothenburg, including Lovisa Tenggren, Fredrika Gårdfeldt and Christina Berter who came to Stockholm to learn more about Ericsson and the world of investing.

Photo: Sofie Sabel

nies. Each class received 100,000 to invest, with the requirement that one of the investments be in Ericsson, the sponsor company.

So far, things have been going well. The students at the Sigrid Rudebeck school have made real finds. Most of their portfolios increased in value by nearly 50 percent in just a few months. The fund portfolio that experienced the most growth grew by 130 percent. Those results can be partially explained by Ericsson's stock market rally, but the students also invested carefully.

"Most of them chose companies within the IT and telecom sectors. After Ericsson, Nokia

was the most popular", says student Henrik Nikkilä.

With their newfound skills, the students have a favorable outlook for Ericsson's future. They have learned a great deal about the company and realized that the telecom industry is about much more than simply nice attractive phones. They are convinced that Ericsson will be a stock market winner in the future as well.

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www.ungaaktiesparare.se

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Meet the colleagues with the same interests!

Ericsson IPSec Competence Center, IPSecCC

Ericsson a big draw on Investor Day

"Ericsson has the resources to invest in its employees. And it also offers great opportunities for advancement and a career."

That's how Ericsson is perceived by students who attended Investor Day at the Stockholm convention center last week.

Each year, companies are invited by Investor, Sweden's largest industrial holding company, to participate in the Investor Day career fair.

The giants of heavy industry such as SKF and ABB, lined up alongside new IT companies, such as Bredbandsbolaget and many others, all of whom were competing for the attention of the 1,600 students in attendance. The Ericsson display was so popular that it was difficult to get to it.

Large interest in trainee program

"There was a huge crush of people at the display all day", says Markus Schöld, wearing a white shirt with a WAP logo on the back.

On a normal day, he is involved the company's management trainee program.

"The first question you get is, 'what do you do,' and then we start talking about the trainee program. Many people are interested in it. They wonder what it involves and how you apply. The second and third most common questions are, 'can you work overseas' and 'how do you apply for a job here'", says Markus Schöld.

Hopes to win a telephone

I sit down beside a female student, Mia Hjälbo, who is responding to questions about Ericsson.

She hopes to win a T28 telephone by filling

out Ericsson's questionnaire. Mia Hjälbo is in her last year of a business law program at the University of Stockholm.

"I could absolutely envision myself working at Ericsson. I want to work at a large, serious, multinational company, and I believe that there are good opportunities for advancement there", she says.

An important day

Elinore Johansson and Helena Jönsson are both studying industrial economics at the Royal Institute of Technology in Stockholm.

"It's very interesting to hear about other peoples' work experiences. I met a guy in the display who had also studied industrial economics, and it was interesting to hear what kind of career paths are possible", says Helena Jönsson.

"The trainee program sounds exciting. It's fun to know that a company is investing in you, and as a trainee you get a good overview of the company", says Elinore Johansson.

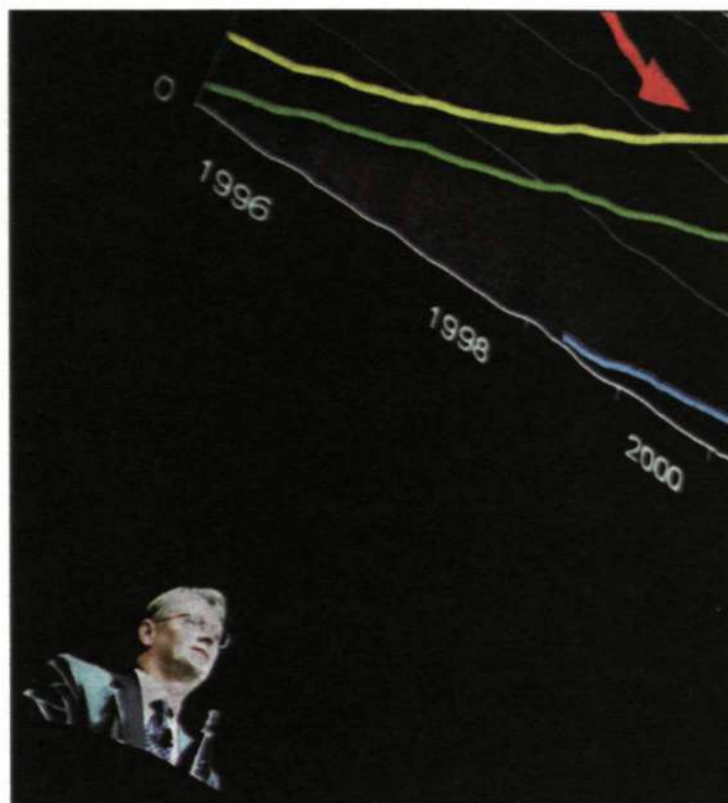
Both are in agreement that this kind of day is important – being able to listen to other peoples' experiences, form an opinion on different companies and make contacts.

Ericsson a favorite among students

"Contacts are everything. Now that we're in our last year at school, it really felt important to come here", says Elinore Johansson.

Statistically speaking, Ericsson is a favorite among students. According to the Company Barometer survey Ericsson is at the top of the list of companies that technology students would prefer working at.

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Kurt Hellström will be taking over as CEO at the end of the year, succeeding Lars Ramqvist. Another important announcement at the General Meeting is that a 4:1 share split will be implemented.

Photo: Lars Åström

Kurt Hellström to be new CEO

Lars Ramqvist will be stepping down from his position as CEO at the end of the year, turning the job over to Kurt Hellström. That news was disclosed during Ericsson's Annual General Meeting, held on March 31.

Ramqvist explained that he had originally agreed to be the CEO for 18 months, which would mean a change next year. He will gradually step down from his position.

The meeting decided to approve a 4:1 share split. Effective May 8, every Ericsson share will be divided into four shares, facilitating trade.

Nominal value of the new shares will be SEK 1 compared with the current SEK 2.50, which means total share capital will increase.

The meeting also decided to approve a plan for the company to

acquire its own shares, letting Ericsson buy shares in the company over the stock exchange.

This would provide the company with the ability to protect itself against financial exposures resulting from options issued.

Although currently not allowed in Sweden, the Swedish Parliament is expected to make a decision to permit such activity later this spring.

Two new board members were elected from outside Sweden: Niall FitzGerald and Eckhard Pfeiffer. Irishman Peter Sutherland was elected to the board in a previous election.

Niall FitzGerald is chairman of Unilever, the international household products conglomerate, and Eckhard Pfeiffer built up the Compaq computer company.

No women were elected to the

board. Lars Ramqvist noted that while there were no suitable female board candidates this year, he welcomed serious nominees in future years.

Skandia CEO Lars-Erik Pettersson resigned from his position on the board after being named chairman of the board for Telia.

Former Ericsson President Sven-Christer Nilsson also left the board since the last General Meeting. Current President Kurt Hellström will not be a member of the board.

Patrik Lindén

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More information about the Annual General Meeting can be found on:

webcast.ericsson.se/customers/lme/2000-03-31

Record number attends General Meeting

Ericsson's Annual General Meeting, held at the Stockholm Globe Arena last Friday, was a well-attended event. Over 5,000 people were preregistered.

That the meeting was held in the Globe Arena shows that Ericsson is in the same league as the Eurovision song contest, an ice hockey tournament or a Pavarotti concert – three other events that also have been held at Stockholm's largest arena.

More than 3,000 people were present at the Globe Arena, choosing to spend their Friday evening attending the General Meeting.

Before the meeting itself was convened, a moment of silence was held for recently deceased Hans Werthén. He was a board member from 1981 to 1990, and an employee at Ericsson between 1959 and 1967.

The issue that took up the most time during the meeting was whether or not to grant A and B shares equal voting rights. The issue was raised by shareholder Einar Hellbom.

The Meeting voted down the proposal, so A shares will continue to have one vote and B shares one-

thousandth of a vote in the future. However, five of the largest shareholders will investigate the consequences of allowing equal voting rights for all shares.

In addition to Einar Hellbom, Skandia was also supportive of the proposal for equal voting rights.

Currently, Wallenberg and Handelsbanken interests together control 81 percent of the votes and 9 percent of the shares. A change in voting rights would have major consequences for them.

Lars-Erik Forsgårdh, the president of Sweden's small shareholders' association, approves of the principle of one share – one vote, but also felt that Ericsson was an exception and that the company was better served by a stable ownership structure.

Many factors indicate that this was not the last time the issue will be raised.

Lars-Erik Forsgårdh also expressed his appreciation of the fact that Ericsson has increased and improved its financial information. He was skeptical about the London move and wondered what it cost.

Lars Ramqvist pointed out that the main office had not moved to London, only that it is one of four regional offices that Ericsson maintains.



More than 5,000 people preregistered for Ericsson's Annual General Meeting. Not everyone came. Still, over 3,000 did show up, making it Ericsson's best attended meeting ever.

Headquarters remain in Stockholm, while certain corporate functions are located in London.

In terms of cost, Ramqvist pointed out that all of Ericsson's properties are being sold and that Ericsson expects to profit from the sale.

Shareholder Sven Gavlevik posed the question to management of what they are doing to increase employee ownership in the company.

Lars Ramqvist and Kurt Hellström explained that 40,000 em-

ployees currently own convertibles in Ericsson and that 8,000 persons have options. They also stated that Ericsson would gladly expand employee ownership.

Patrik Lindén

Lars-Erik Forsgårdh felt that Ericsson should retain distinct voting rights for A and B shares.



Ericsson shares increase for ninth year in a row

Last year, 1999, was the ninth year in a row that Ericsson shares increased in value, jumping 183 percent in one year. The increase during the first quarter of the year was 40 percent. Not a bad investment, according to Lars Ramqvist in his speech to shareholders.

Lars Ramqvist also took the opportunity to point out what a large company Ericsson is.

Every workday, the company generates more than SEK 1 billion (approx. 116 million USD) in sales. During 1999, Ericsson spent SEK 33

billion in research and development. As a result, Ericsson alone accounts for 15 percent of Sweden's exports.

According to Lars Ramqvist, Ericsson is now a knowledge company with over 50,000 employees under the age of 35. Of these, 28,000 are under the age of 30.

President Kurt Hellström accounted for the company's strategic position.

"Our future looks very bright," he stated.

An increasing number of countries have more wireless phone subscribers than wireline subscribers, including Norway and Finland.

The forecasts for Internet and mobile telephony point strongly upwards and deliveries of third-generation mobile phone systems (3G) have commenced.

Within one year, more than 84 licenses for 3G will have been issued. Ericsson currently has 17 test systems in place around the world.

Things are not only going well on the wireless front. On the wireline side of business, Ericsson's Engine solutions have gone from zero to SEK 9 billion in sales in less than one year. Engine is Ericsson's solution for operators who want to migrate to IP traffic on a wireline network

without having to build up a whole new network.

Ericsson still retains a strong position when it comes to GPRS (General Packet Radio Services), a stepping stone to 3G that offers mobile IP traffic and significantly higher data transmission speeds than today.

In order to illustrate how rapidly the market is changing for Ericsson, Kurt Hellström cited New York as an example.

Mobile network traffic for Ericsson's customer, AT&T, increased by 500 percent in one year. That kind of growth places enormous demands on Ericsson to be a flexible supplier.

Ericsson CFO Sten Fornell thanked shareholders for their confidence in allowing Ericsson to manage their capital. He provided a financial account of 1999, as well as a forecast for the first quarter of this year, which concluded on the day of the Meeting.

"Earnings will be three times what they were during the first quarter last year, and sales are anticipated to increase by 30 percent," said Sten Fornell.

Ericsson's first quarter report will be presented on April 28.

Patrik Lindén

INDUSTRY NEWS



A diamond cut above the rest, Motorola's \$50,000 phone.

World's most expensive phone

► Do you feel like buying something really luxurious? Why not a diamond-studded mobile phone?

During the Oscars awards, Motorola unveiled the world's most expensive telephone ever. It is covered with two grams worth of 10-karat diamonds and can be yours for only USD 50,000. Motorola teamed up with Mondera.com to create the new telephone.

Analysts believe that there is a market for luxury telephones now that manufacturing costs for telephones are dropping. Moreover, they believe that it will become increasingly common for consumers to desire different phones for different occasions.

Cisco worth more than Microsoft

► Datacom company Cisco recently surpassed software giant Microsoft to become the world's most highly valued company in the stock market.

Although the margin between them is small, the change is viewed as a milestone in the transition from the PC era to the information age. Cisco is now worth approximately SEK 4,800 billion. Eighty percent of the world's computers are equipped with Microsoft operating systems. A similar percentage of today's Internet traffic is sent through routers manufactured by Cisco.

Costly licenses could delay 3G

► The UK is currently auctioning off licenses for third-generation mobile phone systems.

While it appears that the auction will be a real moneymaker for government coffers, it could mean that operators who obtain licenses will not have the funds to build their 3G networks at the pace they had planned. Another long-term consequence could be that operators will charge excessive fees for 3G services, resulting in a backlash for the entire telecom industry.

Orange has placed the highest bid so far (SEK 17 billion) among the thirteen operators participating.

Internet guru to OZ.COM

► Jeff Pulver, one of the founding fathers of IP telephony, has been named a board member of the American-Icelandic company, OZ.COM.

Ericsson is one of the main owners of the company, which develops and sells platform-independent solutions for mobile Internet.

"The strategic collaboration with Ericsson provides OZ.COM a key role within wireless Internet," says Jeff Pulver.

Motorola shuts down Iridium

Motorola was forced to shut down its satellite-based mobile phone system, Iridium, at the end of March due to a lack of profitability. Ericsson believes, however, that there is a market for satellite services and is collaborating with two companies in the field.

A total of 66 satellites, worth SEK 55 billion, will go up in smoke when Iridium LCC sets its satellites to reenter the earth's atmosphere.

Iridium has been attempting to save the project for some time, and several telephone companies have expressed an interest in becoming operators after Motorola, including the American telecom company Crescent Communications.

However, the deal was halted by the courts, which have been administering Iridium since the company declared bankruptcy last August.

When Iridium shut down last week, there were only 50,000 subscribers. In order to keep the company running, approximately one million subscribers would have been required.

Unpleasant surprise

With the bankruptcy of Iridium, Motorola was forced to shut down its satellite-based mobile phone services.

Swedish North Pole adventurers Göran Kropp and Ola Skinnarmo found this out the hard way when their telephone connection suddenly quit during the middle of a call as they were making a report on their journey.

A few days later, however, they



Ola Skinnarmo (right) is still able to make phone calls to the outside world using the Iridium mobile phone system. Motorola is attempting to maintain telephone service for people in remote areas. Göran Kropp was forced to quit his attempt to reach the North Pole due to a frostbitten thumb.

Photo: Pressens Bild/Fredrik Blomqvist

were again able to use their phone. Motorola is attempting to maintain telephone service for people in remote locations, according to the publication Ny Teknik.

Ericsson's satellite venture

Ericsson is collaborating with two satellite companies, Globalstar and ACeS.

"Both ACeS and Globalstar operate in a different manner than Iridium.

The former uses completely different technology and the latter partially different technology. Both have fewer satellites and a much greater chance of profiting from their operations," says Tord Nybleus, marketing manager for satellite phones at the Consumer Products business segment.

ACeS owns a single geostationary satellite (a satellite that is situated far away from the earth) and can

provide coverage for two thirds of the world's population.

Telephone quality reaches the same level as a system based on multiple satellites.

Globalstar has approximately 40 satellites, but its satellites use a different technology, in that they cannot communicate with each other.

Ulrika Nybäck

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Ericsson part of defense giant

The Saab Group, through its acquisition of Celsius, has become a formidable supplier of defense systems, with a workforce of approximately 17,000 people and anticipated sales of SEK 17.6 billion. Ericsson Saab Avionics and Saab Ericsson Space are a part of the new group.

The deal, which was formalized at the beginning of March, means that Saab (Aerospace) is acquiring Celsius, the leading Swedish company in, among other areas, command and control systems, with approximately 9,000 employees.

Ericsson Saab Avionics, which is jointly owned by Saab and Ericsson Microwave, is an important part of the new company. Avionics has operations in Kista, Linköping and Jönköping, Sweden.

The company is the leading supplier of electronics systems for the JAS 39 Gripen fighter aircraft, including the cockpit presentation system.

"We will continue to operate largely as we've done in the past. However, one of our parent companies has grown significantly, gaining access to new resources that we will, of course, also benefit from," says Avionics PR manager Lars Olsson.

The new company will consist of



The EP-17 presentation system for the JAS 39 Gripen fighter was developed by Ericsson Saab Avionics. The company will play an important role in the new Saab Group.

six business areas, with Avionics sorting under Infomatics. Included in the Infomatics business area are command and control systems as well as systems for electronic warfare, avionics, sensors, simulation, training and signature management.

Ericsson Saab Avionics, with its broad expertise in these areas, will be a leading player within Infomatics and be responsible for approximately 25 percent of the sales of the business area.

As the leading supplier of elec-

tronics systems for the Gripen fighter aircraft, it will continue to constitute the base of Avionics operations.

Export sales of the Gripen are expected to play an increasingly important role.

Saab Ericsson Space, with its unique expertise in space technology, will single-handedly form the space business area. Ericsson Microwave owns a 40 percent share in the company.

Nils Sundström

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Mobile Internet to be simplified

In the future, it will be easier to transmit data between the devices and operating systems of various manufacturers. An industry group has been formed to simplify the expansion of mobile Internet service.

Wireless, handheld devices connected to the Internet can read data files on a central server. Sometimes, however, those files cannot be altered or incremented, due to the different communications protocols and operating systems that are in use.

In order to solve this problem, UK handheld manufacturer Psion has established a working group to develop a worldwide standard for synchronized data transmission, according to the publication Ny Teknik.

The open working group, known as the SyncML Initiative, includes IBM, Nokia, Motorola and Palm.

The new standard will be based on Extensible Markup Language (XML), which is derived from HTML, the language used to construct web pages on the Internet. The first specifications for the new standard are expected to be ready within six months.

Nils Sundström

Ericsson launches program for disaster response

Ericsson is launching a program for disaster response. The program includes direct aid in the form of communications equipment, expertise and a partnership with the UN and the Red Cross/Red Crescent. In addition, we will facilitate research and campaigns inviting leaders of the business world to become involved.

According to the World Disasters Report (1999), the extent and the consequences of disasters have increased dramatically in recent years. In 1999 alone, more than 100,000 persons perished in 326 major disasters. Material damage amounted to more than 100 billion USD the same year. But behind these figures lies enormous human suffering.

Ericsson Response is a global initiative to provide better and faster aid in the event of a disaster.

"The program has been developed in conjunction with leading aid organizations and takes advantage of our own experience with disaster situations," says Jennifer Hilborn, who is responsible for social marketing within Ericsson.

Ericsson has already demonstrated its commitment by providing communications aid in Turkey, Venezuela, Kosovo and other areas hit by disaster. The introduction of the Ericsson Response program builds on the company's previous response efforts.

"We want to contribute our fair share and help improve conditions for people who have been affected by a disaster. We do not profess to be a relief organization, so we are therefore working with the UN organizations UNDP and OCHA, as well as the International Federation of Red Cross and Red Crescent Societies," Jennifer Hilborn explains.

Local task force

Research shows that the first 12-24 hours of a disaster are critical to saving lives, so in order to be more prepared for disasters, Ericsson will establish a worldwide program for local preparedness together with the Red Cross, UNDP and OCHA.

"Our strength lies in our knowledge of the telecommunications infrastructure and presence in 140 countries. Local Ericsson companies have already been active when disaster has struck their areas, but we are now reinforcing our possibilities to contribute even further," says Lars A Stålberg, Senior Vice President, Corporate Public Affairs.

In addition to facilitating local preparedness, several other activities are included in the Response program, such as research and estab-



Ericsson's President, Kurt Hellström, meets the United Nations' Secretary-General, Kofi Annan. In the UN's Millennium Report, Mr. Annan commented on Ericsson's humanitarian involvement saying, "I am pleased to announce the launch of a new disaster response program, which will provide and maintain mobile and satellite telephones as well as microwave links for humanitarian relief workers. This initiative will be led by Ericsson, in partnership with UN entities and the International Federation of Red Cross and Red Crescent Societies."

lishment of best practices in handling communications for disaster response. Ericsson has also created a website, hosting a virtual Web-based community for knowledge management and expertise on this issue.

As we continue to learn about the issue, we are simultaneously developing a rapid deployment communications solution. It will encompass Ericsson technologies to support and respond to the unique communications challenges of each disaster.

Other companies invited

An additional aspect of Ericsson Response is an upcoming ad campaign in the business press. The objective of the campaign is to create awareness and to rally support for disaster response as a means of driving additional corporate involvement in the issue.

"Ericsson cannot act alone. We contribute with our expertise and commitment, but the

needs are enormous. This is why we invite other companies to join our efforts," says Lars A Stålberg.

We intend to draw on the many skilled and qualified resources within the company to contribute to Ericsson Response. The Ericsson Response Volunteer program will present opportunities for all employees to get involved. The program parameters are under development and will be announced before the end of the year.

Ericsson Response is part of our growing efforts in social marketing. The activities aim to strengthen the company's position, and reinvest in the communities where we operate. Other important social marketing initiatives include the ERICA Awards, on which Contact recently reported.

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 www.ericssonresponse.com

ERICSSON AND UNDP

Some of Ericsson's disaster relief efforts in 1999:

- Earthquake in Venezuela, December.
- Flood in Vietnam, November
- Earthquake in Taiwan, September.
- Hurricane Floyd in the US, September.
- Earthquake in Turkey, August
- Refugee disaster in Kosovo, May.

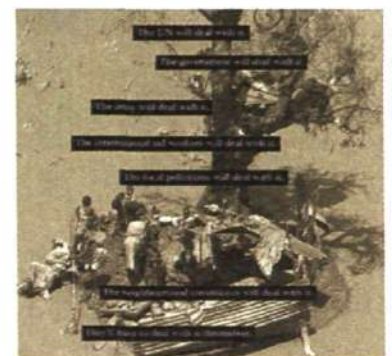
UNDP stands for the United Nations Development Program. OCHA is the United Nations Office for the Coordination of Humanitarian Affairs. The Red Crescent is the Red Cross equivalent in the world's Muslim countries.



Lars A Stålberg, Senior Vice President, Corporate Public Affairs, meets with the new Secretary General of the IFRC, Mr. Didier Cherpitel. Mr Cherpitel explains: "The quicker we can obtain and share information in the field on the extent of a disaster and the needs of its victims, the more efficiently and rapidly we can get assistance to them."

Photo: Peter Nordahl

Ericsson is rolling out a worldwide ad campaign to raise awareness and to champion the need for a better response to disaster. The ads are directed at senior corporate and public sector leaders worldwide to give them a sense of the growing challenge of disasters, the role Ericsson intends to play, and how they can help.



Ericsson Response is a global initiative to provide better and faster aid in the event of a disaster. The program includes direct aid in the form of communications equipment, expertise and a partnership with the UN and the Red Cross/Red Crescent. In addition, we will facilitate research and campaigns inviting leaders of the business world to become involved.

THE WORLD'S FIRST

The Key to Making Your DECT

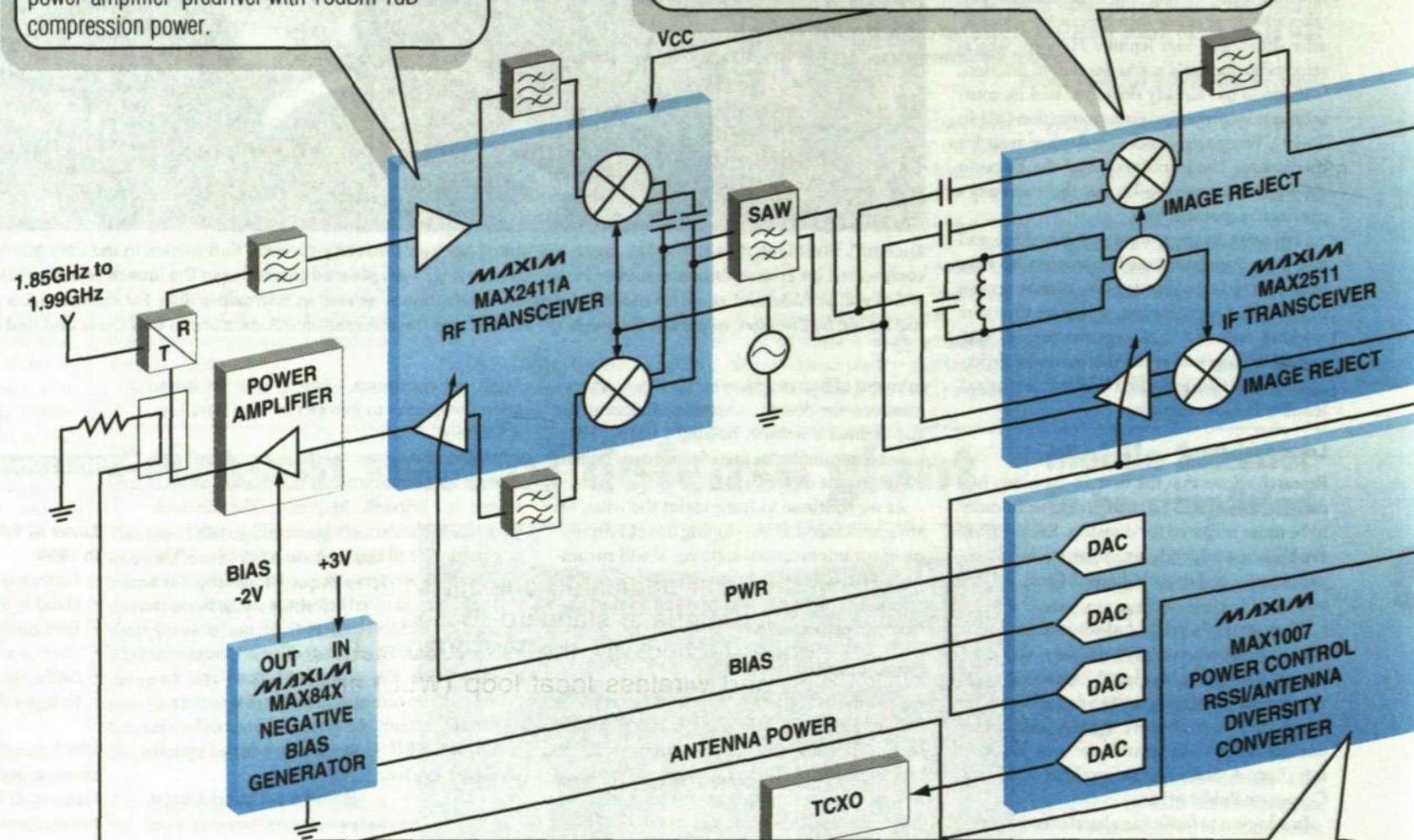
The **MAX2411A*** performs RF front-end amplification and frequency conversion in both receive and transmit modes. Its unique differential IF interface allows a single SAW filter to serve as a receive and transmit IF filter.

The MAX2411A has a 3.2dB combined down-converter noise figure and a -12.5dBm input IP3. The receive current is only 20mA with a 3.0V supply, and can be reduced below 1µA in shutdown. The transmit section includes an upconverter mixer, followed by a variable-gain power-amplifier predriver with +6dBm 1dB compression power.

The **MAX2511** performs IF frequency conversion, receive gain, transmit frequency conversion, and gain control functions. The receive mixer input and the transmitter output interface directly to one differential SAW IF filter to save space and cost.

The low-noise receive mixer has a unique image-rejection feature to keep spurious signals or image noise from mixing to the second IF. The RSSI output has excellent dynamic range (>90dB monotonic) and linearity (± 2 dB error over an 80dB range).

The transmit image-reject mixer generates a clean output spectrum to minimize filter requirements. It is followed by a variable-gain amplifier with +2dBm maximum output power.



The **MAX1007*** provides for both measurement and control of numerous radio signals. Its 8-bit ADC enables peak detecting and measuring of RSSI and PS (power sense) signals. Its internal conditioning circuit converts a PS signal into a DC signal, which is then converted by the ADC. For antenna diversity, the power detector circuit compares two RSSI signals.

The MAX1007 also includes four DACs. XDAC is designed to tune varactor diodes, while SDAC and KDAC adjust power-amplifier output power levels. GDAC provides bias control for GaAs amplifiers. All of the DACs are double buffered, allowing for simultaneous updating of the outputs.

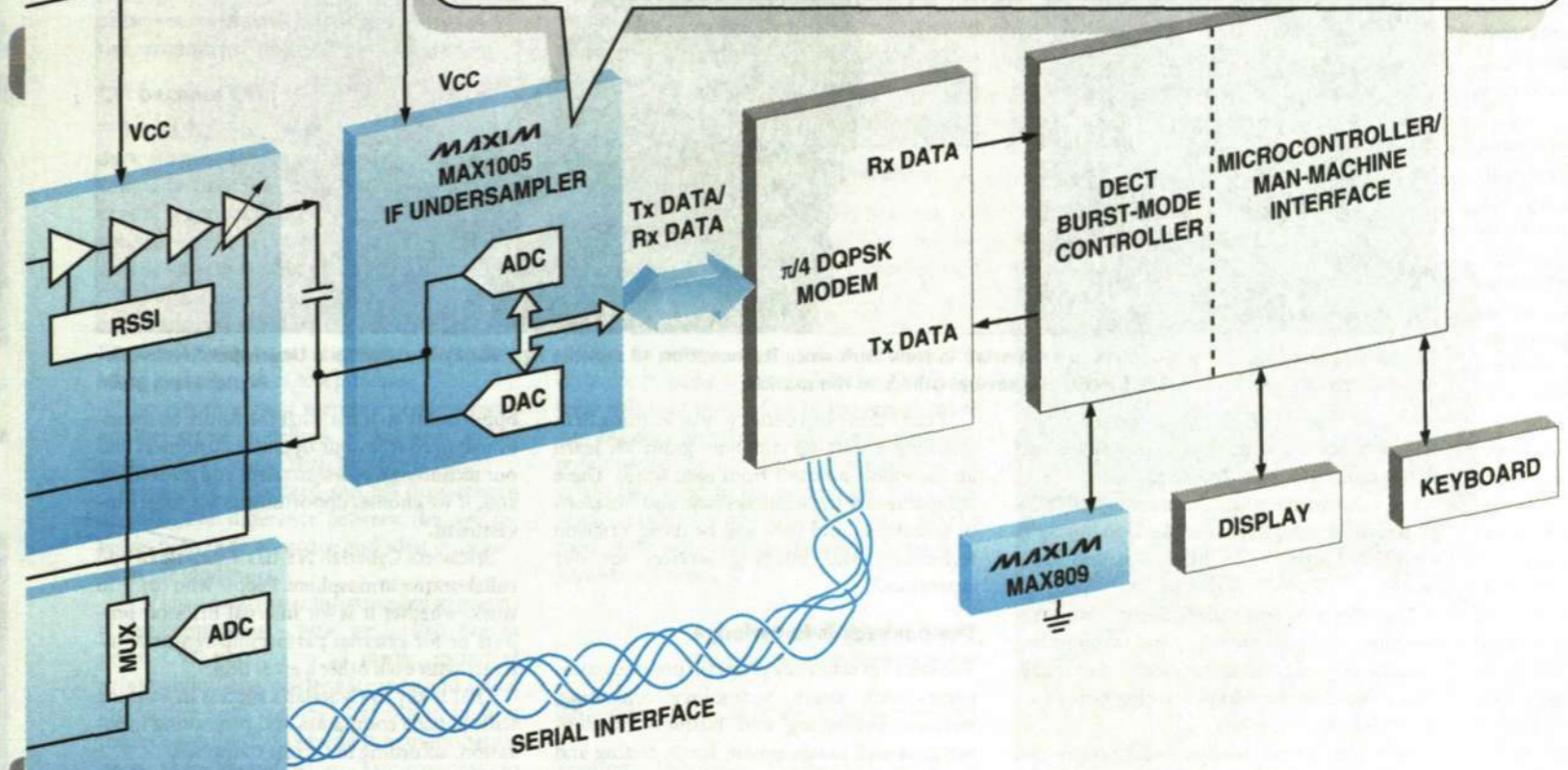
*Available October 1997. Contact factory for engineering samples.
PWT1900 Rev 1

PWT1900 CHIPSET

Design Ready for the U.S. Market

The **MAX1005** includes an Rx ADC and Tx DAC plus voltage reference. In Rx mode, the ADC under-samples the data signal bandwidth centered on the IF. The ADC's 15MSPS conversion speed provides for 10-times oversampling of a 1.5MHz data signal. The wide input converter bandwidth provides for IFs in excess of 10.7MHz.

The MAX1005 requires very little power (13mA in Rx and 5.5mA in Tx mode) while providing a high level of signal integrity. Supply voltage operation is guaranteed down to +2.7V and multiple shutdown modes are provided, including a 1µA (max) full shutdown mode. Wakeup time from partial shutdown is just 2.5µs, providing for power savings even during short periods of idle time.



Maxim announces the world's first dedicated chipset solution to comply with the PWT1900 (TAG-6) U.S. PCS air interface standard. Based on proven DECT (Digital European Cordless Telephone) technology, the PWT1900 standard is ideal for toll-quality wireless PBX, PCS, and wireless local loop (WLL) applications. Maxim's PWT1900 chipset provides an easy-to-implement adaptation of existing DECT platforms using GFSK (Gaussian Frequency Shift Keying) to the $\pi/4$ DQPSK modulation specified in the PWT1900 standard for operation in the U.S.



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New York's web world a greenhouse for new ideas

Ericsson's Cyberlab in New York started with a big bang 18 months ago. But what has happened since then?

"Great things," says Cyberlab's director, Donna Campbell with a big smile. "We have start-up companies in residence, and are running a Developers' Network of 75 companies."

Capturing innovations within such a creative environment as the New York business community could be seen as both easy and difficult. The main ingredients needed to perform this huge and inspiring task, however, are connections and know-how. Donna Campbell has both.

She has been involved in the field of innovation for about ten years now, working with, among others, Hearst New Media, and witnessing both the birth of the Internet World and the forming of the Wireless Internet Age.

"This is all déjà vu to me," says Donna Campbell. "It is amazing to witness a second transformation like the one we are experiencing in the wireless scene now. Much of what I learned in the web world, I'm using this time around."

Together with her colleagues Tim Connelly and John Maxwell Hobbs, Donna Campbell has structured Ericsson's New York business and technology innovation center to focus on mobile Internet applications and services.

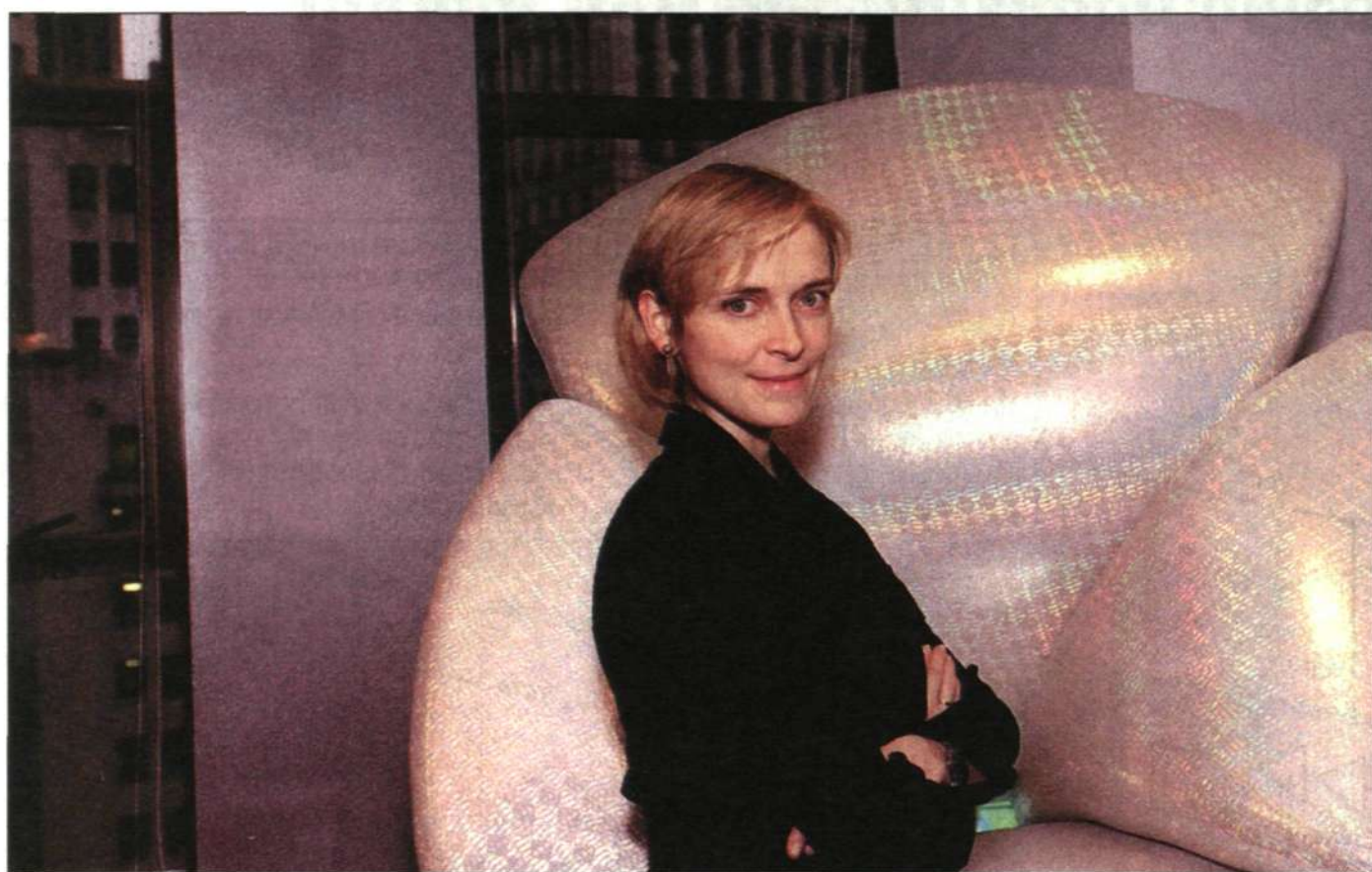
"We've seen interest in mobile Internet soar in the US market during the past 18 months. This gives Ericsson and Cyberlab a powerful position. We can hardly keep up with the people who are coming to us with new ideas, new businesses, and new ways to work together," says Donna Campbell.

In the heart of Silicon Alley

Ericsson's Cyberlab NY was established in 1998 in cooperation with the New York Investment Fund to foster the development of new kinds of mobile Internet business.

The location on 55 Broad Street in New York's Technology Center puts Cyberlab in the middle of downtown Manhattan's financial district, as well as in the heart of Silicon Alley.

Cyberlab New York's developer support,



Donna Campbell has directed Ericsson's Cyberlab in New York since its inception 18 months ago. Today, it supports a Developers' Network of 75 companies and has helped introduce several others to the market.

Photo: Maria Melin

prototyping and business development activities are focused on emerging technologies and applications in mobile Internet.

Cyberlab works with a broad range of companies, from new start-ups like Upoc to more established names like Mapquest and Citysearch.

The effects of this collaboration with non-telecom companies are many, but the most important one, according to Donna Campbell, may be the least tangible - learning how to act and think like a start-up.

"We're trying to discover what people will want from mobile Internet in terms of future services and applications," Donna Campbell explains.

"We're not going to learn that from talking to ourselves. Instead, we need to involve people from many different walks of life, and especially the innovators and entrepreneurs who helped shape and drive the Internet."

This past autumn, Cyberlab launched a start-up residency program for companies focusing on mobile Internet business.

"I can't think of a better way of learning than watching a start-up company grow. We learn an incredible amount from each other. These companies are the wireless Ebays and Amazons of tomorrow, and they will be using Ericsson technology and building services for our operators."

The payback is knowledge

The start-up residency program provides companies with space, technology consulting, strategic partnering and business development, as well as equipment loans, testing and prototyping, and other valuable services for a company just starting out.

Residents live with Cyberlab for three to six months. Companies that are selected must somehow expand the market for wireless Internet and benefit from Ericsson's technology and marketing strengths.

"This is not just a financial relationship - money is cheap today. What start-ups really need is expertise and access to markets," says Donna Campbell. "In return, Ericsson gets an

opportunity to learn what the future businesses will need from our operator customers and our technology, access to talent and great ideas, and, if we choose, opportunities for future investment."

Ericsson's Cyberlab NY has a very open and collaborative atmosphere. People who come to work, whether it is for internal Ericsson projects or for external partnership ventures, interact with each other a great deal.

That is key to Cyberlab's success in working with outside companies and promoting innovation, according to Donna Campbell.

"Many companies today want to learn how to incorporate more innovation in their corporate structure," says Donna Campbell.

"I can't think of a better way of doing that than working with young start-up companies. You get infused with ideas and energy. It's a wonderful exchange of ideas and abilities."

Charlotte von Proschwitz
Freelance journalist

Head-start for Upoc at Cyberlab

The first graduate of the Cyberlab Start-Up In Residency Program is a company called Upoc. Gordon Gould, president of Upoc, is equally pleased with his experience as an Ericsson Cyberlab resident.

"Ericsson has done so much for us. For one thing, we've gained credibility," says Gordon Gould.

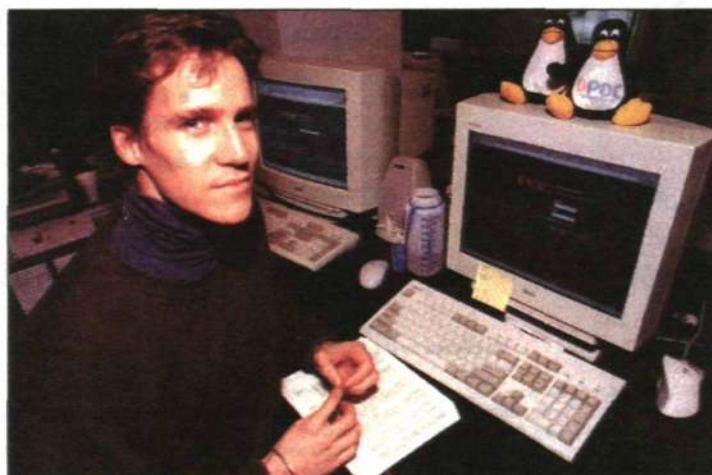
"Just being here is great. We bump into the staff all the time and get invaluable feedback. Ericsson brought us over to London to visit its R&D lab. All of the different networks there and their visions for the future were extremely valuable.

"We are also discussing how we can work with Ericsson in the future," he continues. "We will be needing help with things like Voice

Over IP and 800-number services. Big voice-mail systems and SMS services are other products we will be needing shortly."

Upoc is a youth portal that will target "Generation Y", young people between the ages of 14 and 24. So far, all the surveys have shown that Cyberlab's protégés are on the right track.

"My dream was to create a multinet for young people," says Gordon Gould. "Now I am realizing it. Upoc offers homepages. Kids can set up accounts and are offered information services. We will be like a club that young peo-



Gordon Gould's company Upoc is one of the graduates of Cyberlab's Start-Up Residency Program.

ple and their friends can join. You can get voice mail messages on the computer and text messages on your handsets. Our strategy will be to add more and more services."

With graduates like Upoc, Cyberlab is fostering projects similar to those at other incubators and corporate greenhouse programs.

Many inhouse Ericsson innovators have had the opportunity to develop products at Cyberlab too. As the first Cyberlab resident start-up company, Upoc officially hopes to launch itself to the media in September.

Charlotte von Proschwitz



Visiblerness strengthens company profile

All the various ways that Ericsson presents itself to the world – be it through brochures, trade shows, CD-ROMs, websites or letterhead – should provide the image of a single company.

That is the overall goal of Corporate Visual Language, a set of guidelines and directives for how Ericsson presents itself graphically.

Corporate Visual Language, or CVL as it is commonly called, is the bible for Ericsson's visual identity.

Johan W Fischerström, who oversees CVL, is passionate about his task and spreads the message with a fervor that representatives of most faiths would envy.

He divides his time between his office at Telefonplan in Stockholm, and various Ericsson companies around the world.

"A strong visual language strengthens Ericsson's profile. It is an instrument to create a simple, uniform identity. Every time we present ourselves, we should invoke immediate, positive recognition," says Johan W Fischerström.

CVI became CVL

"Ultimately, it's all about selling or not. Nowadays, it is the customer who chooses, not the company that sells. Only 30 percent of all products are sold. The rest, the remaining 70 percent, are purchased by customers who choose what they want," he says.

"That means we have to do everything we can to end up on the customer's shortlist. The list naming two, or at most three, alternatives being evaluated prior to a purchase."

Those with a good memory perhaps recall another set of guidelines, which went by the name of Corporate Visual Identity (CVI).

However, CVI is dead and has been reborn as CVL. The difference between the two involves both their approach and what is included in the guidelines.

"CVI had a narrower focus limited to graphic representations – how we looked like in print. CVL pertains to all media, including print publications, electronic media and actual interaction with customers at places such as trade shows. In CVL, we add the emotional aspects; there should be an 'Ericsson-ness' to everything we do," says Johan W Fischerström.

Focus on creativity

In its most tangible form, the CVL guide is a sober-looking binder made of semi-transparent plastic. It includes guidelines for how to present the company logo and how various kinds of communication materials should look (i.e., the same things that were also covered by CVI).

There is also a section describing the 'Ericsson accent' – the brand's personality that all communication should reflect.

Occasionally, complaints are made that the guidelines inhibit creativity. But the fact of the matter is, according to Johan W Fischerström, that CVL allows users the opportunity to focus on creative aspects.

"The purpose of the rules is to strengthen

our identity, but within that framework you can be as creative as you like. In reality, they provide freedom of thought since you no longer have to wonder where to put the logo. They allow you to focus on what you're going to say and how to say it in the most effective manner," says Johan W Fischerström.

"CVL is a business directive like many others," explains Mats Rönne, who works with trademark issues at the corporate level.

"It is the responsibility of managers to ensure that the regulations are followed. There are, however, no punishments or fines for those who disobey the directives. It has happened, however, that flagrant violations have been withdrawn", says Mats Rönne and continues:

"The seriousness does not lie in the added costs for printing a new brochure. The long-term effects of proceeding in the wrong manner, and the effect that could have on customer opinions of us, are much more serious. It might be a drop in the ocean now, but could result in more serious consequences down the road. If it's worth doing, it's worth doing well, says Mats Rönne."



Johan W Fischerström

Henrika Lavonius-Norén

henrika.lavonius-noren@lme.ericsson.se

© inside.ericsson.se → Work support → CVL

Footnote: This spring, Contact will be writing more about Corporate Visual Language and Ericsson's methods for presenting itself to its customers.

READING TIPS

The CVL guide contains guidelines for how to present the company – in publications, in speech, in writing. The binder may appear dauntingly thick. Fischerström's advice is to begin by looking at four basic elements in order to understand what they involve: the logo, the logo's color, the font and the company accent (the latter, unlike the other three, is not a specific object but rather a behavior and an approach).

After reviewing the basic elements, you can study applications and see how guidelines are utilized for different media, such as letterhead, signs, brochures, electronic media, etc.

EXAMPLES FROM THE CORPORATE VISUAL LANGUAGE GUIDELINES

- The logo should always be surrounded by free space. The greater the distance to surrounding objects, the stronger the impact of the logo. The logo must only be reproduced from electronic originals, which can be retrieved from inside.ericsson.se/work-support (click on CVL, then toolbox).
- Ericsson uses two fonts: Ericsson Roman and Ericsson Sans. These are included in ESOE as of March/April.
- The stylized 'E' cannot be utilized alone, except in certain rare and approved exceptions (on some mobile phones). The reason

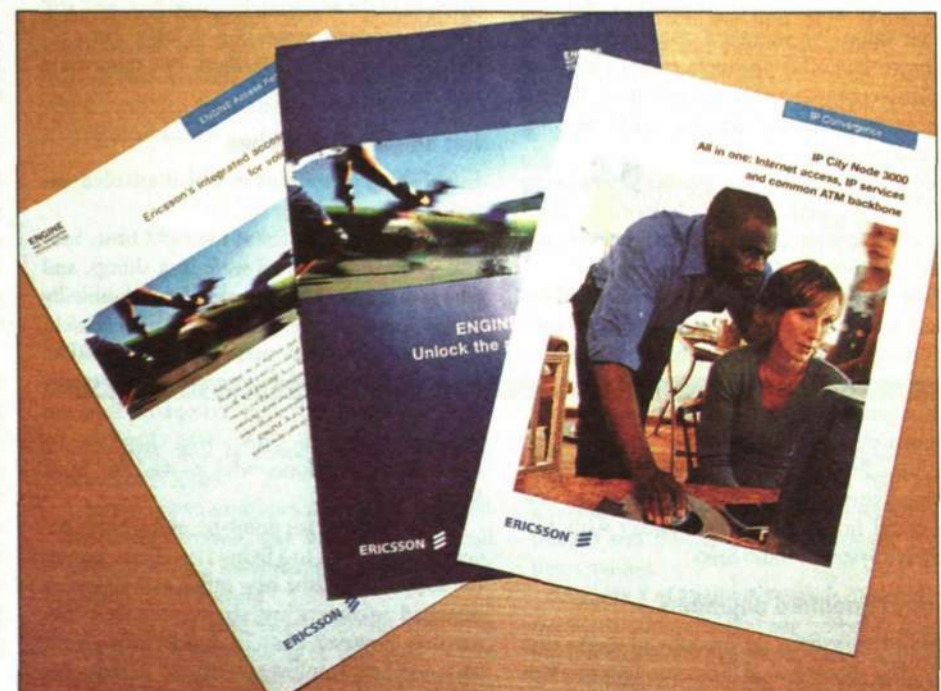
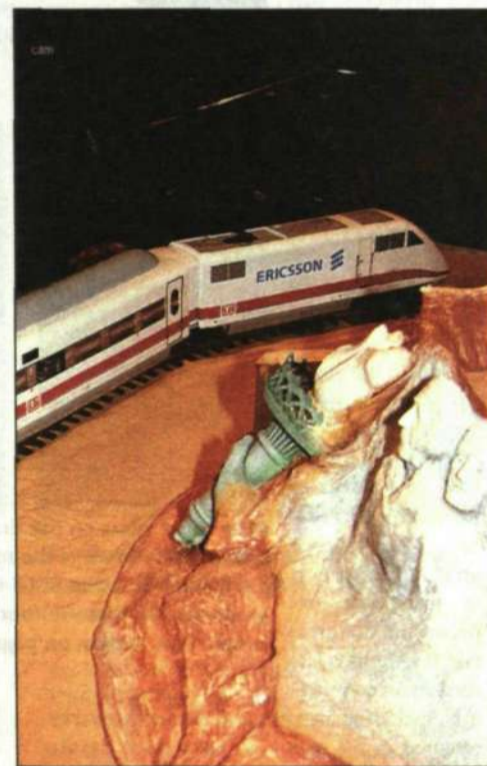
for this is that the symbol does not yet have sufficient legal protection, which opens the door for pirate labeling. Moreover, it is a graphic degeneration of the trademark.

- Publications, such as brochures, folders or instructions should always have the Ericsson logo in the lower left corner and the heading in the upper right corner. Other than those requirements, the layout is optional.
- If the logo is used in a vertical alignment, it should be positioned so that it reads from the bottom up.



If Ericsson followed temporary trends in typography and expression, publications would look like everything else produced during the same period. We would lose our "Ericsson-ness" and blend into the crowd.

Photo: Lars Åström



Correctly produced product information sheets always have the company logo surrounded by free space in the lower left corner. Captions on product information sheets are always flush with the right-hand margin.

With new radio link technology, broadband is taking to the air. The new MINI-LINK BAS product is the most significant development in the past 15 years at Ericsson Microwave Systems, according to the company's Vice President Sivert Bergman. This is about the future of radio links, where the total order value for wireless broadband systems is expected to amount to between four and ten billion dollars over the next three or four years. Follow the development of MINI-LINK BAS over the past three years to the present time.

Broadband in the air

The first MINI LINK radio links were delivered by Ericsson as early as 1975. They were used to send and receive signals for opening the Göta Älv Bridge in Gothenburg.

By spring 1997, the MINI LINK was a success. The telecom market was undergoing deregulation, and operators were beginning to demand more sophisticated services. Ericsson Microwave Systems wished to expand its expertise, and a group at Ericsson in Mölndal, which included Dag Jungenfelt, Örjan Eriksson and Hans Herbertsson, were testing the market winds to see which way they were blowing.

At that time, in spring 1997, there was little doubt.

"It was a question of optimizing data services for IP and ATM. Put simply, more broadband was needed," recalls Dag Jungenfelt, who is now system owner and principal project manager for MINI-LINK BAS, which is Ericsson's solution for high-capacity, point-to-multi-point communications.

There was an alternative, however, which involved developing the existing point-to-point system to support cellular networks using a point-to-multi-point solution. Two studies were launched. One was focused on providing access to base station-using point-to-multi-point, while the other concentrated on increasing the service area so that operators could offer data and telecom services to business users.

Project stopped

Since the first alternative was most similar to existing radio links, work got underway more quickly, and progress was more rapid. After a few months' work, the project was stopped.

"We were beginning to doubt whether it was a good idea from a business standpoint," relates Dag Jungenfelt. "It was difficult to motivate the development costs based on the customer value. We wanted a system that would do more than other products, except a little less expensively and perhaps a little better. The goal was to create something completely new - a unique product."

With this as the starting point, the remaining MINI-LINK BAS project developed rather quickly into something that was a priority not only for Ericsson Microwave Systems.

"We were just starting to develop ATM-based broadband platforms for ADSL and other types of broadband over cable," says Christer Landberg, design manager at Ericsson Telecom in Kungens Kurva outside Stockholm, who was responsible for developing the radio node for the broadband platform. "When Microwave Systems contacted us, we quickly realized that we could integrate our technology with Microwave Systems' radio links."

Lack of qualified engineers

One of the systems for broadband access that had been developed at Ericsson Telecom was point-to-multi-point for cable TV using a so-called Hybrid Fiber Coax network. This system has many similarities with LMDS. The broadband platform that Ericsson had developed

was also ATM-based and therefore suitable for future services, which was important for Ericsson Microwave Systems. It was now autumn 1997, and other work was being conducted in parallel with the project.

Lack of qualified engineers was causing problems. Microwave Systems realized that it would not be possible to conduct the project in Mölndal and therefore decided to look for a new facility in Europe that could take over overall responsibility for the project. After an extensive search, all the pieces fell into place in Milan.

The arguments for the Northern Italian city were several. There was a great concentration of microwave expertise in the area, and several of Ericsson's main competitors, including Siemens and Alcatel, were represented in the region, as were many smaller companies, universities and technical colleges in the field. In addition, Ericsson had, and still has, an excellent reputation in Italy. The prerequisites were thus excellent, but there were also risks.

Job ad gets 200 replies

Establishing operations in Milan entailed entering virgin territory.

"We probably started at the right time. Several of our competitors were in a slump, and when we presented our project, it undoubtedly looked pretty exciting," says Dag Jungenfelt, who was appointed manager for the Milan project. The new office, which organizationally reported to the Italian company Ericsson Telecomunicazioni SpA, was headed by Alessandro Giacalone, who moved up from Rome.

The new center for point-to-multi-point development got off to a flying start. From zero at the start of 1998, the new office had 40 highly qualified engineers just six months later. Expansion, however, has a back side. How to get so many new employees with completely different backgrounds to work together? How to build an Ericsson culture?

"It actually went surprisingly smoothly," says Alessandro Giacalone. "The main reason,



After three years on the drawing board and in the test lab, MINI-LINK BAS is ready to meet the market. According to the forecasts, the point-to-multi-point MINI-LINK BAS system will achieve full volume production in three to four years. Read more about the first commercial system on page 4.

Photo: Åsa Dahlgren

I believe, was that we were so focused on our assignment. We had a well-defined product concept, and could take full responsibility. There was great enthusiasm and an ambition to make the project a success that we were able to communicate to newly recruited engineers."

The project now employed 150 persons working in six locations in two countries. The clock was ticking. In order to organize a proper marketing effort, it would of course be a great help to have an actual system. Work was therefore started in April 1998 to produce a prototype system called P1. Project coordination was now put to the first real test.

Production of the broadband platform was the responsibility of Ericsson Telecom in Nynäshamn and Kungens Kurva, while Ericsson in Rome was responsible for producing the modem. Ericsson Microwave in Mölndal took responsibility for providing microwave technology. The Ericsson office in Milan was responsible for designing the radio, as well as verification, testing and project management. Production was handled by the production unit in Borås.

"We concentrated on producing hardware. There were no requirements for industrialization. Our objective was to produce a system with limited capacity to demonstrate for customers in Milan," says Anders Wilson, produc-

tion project manager for MINI-LINK BAS.

The P1 system was a reality in April 1999. Now the marketing department in Mölndal could demonstrate an actual system with limited capacity instead of presenting diagrams and slides.

A few months earlier, in December 1998, another project had been started for commercialization of the product. This is the system that will shortly be delivered to customers for testing and verification during the spring.

According to the forecasts, 10,000 units will be produced by year-end. But this is only the beginning. The ambition is that the point-to-multi-point system will achieve the same volumes as MINI-LINK within three to four years, which will mean approximately 70,000 terminals per year. External observers estimate the value of wireless broadband systems at between four and ten billions dollars over the next three to four years.

"Our ambition is to capture a market share of about 40 percent," says Herbert Andersson, who is marketing manager for MINI-LINK BAS.

The figures are astonishing, but the question is why customers should choose an Ericsson system over competing products.

Part of the answer lies in the fact that Ericsson, unlike its competitors, has all the technology in-house. It has never been necessary to go outside Ericsson to find the required leading-edge technology. This means in turn that the customer can be more confident, since a single supplier can provide a complete system.

"The potential for success is also strongly based on having unique MINI-LINK expertise to fall back on. Without that platform, this project would not have been possible," notes Dag Jungenfelt.

Difficult market

The marketing people in Mölndal are being kept busy. At the same time, the situation is somewhat paradoxical.

"The market is somewhat difficult right now," explains Sivert Bergman, Vice President of Ericsson Microwave Systems and responsible for the Transmission Solutions business unit to which MINI-LINK BAS belongs. "There is a mix of serious, well-established operators and all the new players wishing to enter the market. We therefore have to be somewhat selective in the beginning. Still, there are more than enough customers to keep us busy."

When the first-generation product is out on the market, the MINI-LINK BAS project will have achieved an important milestone.

There is no time for project members to rest on their laurels, however. The product must be integrated with ATM switches and IP routers. Functionality must be enhanced and the system made more powerful.

"The services supported today are circuit emulation and Ethernet, meaning telecom and datacom. Flexibility is costly, and one way of reducing costs is to produce a unit with a fixed number of ports for specific services. In addition, we need to produce a more attractive design," says Anders Lindblad, who is

These are the MINI-LINK BAS components

MINI-LINK BAS (Broadband Access System) consists of an access terminal and a network unit, which are customer-premises equipment. This equipment communicates via radio links with a radio node, which is located at the operator's site. The complete system is produced at Ericsson Microwave's production unit in Borås. Ericsson Microwave in Mölndal is responsible for marketing.



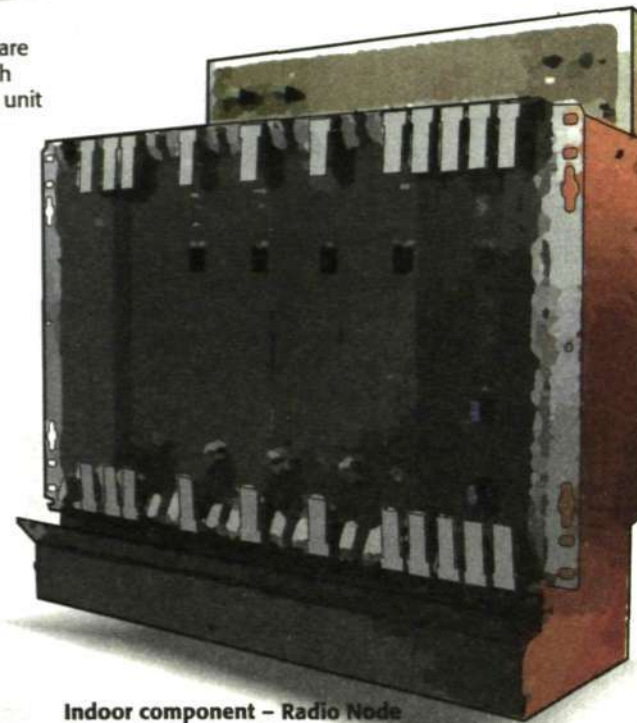
Indoor component - Network Unit

Design of this unit was mainly the responsibility of Ericsson Telecom in Nynäshamn, which developed functions for the control system and traffic management. Service unit cards for such services as telephony and data communications can be added to the Network Unit. The modem was developed by Ericsson in Rome.



Outdoor - Radio Unit

The Radio Unit is the outdoor component in the system. There is a Radio Unit connected to every Radio Node and every Network Unit in the system. The radio card was designed by Ericsson Telecomunicazione in Milan, while the MMICs (Microwave Monolith Integrated Circuit), which are specially designed for microwave applications, were developed by Ericsson Microwave in Mölndal.



Indoor component - Radio Node

The Radio Node, which is placed in a fixed location, was designed by Ericsson Telecom in Kungens Kurva outside Stockholm, which contributed to the development of the card rack, the MAC (Media Access Control) cards and the point-to-multi-point system. The modem was developed by Ericsson in Rome.

Graphics: MIKAEL PARMENT

Illustration: Mikael Parment



Anders Wilson, project manager for Production and Supply, MINI-LINK BAS, Ericsson Microwave Systems in Borås.

If everything goes according to plan, series deliveries of MINI-LINK BAS will start after the summer. The Borås plant will play a very central role. Are you ready for this?

"Definitely. We have been involved in this project since March 1998 and have participated in the design of the various components, so it's nothing new for us. We have made extensive preparations and the production tests are 95-percent complete. After the summer, volumes will increase sharply, but the way things look now, it won't be a problem."



Sivert Bergman, Vice President, Ericsson Microwave Systems and responsible for the Transmission Solutions business unit.

MINI-LINK BAS is now nearing the first production deliveries. How would you summarize the project to date?

"It has gone extremely well. In two years, we have succeeded in building up a resource in Milan, recruiting completely new employees and developing a project that is now ready to be launched on the market. That is extremely well done, a very successful project."



Dag Jungenfelt, principal project manager for MINI-LINK BAS, stationed in Milan.

You were somewhat of a pioneer when the office in Milan opened. How was that?

"It certainly wasn't entirely easy. We recruited people who had no knowledge at all of Ericsson, and we also came from two different cultures. But we didn't want to establish the Mölndal culture here in Milan. Instead, I believe that we have created our own culture which includes a number of ingredients from several sources."



Alessandro Giacalone, manager of Ericsson Telecomunicazione in Milano, who has overall responsibility for the development of MINI-LINK BAS.

Two years have now passed since the project started in Milano. How do you feel the work has gone?

"First and foremost I can tell you that it has been two challenging and very instructive years. We really did start from scratch, in an empty building in which more than 100 persons are now working. What I think is fantastic is the commitment shown by everyone involved. We have set a clear goal, and everyone has worked hard together to achieve that goal."

design manager for the network unit at Ericsson Telecom in Nynäshamn. Ericsson Telecom, however, will not be a part of this work.

The MINI-LINK BAS project is now undergoing a concentration phase, which means that development responsibility for the system's indoor components is being transferred from Kungens Kurva and Nynäshamn to Rome and Milan, respectively.

At the same time, Dag Jungenfelt is handing over system ownership to Alessandro Giacalone, since his two-year assignment in Milano is now over.

"Basic development is now complete, and it

is possible to consolidate the projects and create a more efficient organization. Ericsson Telecom is now leaving the project, which is natural, since the company is part of Wireline Systems and has new work that demands their attention," says Dag Jungenfelt, who is now returning home to Mölndal.

Martin Ahlgren
freelance journalist

transmission.ericsson.se
tei.ericsson.se
tx.ericsson.se

MINI-LINK BAS IN BRIEF

MINI-LINK BAS is a refinement of conventional radio links.

In a point-to-multi-point solution, up to 64 terminals communicate with a single radio node, sharing a transmission capacity of 37.5 megabits per second.

The biggest advantage with this system is that broadband capacity is allocated in real time to the connection points where traffic is currently greatest.

Because capacity allocation takes only a fraction of a second, each node believes that

the highest capacity is available at all times. The first version of the system has been developed for the 28 GHz band for the US market and the 26 GHz band for the European market.

Marketing of MINI-LINK BAS is directed primarily to operators that are primarily targeting three different segments. These segments are broadband to small and medium-size companies, property owners who wish to offer broadband to their tenants and future mobile networks.

Kyrgyzstan may be a poor country today. Making the change from communism to a market economy takes time. But there is an entrepreneurial spirit and a will to succeed. Within a few years, the country will be a trading nation, and the new Silk Road may be the Internet.

Internet may be Kyrgyzstan's new Silk Road

The trip to the Ericsson office reveals that Kyrgyzstan is a poor country, but also that it is beautiful. The capital city of Bishkek is surrounded by snow-covered mountains that reach for the sky, with the highest peaks measuring 7,500 meters.

Once in a while there are reminders of the communist era. In the city center there is a statue of Lenin pointing resolutely to the North. Nine years ago, Kyrgyzstan was a part of the Soviet Union.

Trading vital for the economy

Today, however, the Kyrgyz are building their country on a market economy. Trading with other countries is once again important. The Ericsson office is located on the outskirts of town in a residential area. The Norwegian office manager Reidar Braathen welcomes us. He's ready to start the interview right away, but is eager to show us around the 650 square meter villa that Reidar and his colleagues rent.

The house, the furnishings and the 14 employees make the office feel more like a home. There is an art exhibition in the basement where local artists sponsored by the UN can exhibit their work.

Great interest from operators

The office is bustling with activity. Today alone, six new operators are visiting the office for discussion that will focus on the new business concept for micro-operators and micro-switches.

Between meetings with the men and women representing the operators, the female cook rushes between the kitchen and the dining room carrying steaming pans with today's lunch.

"I believe in the country's entrepreneurial spirit," says Reidar Braathen.

"Kyrgyzstan has a potential to once again become a trading nation," he continues. "But today trading should take place on the Internet. Look

at the art in the basement. It's certainly beautiful, but I firmly believe that it would be possible to sell it on the Internet."

Five hundred years ago, the Silk Road ran through Kyrgyzstan. On this road, the Chinese transported silk, tea and spices to the Far East until the 1500s, when the sea became the new transport route.

"In a few years, trading could become just as intensive again, but data and telecom networks will replace the roads," predicts the Ericsson manager.

Most of the country's population are poor. The average per capita income is approximately USD 1,000.

Good education system

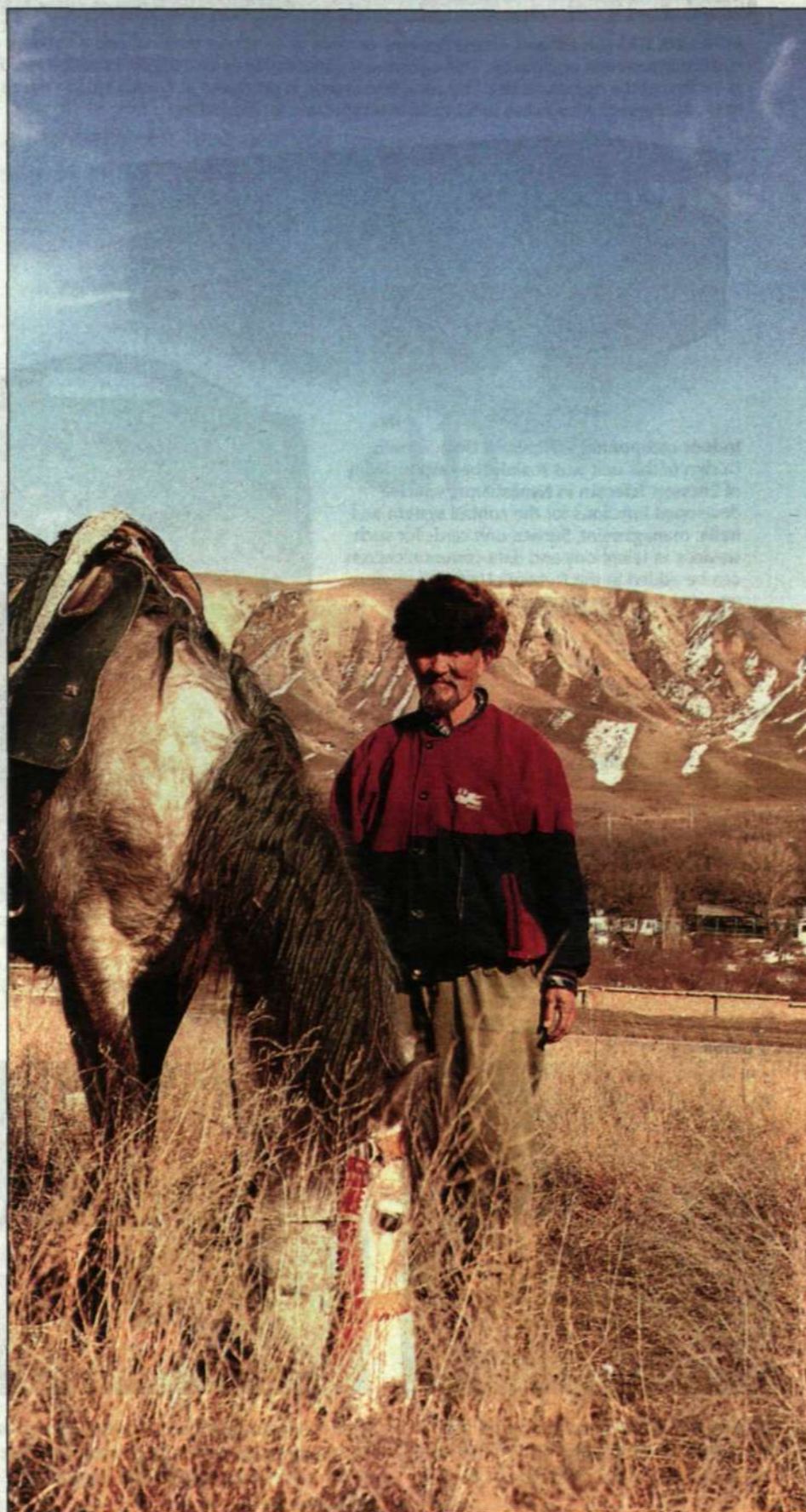
Well-educated workers are plentiful, however. At the Ericsson office there are only two Europeans, including Reidar.

"The educational system and the universities function well. I have never had a problem finding well-educated employees. Nearly everyone under 25 speaks English and is very curious about the Western world. The dream of many young people is to get a job with an international company like Ericsson," reveals Reidar Braathen.

Most Kyrgyzstans are Muslims, but there is only a small area in the south of the country where travelers will see signs of the religion.

"The only thing that I have noticed about the religion is the friendliness of the people," observes Reidar Braathen. "If you are invited home to someone who lives in the country, you will be staying for the day. Even in the poorest families, guests are treated lavishly to food and drink. The hospitality is overwhelming."

The Ericsson manager has not experienced any cultural clashes, but he is working to make his



Of Kyrgyzstan's total population, some 60 percent live in rural areas. They are mostly farmers who support themselves by raising animals, such as sheep, goats and horses. Even rural inhabitants could have access to a telephone with Ericsson's new business concept which is based on leasing micro-switches to many small operators. Photo: Ulrika Nybäck

local organization flatter. Progress has been favorable so far.

"When I first came here, I quickly noted that what the boss says is the law. I've been trying to work on delegating responsibility in order to make things run more smoothly. We're making progress, but there is still some way to go," explains Reidar Braathen.

"I had to invent my own team-building exercises," he continues. "When we received office furniture from Ikea, we formed a number of groups for assembling the furniture. That was a lot of fun," recalls Reidar with a smile.



Reidar Braathen

KYRGYZSTAN IN BRIEF

Population: 4.7 million.
Religion: Islam
Capital: Bishkek. Osh is the second largest city.
Neighbours: Kazakhstan to the North, Tajikistan to the South, China to the East and Uzbekistan to the West.
Area: 198,000 square kilometers (approximately the same area as the UK and Senegal).
Belonged to the Soviet Union until 1991.

- Eight percent of the population have access to a telephone
- There are two mobile operators: Bitel (GSM 900) and Katel (TDMA)
- State-owned Kyrgyz Telecom operates the fixed network
- Ericsson's local office has 14 employees
- The company has been supplying systems to Kyrgyzstan since 1994
- The local office will celebrate its first anniversary this year

Leasing mobile networks creates new opportunities

Leasing telecom networks to many small operators via franchising companies is the basis for a new business concept for countries with weak economies. Both the UN and EBRD, the European development bank, are supporting the concept.

Today one billion of the world's six billion inhabitants are able to make a phone call. Increasingly, telecom companies are trying to do business with countries in which only a small portion of the population has access to a phone. However, since these are poor countries and financing is a major obstacle, new business methods are required in order to succeed.

Holger Rönquist is responsible for 13 countries in Eastern Europe. Together with a few coworkers, he has developed a business model that over the next few years could bring telephones to an additional one billion people. This will be just the start of a new business concept that is both simple and ingenious. The idea is to lease a number of telephone micro-switches to small operators, who in turn do business with a franchising company.

Great need for communications

In this manner, many people can be given access to a telephone without the operator having to finance a large initial investment.

"I know that people in these countries have a great need for communications for both business and personal reasons. They're also willing to pay a relatively high cost to be able to make calls," relates Holger Rönquist on the plane to Kyrgyzstan.

Holger Rönquist is on his way to the Ericsson office in Bishkek for negotiations and a presentation of the new business concept. After having a glass of water spilled on him by a female cabin attendant, he decides to take the interview during dinner.

UN shows interest

The new concept is now being tested in Georgia and Kazakhstan. If it succeeds there, it will be used in other countries, such as Kyrgyzstan.

Holger Rönquist is not the only person with a passion for this business concept.

Today there are a number of international telecom operators who wish to create a market by acting as franchising companies for small local oper-

ators. Ericsson would then supply systems to these companies, which will handle the contacts with the local operators.

EBRD, the European Bank for Reconstruction and Development, is prepared to lend money to local operators to help them get started.

Anna Stjärneklint is responsible for the UNDP (United Nations Development Program) office in Kyrgyzstan. She relates that the UNDP is interested in organizing business training for would-be operators.

"We are already organizing courses in marketing and accounting for entrepreneurs," she reveals. "But we will need to include telecom in our courses if we're going to train new operators.

We're going to evaluate the new concept from all angles, but it certainly looks attractive to us.

"It's extremely important to break the isolation of people in rural areas and give them a

chance to develop. Telecommunications plays an important role in this regard," continues Anna Stjärneklint.

Continuous upgrades

Holger Rönquist makes no secret of the fact that Ericsson has to make money, but he also knows what telecommunications mean for a country's development.

"Studies show that as the telecom network is built out, gross national product doubles every five years," he says.

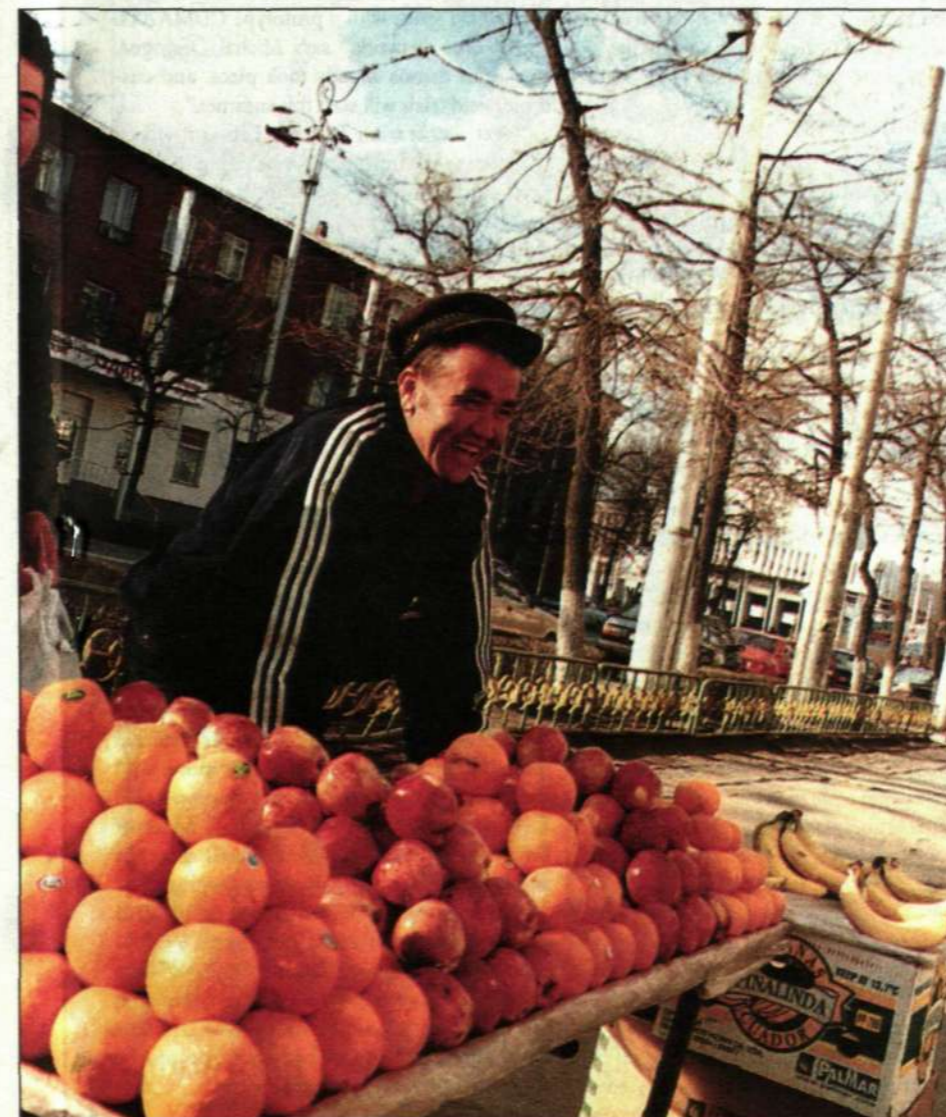
"When many small operators lease micro-switches, even rural inhabitants, which account for 60 percent of Kyrgyzstan's population, have a chance to gain access to a phone. Starting on a small scale and being able to expand over time is the key to this concept. The leasing concept, which is based on three-month periods, includes continuous upgrades of the software, which means that IP telephony and third-generation networks are not far away."

"There are many examples of small companies that are already using the Internet for marketing their services. The tourist industry is one example where companies have a lot to gain from e-commerce," says Holger Rönquist.

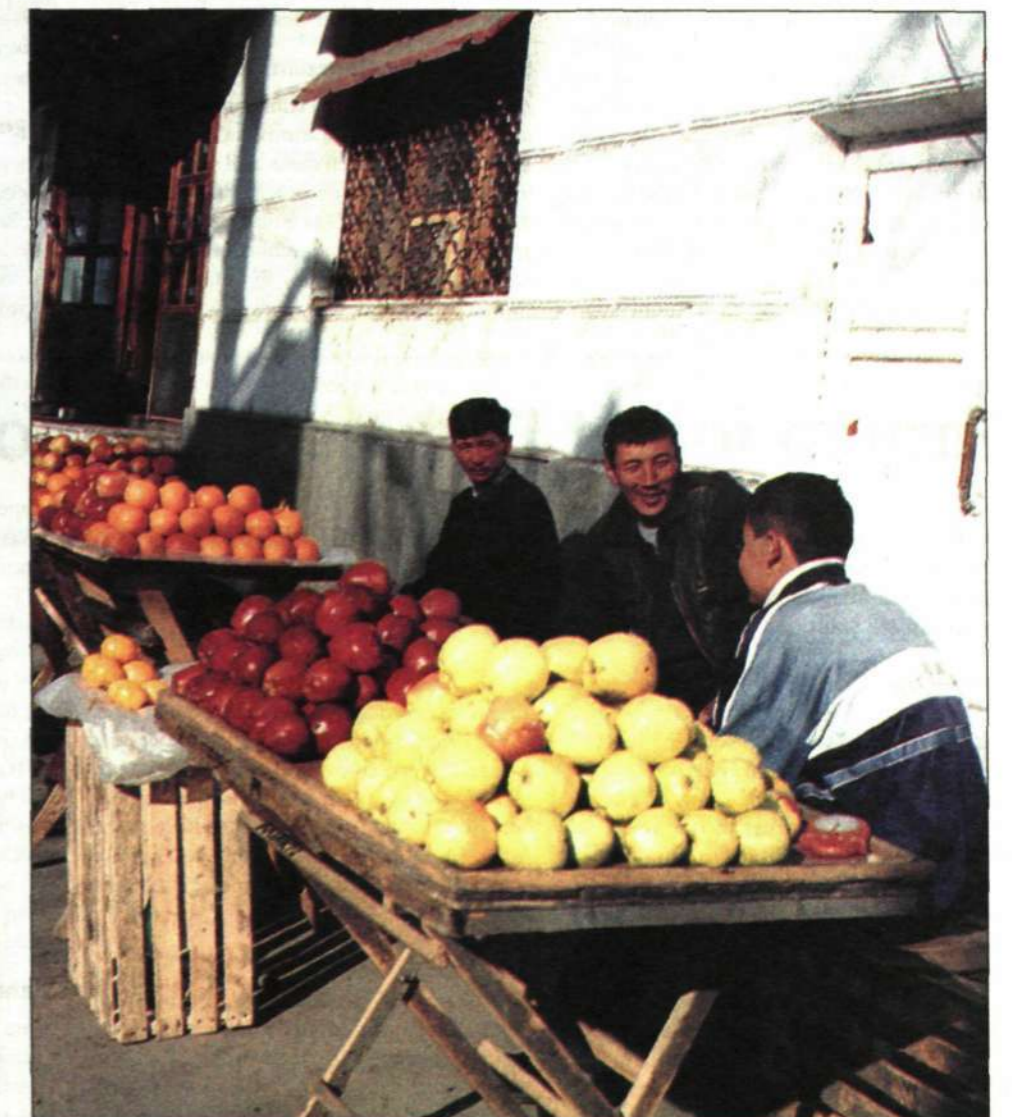
"There are many data and telecom companies that have realized the importance of doing business with these countries in both Central Asia and Africa. So if we want to follow Kurt Hellström's encouragement to always be first, then we have to act now," concludes Holger Rönquist, clenching his fist in a resolute gesture.

Ulrika Nybäck

ulrika.nybäck@lme.ericsson.se



There are many small entrepreneurs in Kyrgyzstan, such as those in the tourist industry and local artists, who would be able to benefit from an expansion of the telephone network. Shown here are street vendors crowding the streets of capital city Bishkek. Photo: Ulrika Nybäck



Unique center in Montreal demonstrates 3G technology

Conducting third generation field tests, stimulating the development of wireless applications in Canada and working with local universities are three important tasks for the group working at the Next Generation Systems Labs at Ericsson Research Canada in Montreal.

"Six months ago neither this lab nor the demo center existed," say Michel Desgagné and François Sawyer proudly as they open the door to the new facilities. Michel is the manager of the Next Generation Systems Labs while François Sawyer is a principal engineer in that group. They take particular pride in demonstrating the frequency converter, which is required for using Ericsson's experimental WCDMA system on the North American 1900 MHz PCS band.

"Our roots being in mobile telephony software, this is the first Ericsson hardware equipment designed here in Montreal," explains François. "This equipment respectfully reproduces the characteristics of the original WCDMA experimental system in the PCS band."

August 23 of last year was a day that he and Michel remember fondly. This was the day when the world's first WCDMA call was placed over the 1900 MHz PCS band.

The experimental system was supplied by Ericsson Radio Systems in Kista.

"Working together with Montreal has been very rewarding, and they have been able to supply considerable technical expertise," says Johan Frisk, who works at Ericsson Radio Systems, where he is customer project manager for Microcell, Canada's nationwide GSM operator and an Ericsson customer. Johan, who has also been the liaison between Montreal and Kista is also impressed by the frequency converter.

"The Canadian development group did all the work themselves in a very short period of time with very few resources," notes Johan.

Ericsson currently has 17 experimental WCDMA systems in operation around the world. Of these, the Montreal system is unique in that it is the only one that uses the 1900 MHz PCS band, for which Ericsson has been granted a developmental radio license by the Canadian government. Ericsson is the only vendor that has built 1900 MHz systems.

Adjacent to the lab, Microcell has its own office, visible proof of the close cooperation



Michel Desgagné and François Sawyer pose with the frequency converter which makes it possible to use Ericsson's WCDMA test system in the North American 1900 MHz PCS band.

Photo: Lars Åström

between Ericsson and the customer. For the operator, it is important to show the government that they are contributing to the technology evolution. Evaluation of the experimental system in Montreal is being conducted by Microcell on behalf of the GSM Alliance in North America.

"Together with our colleagues at Microcell, we determine how the tests should be implemented and then run them together with Microcell," says Michel Desgagné.

Stimulate development

An additional task is to stimulate the development of wireless applications in Canada. Much work has already been done, and several agreements have been signed with business partners. One of these is 724 Solutions Inc., whose application can provide enhanced e-banking and e-brokerage services. By combining the speed of third generation wireless technology

with 724 Solution's platform for financial services, the application aims to show how consumers will be able to interact visually in real-time with e-banking and e-broker age services via their mobile phones

Other applications under development include a video surveillance from Telexis and a wireless jukebox from Wysdom.

"An important function for the Next Generation Systems Labs is also to collaborate with universities and get students interested in third-generation technology," says Michel Desgagné.

Edge demonstrations

When Contact's reporter visited the demo and test center, Ericsson's customer, TDMA operator Rogers AT&T Wireless, had just received a demonstration of Edge. The Edge demo system was mainly used by Rogers AT&T Wireless to promote the capabilities of third-generation

technology to their corporate customers in Canada. The Edge demo system was located in Montreal for a three months. Last February, the same system was used in Hanover at the CeBIT exhibition.

CDMA2000

"The day after the Edge equipment left Montreal for the CeBIT exhibition, we started filling the vacated lab space with a prototype CDMA2000 packet core network," says Michel Desgagné. "The first demos already took place, and customer field trials will start this summer."

"Next Generation Systems Labs provide a stimulating environment for bringing together Ericsson, customers and other business partners sharing interest in the new telecoms world", concludes François Sawyer.

Gunilla Tamm

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Easy to forget IT questions at outsourcing

Ericsson has several major deals in the works that are not directly related to IT. On the other hand, they are dependent on having IT matters dealt with in a fast, secure and standardized manner. Corporate IT is establishing a program with expertise, guidelines and complete solutions to improve this situation.

Ericsson is outsourcing an increasing number of its operations. Several major deals are currently in the works, and outsourcing has become just as common within Ericsson as mergers and acquisitions. Soon, Ericsson Energy Systems will become a part of the American firm Emerson, production in Östersund is being sold off to Solectron and building maintenance, reception and other aspects are being taken over by Skanska. These are deals, both big and small, that have nothing to do with IT, and yet they are dependent on a functional IT infrastructure and that those who are taking over have access to Ericsson's information.

"IT is integral to all operations, regardless of whether it pertains to building maintenance, telephone switches or production," says Lennart Lysén at Corporate IT.

"If access to Ericsson's product data system is unavailable, production will shut down after only a couple hours. Our telephone operators are dependent on data from the TEAM system. All operations contain a larger or smaller portion of IT-related problems that have to be dealt with in the course of business. They are more difficult and costly when the problems are acute."

IT can act as a brake

For over two months, Lennart Lysén and Sven-Erik Kohlin, of Corporate IT, have been working on a strategy for dealing with the IT aspects of outsourcing, along with formulating concrete guidelines and providing assistance and support for various projects. The goal is to achieve smooth, cost-effective and secure IT

support during outsourcing. Once the appropriate buyer is at hand, the sale is often quickly completed.

IT questions also need to be dealt with quickly, securely and in a standardized manner so that it doesn't put a brake on things. Still, they often get overlooked or are entirely missing from the process. These are mistakes that can cost time and lots of money at a later date.

"It's important that Ericsson be clear about what will happen when a partner takes over, such as which information a partner needs access to, which security will be in force, which system will be used. The goal is to deal with as many of these problems as possible, early in the outsourcing process."

Standard solutions

More knowledge about the importance of IT questions as well as tools, such as ready-made IT infrastructure solutions and flexible systems that are possible to adapt to other partners, are needed for the smooth handling of IT issues.

"The issue of information and IT infrastruc-

ture are two highly relevant areas on which we are focusing significant energy. Which information does the outside company need to have access to in order to be able to supply the agreed product or service? Today, we base our assumptions on the fact that the partner needs to have access to the same information as the previous internal unit, but often they need much more, and sometimes it isn't the right information at all. It is just as important is determining which of Ericsson's systems the partner needs access to and how they are going to connect with us."

"Once we're finished, we need to get better at cleaning up and cleaning out things like old signatures and authorizations. Perhaps there might also be a need to set up a 'hit-team' that can be called out and be involved in business dealings when IT questions are raised on the daily schedule," says Lennart Lysén.



Lennart Lysén

Eva Andersson
freelance journalist



High drama in New York for the Ericsson sponsored performance of Carmen. Don José and Carmen are the main characters of the opera.

Ericsson sponsors Carmen in New York

The Swedish opera company, Folkoperan is to perform George Bizet's 'Carmen' in New York - and Ericsson is the presenting sponsor.

For the past thirteen years, Ericsson has been one of Folkoperan's main sponsors, and will now give its support to the company's return to the United States.

Lars Ramqvist, CEO for Ericsson, commented, "Like Folkoperan, Ericsson is committed to quality. In that spirit, we sincerely hope the New York audience enjoys this unique guest performance."

A gritty and non-traditional production of Carmen, Folkoperan's portrayal is noted for its rejection of lavish sets and trappings, shearing down the original story to a more fundamental enactment.

Since its premiere in 1996, Staffan Valdemar

Holm's Carmen has received critical praise in Europe.

"This interpretation surprises and takes the breath out of the audience and yes, even shocks, but it remains decisive and real," says Jochen Breiholz, of the German 'Opernwelt' magazine.

Carmen will be staged at the Brooklyn Academy of Music Harvey Theatre in New York, over four performances on the 11, 13, 15 and 16 April. In addition, local children from the Brooklyn area will be invited to a special dress rehearsal to be performed on April 10.

Matthew Tapsell

matthew.tapsell@lme.ericsson.se



Good start of the year for Ericsson in the US

► Kurt Hellström (centre), President of Ericsson, is pictured together with Ericsson US employees and the newly appointed head of market area North America, Per-Arne Sandström (right-centre). Kurt and Per-Arne are sporting

American football's Dallas Cowboy shirts. Kurt was in ebullient mood at the recent employee meeting in Richardson, Texas. "Ericsson in the US has had a great year and we're off to a good start in this one", he said.

Time for Erica Awards

Ericsson recently announced the second annual Erica Prize. Five non-profit organizations in all parts of the world will be awarded Internet development services valued at USD 500,000.

Erica is an acronym for Ericsson Internet Community Awards, which are presented to five non-profit organizations that wish to benefit from maximum creativity and utilization of the Internet.

"The Erica Awards enable Ericsson to combine its commitments to Internet development with social responsibility. Erica provides Internet access for non-profit organizations that want to spread information about their organizations and operations," says Kristina Forsman, communications manager for corporate sponsorship and community marketing programs.

The prize was established to create contacts between non-profit organizations, commercial Internet companies and worldwide web development companies.

A parallel objective is to underline Ericsson's position as one of the world's leading players in datacom and Internet operations.

Erica is open to non-profit organizations in

all parts of the world. The winning entries should demonstrate new schools of thought and user-friendly concepts characterized by innovative utilization of opportunities created by the Internet.

Last year, more than 1,400 entries were received from all parts of the world, and three winners were crowned.

Due to the strong interest, Ericsson is increasing the number of winners this year and contributing a total value of USD 500,000 in web development services and technical support.

The final day for Erica 2000 applications is July 17.

All applications should be sent to Erica's web site. Winners of this year's Erica Prize will be announced on September 15.

Henrika Lavonius-Norén

henrika.lavonius-noren@lme.ericsson.se

www.ericsson.com/erica

ERIC & SON



Dogs with pulling power

► Kristina Norberg from Ericsson in Gävle and Jaana Tengman from Erisoft in Skellefteå devote their free time to the somewhat unusual sport of sled dog racing.

Recently, the 2000 Swedish Sled Dog Racing Championship was held in Skellefteå, northern Sweden. Kristina won first prize in the 20 km event for women "mushers" - an Ericsson T28.

In a second race, over 10 km, she was second, while Jaana was fourth in both events. The relay race for women was won by Jaana Tengman's team, the Skellefteå Working Dogs Club.

Ericsson was principal sponsor for one of the Championship competition days.

Since the Championship, Kristina Norberg and Jaana Tengman have competed in the finals of the European Sled Dog Racing Cup, where they each took a bronze medal.

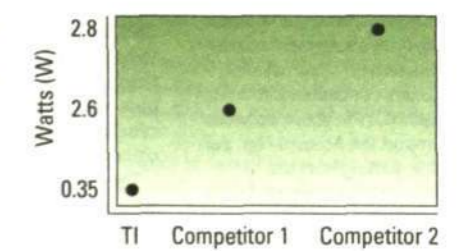
SERIAL GIGABIT CMOS AT 2.5 Gbps.



GET A JUMP ON THE COMPETITION. (BY LEAPS AND BOUNDS.)

2.5 Gbps or CMOS. Until now, you've had to choose one or the other. Texas Instruments introduces the TLK2500, a 2.5-gigabit transceiver in CMOS. This transceiver solution delivers ultrahigh-speed I/O at a reduced per-port development cost and at 350 mW uses one-sixth the power of its closest competitor. The TLK2500 provides several on-chip system and manufacturing tests and is housed in a thermally enhanced PowerPAD™ package that allows heat to dissipate efficiently.

This new technology exceeds the boundaries set by other data transmission solutions. And with TI as your partner, your serial backplane designs are sure to spring ahead.



Device	Description	Parallel Bus Width	Rate (Gbps)	V _{CC}
TLK2500	1.5-2.5 Gbps Transceiver	16 bit	1.5-2.5	2.5 V
TLK2201	Single 1.25 Gbps Transceiver	10 bit	1.0-1.5	2.5 V
SN65LVDS93/94	Quad LVDS Tx/Rx Pair	7 bit	0.2-0.45	3.3 V

For more information, free data sheets or application notes, visit www.ti.com/sc/serdes or call 1-800-477-8924 (North America), +886 - 2 - 23786800 (Asia) or +44 - 1604 - 66 33 99 (Europe).

www.ti.com/sc/serdes

PowerPAD is a trademark of Texas Instruments.
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THE WORLD LEADER IN DSP AND ANALOG



vacancies

AT ERICSSON

■ This is a selection of vacancies within the Ericsson corporation. They are also published on <http://www.ericsson.se/jobs/international.shtml>, International Openings, updated every second week.

To advertise: mail your adverts to: employment.adverts@lme.ericsson.se.

Contact No. 6 2000

Updated March 31

NIPPON ERICSSON K.K. JAPAN

The Network center at our regional office in Kanazawa are offering a long term assignment as

System Support Expert

● Work tasks: Regional field support. Troubleshooting. Handling of correction packages. Trouble reports. Participate in FOA activities. Technical presentations. Interface Field Support Center. Transfer of knowledge to local staff.

Qualifications: Relevant education, proven experience and training in system support of AXE and cellular systems, preferably CMS 30. Good communication skills. Good spoken and written English. Windows and MS office skills.

Contact: Yukihiko Nakajima, Yukihiko.Nakajima@nrj.ericsson.se, +81 762 63 7784 or HR, Tommy Naslund, tommy.naslund@nrj.ericsson.se, +81 3 3221 8235.

ERICSSON TELECOMUNICAZIONI S.P.A. ITALY

PSTN - System Support Engineer

● Within Operation and Maintenance Area, in Operation and Customer Service Organisation located in the main office in Italy, Rome, we are looking for a person to fulfil the target trouble reports demands. The organisation OP/F gives support to three big customers (TELECOM ITALIA, Wind, ALBACOM) and about ten small. In this context will act as trouble shooter for fixed network and emergency support procedures.

The candidate shall have at least 3 years experience in the AXE support area and must be fully competent in the area of trouble shooting, system upgrades and updates, trouble report handling and technical customers support. Open mind, availability and flexibility are even a must. Starting data is May 2000.

Contact: Umberto Antonelli, +39 06 7258 2880, umberto.antonelli@tei.ericsson.se.

Technical Sales Support

● In the field of New Wireline Operators, Switching and IN we are looking for a person who will take care of: analysis of Customer requirements, definition of Customer solution (technical feasibility, commercial viability, network planning, network elements dimensioning and configuring), statement of compliance, presentation to the Customers of possible solutions, new products and applications. (The above activities are mainly intended to support the Account Mgr. during the whole Sales process starting from the prospect identification until the offer delivery) technical support in the project kick-off phase.

We need a background skills of: Telecommunications, fixed networks, AXE and IN applications. Ericsson organisation and tools. Team working and initiative attitude. The location is Milano, Italy and the duration is at least one year starting May 2000.

Contact: Daniele Coppola, +39 06 72587 5640, daniele.coppola@tei.ericsson.se or Giuseppe Ieva, +39 02 2659 4506, giuseppe.leva@tei.ericsson.se. Application: Laura Guerani, HR +39 06 7258 3927, laura.guerani@tei.ericsson.se.

TELEFON AB LM ERICSSON, GSM FIELD SUPPORT CENTER, EGYPT

Ericsson is the sole supplier of infrastructure equipment and services to the second GSM operator in Egypt. The network is growing rapidly and new features are being implemented continuously and to become an excellent supplier we need to be able to give excellent support. This position as FSC engineer/trouble shooter is the key to success in managing support to a demanding customer.

FSC engineer, BSC

● We are looking for an experienced trouble shooter for a big, complicated GSM network. You will be re-

sponsible for supporting the customer by providing highly technical professional services in trouble shooting, analysis and resolution of problem in the GSM system, you will ensure that the necessary information is gathered for resolution of system problems, making independent judgements using extensive technical knowledge. You are familiar with the MHS, MSS, TR handling.

Requirement: Bachelor degree in computer science or electrical engineering, or equivalent experience. Minimum 4 years experience working with AXE switches with extensive working knowledge and understanding of GSM system support. Excellent written and oral communication skills in English. Expert in one or more of the following areas, OSS, APZ, IOG. Experience in MSC, PPL, SMS, VMS is considered as a plus.

Contact: Ericsson Egypt, FSC Manager, Nagi Soliman, +20 10 161 0024 or ECN 821 4333, Nagi.Soliman@eel.ericsson.se.

ERICSSON SYSTEMS EXPERTISE LTD. IRELAND

Senior Software Development Engineer

Vacancies have arisen in the Radio Network Solutions Centre (RNSC), for Senior Software Development Engineers. The above positions will be based in Radio House, Beech Hill, Clonskeagh.

The design teams are involved with products that are technically advanced and aimed at carrier-class telecommunications service providers. The Radio Network Solutions Centre is responsible for the development of Next Generation Radio Network Servers.

● This positions will have the following main job functions: Development and Support of Application Software for the Next Generation Radio Network Servers. Member of the design team designing and building the architecture for the Next Generation Radio Network Servers.

The candidates will have a tertiary qualification in Computer Science or related discipline with a minimum of 5 years experience in a development environment.

The position has requirements as follows: Experience in object-oriented analysis and design (OOAD/UML). Experience in CORBA or distributed application development. Significant exposure to UNIX environment. Strong skills in C, C++, and Java. Strong design and innovation experience. The preferred candidate will have exposure to Object Database Management systems and experience in Telecom/Datacom. Also experience in Networking Protocols management would be an advantage.

The successful candidate will have good interpersonal skills, excellent organisational skills and co-operative team working skills.

If you feel you can meet the above requirements and would like to be considered, please forward your Curriculum Vitae in writing to the undersigned. Although preference will be given to those who reply before 20th April 2000 we will receive applications until all positions have been filled

System Architect

A vacancy has arisen in the Radio Network Solutions Centre (RNSC), for a Systems Architect this role will be working as part of the Systems Engineering team. The above position will be based in Radio House, Beech Hill, Clonskeagh.

The Systems Engineering team operating within R&D playing a pivotal role in new product/feature development. It works closely with Marketing/Customers in up-front definition as well as with Development (both hardware & software) in architecting solutions, defining system behaviour and requirements. The team is involved with products that are technically advanced and aimed at carrier-class telecommunications service providers.

● This position will have the following functions: Specify optimal system configurations and architectures to meet Product and Development needs. Architecture development for the Next Generation Radio Network Servers. Define and develop a distrib-

uted realtime OO based architecture. Develop requirements for the Applications Object Model, and the Application Service Platform.

The candidate will have a tertiary qualification in Electronic Engineering or Computer Science an MSc or equivalent is preferred. A minimum of 5+ years experience in an OO development environment, with design of large-scale OO based systems using UML is a pre-requisite. Experience in Corba, and Distributed Computing, also in Networking Protocols with a detailed knowledge of C++ or Java is required. We have a preference for Telecom/Datacom experience with exposure to Network management systems.

The successful candidate will have good interpersonal skills, excellent organisational skills and will be capable of working on their own or as part of a team.

Section Manager Positions

As part of the Cellular Design Division's continuing organisational development and progression, we invite applications for the position of Section Manager, both for PLEX projects and Open Systems projects. The successful candidates will be assigned to Units within the Cellular Design Division as required.

These positions are of critical importance in aiding EEI/R to implement its strategies and meeting the challenging goals and objectives set out for the division.

● Key responsibilities for the position of Section Manager are: To deliver required results within the specified parameters of quality, time, cost and productivity as specified by Ericsson Customers requirements. Manage all planning, monitoring, reporting and day to day activities of the section. Be responsible for budgeted cost (Manhours, Utilisation, Travel, etc). To develop and utilise the technical competencies required to meet the business objectives. Work to achieve the ESSI and CMM software quality goals through the promotion and application of the most appropriate processes and mechanisms.

Active participation in the management of the department in respect of: Strategy and goal realisation. Manpower planning and recruitment. Budget and cost control. Change Management.

Previous Management or Leadership experience will be an advantage as will experience in Open Systems development. Applicants will be qualified at degree level and/or will have acquired sufficient technical and business expertise to function independently at a professional level on all activities.

The nature of the role is dynamic and therefore will require pro-active individuals with good problem solving and decision making skills. Demonstration of Leadership and team skills is essential, as is strong customer and quality awareness.

JAVA Developers / Designers

Vacancies have arisen for Software Developers / Designers within the Wireless Radio Network Dept. of the Radio Network Solutions Centre. W.R.N. is developing applications for 3G mobile systems.

● Candidates will have a proven background in software design, development, and testing. Experience gained in development of telecommunications system software for mobile or fixed networks would be a distinct advantage.

Skills / Experience: The ideal candidate will have a degree in Computer Science or related discipline. You will have experience in a design environment and be proficient in the following: Java development (1yrs+). Open Systems Development (3yrs+).

Experience of the following technologies would be a distinct advantage: Object Oriented Design methodologies, UML. Client/Server design. C programming in a UNIX/Network environment. Shell programming for UNIX. Database application development using (Oracle, or Sybase). Experience of design projects within the telecom environment would be a distinct advantage.

Candidates should be capable of working on assignments either in a team or individually as the need arises. An active contribution to the development of the group in terms of quality, productivity and time is required.

The ideal candidates will naturally be able communicators on technical matters and be capable of working to tight deadlines when required to do so.

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

Contact: Noeleen Waters, HR, Recruitment.Process@eei.ericsson.se, Radio Network Solutions Centre, Ericsson Systems Expertise Ltd, Beech Hill, Clonskeagh, Dublin 4, Ireland.

ERICSSON LTD, BURGESS HILL, UK

Systems Engineer, Data Communications (IP/ATM)

An excellent opportunity to work within the existing Systems Engineering department as part of the dynamic Converged Networks team. The Systems Engineering department forms the centre of excellence for all products within Ericsson, providing the highest level of technical expertise available within the organisation.

● This challenging role requires a highly motivated individual with good communication skills as you will be required to create strong links with both internal and external customers. You will work closely with the Product Marketing, Sales and Pre-Sales teams to keep abreast of customer requirements and technological developments with a view to providing new and innovative solutions. You will also have the opportunity to develop your skills through extensive testing of new products, technologies and solutions. You will be responsible for providing in-depth technical support to ETL departments and directly to customers where appropriate, as well as meeting prospective customers to assist in the sales process. You will also need to contribute to pre-sales activities by providing your in-depth knowledge of the products, their application and inter-working to the sales team.

The successful candidate will have a proven track record of managing and developing customer relationships as well as excellent technical skills in their specialist area. You will need to have at least five years networking experience with three years providing technical support in the Data Communications area. In addition you will need to be a strong team player who has very strong knowledge of at least three of the following. IP, IP routing protocols, IPX, ATM, UNIX, NMS solutions, VoIP.

Contact: Rec. mgr, Mike Waldron, Mike.Waldron@etl.ericsson.se. Application: Suzi Cooper, HR, Susanah.Cooper@etl.ericsson.se, +44 1444 234018, Telecommunications Centre, Burgess Hill UK.

ERICSSON INC., RESEARCH, TECHNOLOGY AND PATENTS, USA

The RF and Analog IC group in RTP, NC has the following openings:

RF/Analog/Mixed-Signal Design Engineer

● We are engaged in the design of highly integrated transceiver ICs that include all functions from antenna to baseband. These functions include receiver front-ends, integrated IF channel filters, A/D converters, modulators, integrated VCOs, frequency synthesizers and power amplifiers. Our work is focused on the American standards including TDMA, EDGE and IS-95. We seek IC design engineers at all experience levels.

RF System/IC Verification Engineer

● This engineer's role during the life of a typical project: Breadboard/debug design during the concept definition stage (requires RF/system engineering skill and standards knowledge). Consult with RF IC designers during IC design stage. Ensure that the IC is designed with testability/usability in mind. Work with technician to build test fixtures and establish a test/evaluation methodology in time for first silicon. Evaluate first silicon. Work with design team to debug and make recommendations for enhancements. Once chip is functional work with semiconductor vendor to establish high-volume test methodology. Also help RF engineers in product groups on implementation issues.

Finally, work with semiconductor vendor on yield enhancement during transfer to production. Minimum of 3 years experience in either RF system design or RF IC test or product engineering.

Contact: Tony Montalvo, +1 919 472 7685, eustjmo@am1.ericsson.se.

ERICSSON (CHINA) COMPANY LTD., CHINA

Senior System/Radio Network Performance Consultant

● Tasks: Work with Radio Network Performance Improvement proposals and projects based on techni-

cal specifications, project specifications. Transfer the knowledge of new technical and sharing information internally as well as to the customers. Assistant to develop methods, tools and processes in the area.

Required skills: More than 2,5 years of the radio network optimization engineering, good seminar ability & the ability to transfer the knowledge as well as to lead and participate the ND&NPI project.

Good English oral ability, good experience on telecommunication network engineering, good IS/IT knowledge. Considerable travelling within the responsible area. The technical title is certified. Having minimum of 2,5 years practical experience in the related area, with leadership and presentation ability, result oriented with analytical capability. Bring experience from other countries and operators.

Duration of contract: 1 year or more.

Contact: Ericsson (China) Company Ltd, Mr. Urban Andersson, General Manager, CSCMr. Thomas Chang, Sr. Manager, ND/NPI Services, Mr. Xinkao Zhang, NPI Manager, +86 10 6561 9988, Fax: +86 10 6561 0116.

MU CARIBBEAN

Project Controller

With strong interest in strategic business planning. Market Unit Caribbean covers an area of 15 countries and 15 dependencies with some 27 million people. Activities are carried out from the main office in Puerto Rico and other offices in the region.

Demanding competition and price pressure require intensified financial focus on implementation projects.

● We are therefore looking for a Project Controller to implement and coordinate the economical planning and follow up of the projects in close cooperation with the different Project Managers. An additional demanding task will be to participate in and coordinate the development of strategic business planning (ESP) working closely with the Key Account and New Account Managers (KAM, NAM) and other members of the MU Management Team.

Candidate should have several years of experience as Project Controller and have a strong interest in business planning. An MBA degree or equivalent and excellent skills in the English language – in writing and verbally – are required. Knowledge in Spanish/French is a further merit as the region is multicultural.

This position is based in San Juan, Puerto Rico reporting to the Director of Finance and with close interaction with the Operations and Marketing Departments.

Contact: Arne Palmkvist, Director Operations, +1 787 771 1734.

Application: Noelia Borrego, HR Representative, noelia.borrego@ericsson.com.

ERICSSON NV/SA, BELGIUM

Marketing Manager

● The Marketing Manager will be responsible for commercial activities towards the existing accounts in Belgian and Luxembourg.

The responsibilities include but are not limited to Network Development Support and developing close partnership with the Marketing Divisions of the existing accounts in order to co-operate in the development of their business on the Belgian market. The Marketing Manager will closely co-operate with Network Design Management and Project Management for the further development of the existing Networks and will take an important role in the tender work towards 3G.

The candidate Marketing Manager has ideally three years of relevant experience in GSM within a similar position. Moreover, the candidate has a good understanding of Public Telecom, radio and datacom networks as well as services deployed on these networks. The candidate is able to integrate her/himself into an international team. Excellent knowledge of the English language is a firm prerequisite.

Contact: Ms Petra Remans, HR, Raketstraat 40B - 1130 BRUSSEL, petra.remans@ebr.ericsson.se, Mr. Rudi Rabbachin, Marketing & Sales Manager Existing Accounts EBR, Raketstraat 40B - 1130 BRUSSEL, rudi.rabbachin@ebr.ericsson.se.

OY LM ERICSSON, FINLAND

Ericsson has globally 4 units which are responsible for program delivery and support of GSM systems. One of these units is located in Finland: Mobile Networks Supply and Support.

We have a close cooperation with other Ericsson global development units and with local support organisations as well. We are responsible for GSM sys-

tems of over 40 European operators. Our over 150 well-experienced persons with high technical competence together with our multifarious test environment make it possible to test program versions of new GSM network in a professional way and to meet customers' requirements before delivery.

After delivery we together with the other Ericsson support organisations offer support of high quality to our customers.

Mobile Network System Tester

● You will be involved in the verification and support tasks for GSM/GPRS/UMTS systems. You will work in an international organisation and close to the customer interface. The position offers a unique opportunity to get a broad network view of our mobile systems.

We expect: Basic knowledge in mobile network technology. Suitable technical education. Initiative and good communication skills. Good skills in English.

We offer: A broad network view of GSM/ GPRS/ UMTS. Versatile and challenging tasks. Dynamic and international work environment. Supporting and motivating teams. Diverse opportunities to develop your professional skills.

We appreciate: Teamwork and social skills. UNIX experience. Willingness to continuously develop your competence. Interest in working with different cultures. Customer orientation.

Contact: Riku Vastela, +358 9 299 2512, +358 40 702 3838, Petteri Viitanen, +358 9 2772, +358 40 557 4424.

ERICSSON ESPAÑA SA, R&D CENTER, MADRID

At GSM/UMTS Database products (PU-CSS) we are working with applications for mobile communication system.

The responsibility includes the following products: HLR for GSM/UMTS including GPRS for TDMA, AUC & EIR for GSM/UMTS both AXE and Sourced products, FNR-NP Flexible numbering and Mobile Number portability and also products for Intersystem Roaming such as ILR.

We are also working with Reconfiguration services to add value for the customers and for our products. We are located in Madrid. One of the most interest-

ing cities in Europe with fantastic cultural, sport, gastronomic sensations. Madrid is also known for its excellent friendly atmosphere. :-)

Experienced AXE 10 Software designers

● To strengthen our capabilities in GSM/UMTS we are looking for some experienced SW designers in AXE 10 that should be familiar with PLEX design methods and preferably GSM applications. Other knowledge and experiences such as signaling SS7 will be evaluated positively.

If you like challenges and be part of our team to develop the next release of Ericsson UMTS/GDB products and share with us the evolution from AXE to the new Ericsson open platform for control nodes and future multimedia applications, work with experienced colleagues and having the possibilities for taking on responsibility and career/personal development.

Contact: Jesus Luque-Ruiz at ece.ericsson.se, Jesus Luque, GSM/UMTS Database Product, Ericsson España, S.A.c/ Ombú, 328045 Madrid, +34 91 339 14 04, Spain, Fax +34 91 339 25 00.

TELECOMMUNICATIONS CENTRE, BURGESS HILL, GUILDFORD, UK

Technical Security Consultant

The task of a Technical Security Consultant is to deliver consultancy, design, technical specification and technical solutions in Wireless Internet Security solution.

● It is essential that suitable candidates have 4 years experience of developing and implementing secure Internet solutions, as well as 2 years experience in design of complex Security Solutions for large corporate network in a commercial environment. Knowledge of Internet Security packages e.g. firewalls, anti-virus, content scanners etc. is also essential as well as experience of either design and implementing PKI solutions or experience of design and implementing IPSEC solutions. In this environment industry standards and protocol must be maintained.

In addition, experience in IP networks, knowledge of BS7799, or experience of security auditing and risk analysis skills are an advantage but not essential.

Looking for Success and Adventures?

1999 was a fantastic year for us! We keep on being successful and are expanding and have the opportunity for you to join us!

What about working with the most exciting and dynamic markets in the world? Join us and start working with Direct Markets at Business Unit GSM systems, ERA/LP. We support 40 countries and are working in another 20 countries within Eastern and Central Europe, Middle East, Africa, Asia and South America. We take full marketing, sales and operations responsibility of GSM System offerings in concert with the Local Market Units. We are rapidly expanding our business with orders from both new and existing customers.

This is Your chance to work in an international dynamic and challenging atmosphere with opportunities to work direct with the customer. The positions will give excellent possibility to travel and for the right person it is possible to build a platform for further international assignments. Our office is situated in Sundbyberg.

New Account Management

We are an aggressive marketing and sales team hunting for new business on BMOG's direct markets. We are working worldwide with complete GSM system tenders in countries where Ericsson have limited local presence. Now we need hungry and professional:

Sales Managers

You are responsible for the commercial part towards our potential customers and perform business planning, tender work, negotiations and other activities related to our customers.

Technical Managers

You have the technical responsibility for the infrastructure. You are responsible for technical issues and customer presentations, tender work, technical advice and for solving different problems.

Project Managers

You are responsible for specifying the project set-up during the tender work. After contract signing you will manage the projects during the first phase of the implementation.

For further information please contact:

Ulf Borison, phone +46 8 757 15 80
Håkan Svahn, phone +46 8 404 87 76
Per Wistrand, phone +46 8 404 87 74

Business Management Key Accounts

Together with local Market Units we are working towards existing customers worldwide. Our scope is to handle marketing, sales and also to support during the delivery and implementation work. We are now looking for the following competent people:

Sales Managers

You are responsible for the marketing and sales activities towards our existing customers. You will perform business planning, tender work, negotiations and other activities related to our customers.

Technical Managers

You will work directly towards the operators with technical marketing. You are responsible for technical issues, customer presentations, tender work, technical advice and for solving different problems.

Project Managers

Your task is to lead and define international system deliveries. You are responsible for planning, follow up and completion of all activities and for the fulfillment of the customers and our expectations together with the MU.

For further information please contact:

Africa, Middle East and Asia
Henrik Moberg, phone +46 8 757 29 19
Hans Olander, phone +46 8 404 69 42
Håkan Nordlander, phone +46 8 585 348 10

Latin America, Central and Eastern Europe
Lars-Olof Lindgren, phone +46 8 764 13 44
Mikael Anckers, phone +46 8 757 39 68
Lars Kristofferson, phone +46 8 764 12 68

To be successful we believe that:

You have a MSC degree or similar and well-proven experience from marketing & sales or project management within the mobile telecommunication area. Good communication skills are required as

well as excellent written and spoken English. Other language skills are considered as an additional qualification. You are also prepared to travel.

We are also looking for the following positions:

- Secretaries
- Business Controller
- Area Manager Customer Services
- Legal Counsellor
- Human Resource Officer

Please contact Human Resources for further information:

Gunilla Lundborg-Regné, phone +46 8 404 50 33
Anita Malmström-Wallner, phone +46 8 404 24 29

If you want to work in an ambitious team in an International environment Please send your job application as soon as possible to:

Ericsson Radio Systems AB
SG/ERA/LP/HÅ Pirjo Hautala
164 80 STOCKHOLM
pirjo.hautala@era.ericsson.se



Make yourself heard.

ERICSSON 

As well as having excellent technical knowledge, the ideal candidate should have good verbal and written communication skills and be able to work well in a team, especially under pressure. A strong customer and business focus and the ability to deliver results are also essential for this position. Some travel abroad may be required.

Wireless Business Automation, Project Manager

Working as part of the Mobile Automation department, the task is to manage projects in the area of wireless business or mobile automation.

● It is essential that suitable candidates have 5 years experience of delivering technical projects in a commercial environment, using recognised methodologies, as well as 2 years experience of one of the following project types - GSM, BackOffice systems, Corporate Database systems or System integration.

As well as having excellent technical knowledge, the ideal candidate should have good verbal and written communication skills and be able to work well in a team, especially under pressure. A strong customer and business focus and the ability to deliver results are also essential for this position. Some travel abroad may be required.

Contact: Recruiting Manager, Dave Kirk, Dave.Kirk@etl.ericsson.se, +44 1444 874100, HR, Suzi Cooper, Susannah.Cooper@etl.ericsson.se, +44 1444 234018, Telecommunications Centre, Burgess Hill.

Senior Marketing Executive

● Key responsibilities: Determine customer requirements and by analysis and co-operation with Product Management, help to produce an appropriate solution. Prepare offers to One2One ensuring that all aspects of price, delivery and profitability are adequately covered and play a key role in the associated pricing negotiations. Develop and manage key relationships within One2One. Achieve annual sales targets for specific areas of business. Attend regular meetings with One2One as necessary to ensure the smooth running of the business. Build and manage strong relationships with key external and/or internal customer contacts in order to influence business opportunities. Facilitate agreement of contractual terms for new business areas. Lead a project team where required to secure orders and promote customer focus throughout the project. Present and promote the Ericsson product portfolio to One2One to develop specific business opportunities. Provide support to less experienced members of the team as required. Develop marketing strategies in accordance with the developments in the market place and implement effective positioning and marketing of Ericsson products to achieve new sales.

Competencies, qualifications and experience: Under the direction of the Marketing Manager, you will be responsible for the management of a wide range of business opportunities towards One 2 One. The ability to develop a relationship with the customer is key to this role.

The suitable person will be required to achieve order and sales targets defined by the sector objectives as well as strategic business successes, within a wide product portfolio. Competencies would include a relevant degree or equivalent, with a marketing / account management approach. The candidate should be capable of demonstrating a technical understanding of mobile telephony and that he/she is able to pursue opportunities to a successful order. Obviously, the candidate must possess excellent analytical, relationship building and negotiating skills. A team player, the candidate will be able to work in a fun and challenging account with little supervision.

Application: Recruiting Manager, Jonathan Harby, jonathan.harby@etl.ericsson.se

ERICSSON TELECOMUNICACOES LDA, LISBON, PORTUGAL

IN Service Designer

Ericsson Telecomunicacoes Lda in Portugal is looking for IN Service Design engineers to join our VAS Design Centre, within the Customer Services Division, based in Lisbon. We offer you a long term assignment in a warm and nice country.

Ericsson in Portugal is supplier of all three GSM operators and two of the major Wireline operators. Several GSM and fixed Ericsson IN services are implemented at most of our customers. For this position we are looking for people experienced in IN service creation and customisation.

● The candidates shall have good knowledge in one or more phases of the IN service design process: pre-studies, feasibility studies, service design, test design, function testing, network integration testing. Candidates with experience in IN Pre-Paid Systems design shall also apply. The candidate shall have good English and communication skills. Competence transfer to the local staff is also an important part of the role.

Contact: Carlos Ferreira, carlos.ferreira@sep.ericsson.se, +351214466194 or Luiz Ofner, luiz.ofner@sep.ericsson.se, +351214466288.

SS System Support Engineer

Ericsson in Portugal is supplier of AXE equipment for all three GSM operators and two wireline operators. Our support organisation is established since 1992.

● Main responsibilities: You have to be involved in all main FSC customer support processes: CSR Handling (TR and Consultation), Emergency service, SW update/upgrade. A very important role is to transfer competence to the local staff.

Requirements: At least 4 years technical experience working with GSM SS system, preferably with system support. Good system knowledge and SW troubleshooting skills. Knowledge of support processes and tools. Good English and communication skills. Experience with OSS applications and remote loading techniques are appreciated.

We will only consider candidates employed by Ericsson.

Contact/Application: Vasco Alpalhão, vasco.alpalhao@sep.ericsson.se, +351 214466253 or Luiz Ofner, luiz.ofner@sep.ericsson.se, +351 214466288, Ericsson Telecomunicacoes, Lda. Edifício Infante D. Henrique Quinta da Fonte - Porto Salvo 2780 - 730 Paço de Arcos, PORTUGAL

ERICSSON TELECOM AB, DATACOM NETWORK & IP SERVICES, SWEDEN

Director of Engineering

PU - IP Network Access Stockholm. The Business Unit Datacom Networks & IP Services is responsible for datacommunications and IP services. We are now launching a number of exciting products and network solutions that dramatically will change the way telecom networks are implemented.

We are looking for a talented, highly motivated individual. Broad Band Remote Access Server group are located in Stockholm, Sweden. You will report into the Engineering Organization of the IP Network Access Product Unit based in Santa Barbara, California.

● Primary responsibilities for the director would include Line management of the designers and testers belonging to the group. Creation, Evaluation and Co-ordination of the Product Roadmap of the AXI 510/AXC 706 suite of BRAS products with the Product Management team based in Santa Barbara. Cross department coordination of program/engineering management components based in the IPNA PU

The employee will work with an embedded operating system for a remote access product that includes support for: routing and tunneling protocols, narrow band and broad band access technologies. Emerging technologies, 2nd and 3rd generation protocol support for wireless networks.

REQUIREMENTS: A technical university degree is required. A degree in Business Administration would be a plus. Thorough working knowledge of IP Networking, Broadband Technologies and Telecommunication field is a must. Several years of engineering management experience are essential. Prior experience in International project/line management would be preferred. Experience related to marketing/sales and tactical planning would be valuable.

Contact: Birgitta Vinje, +46 8 4220230, birgitta.vinje@etx.ericsson.se

Application: Ericsson Telecom AB, NA/ETX/D/H, Marie Nordin, 131 89 STOCKHOLM,marie.nordin@etx.ericsson.se.

LM ERICSSON LIBYA BRANCH, LIBYA

Ericsson have been active in Libya for more than 30 years. We are active in Wireline Systems (public network projects), a GSM mobile network project, a dedicated network project, and Enterprise systems communication solutions.

At present we are 50 employees, where of 15 expatriate staff. All expats, as well as some consultants and short-term staff, live in our well-maintained camp 25 km south of Tripoli, with swimming-pool, tennis-court, Club House, satellite tv, etc.

Key Account Manager (KAM)

● Account: General Post and Telegraph Company (GPTC), a PTT company.

The job: You will be leading the sales and marketing activities, in cooperation with concerned Business Units, towards this customer account, and establish longterm partnerships between our customer and Ericsson. Create and maintain Market Plans and business opportunities, maintain and negotiate contracts, responsible for meeting net sales and order objectives, also responsible to reach set market contribution after WACC and consolidated profitability targets; customer satisfaction. You will be responsible for budgets and forecasts.

The successful candidate: You should have considerable experience of marketing and sales of Ericsson product portfolio, preferably within wireline systems; high level of interpersonal and communication skills; self-drive combined with patience to take on the challenges in this market. Fluent English and relevant university degree or equivalent. Preferably experience from business environment in Africa or Middle East. The position is a long-term conditions contract with location in Tripoli.

Contact: Hakan Johansson, President, +218 22 308 00, hakan.johansson@ericsson.ly, Tommy Frederiksen, HR, tommy.frederiksen@ericsson.ly. **Application latest 000430:** tommy.frederiksen@ericsson.ly

ERICSSON GMBH (EDD) DÜSSELDORF, GERMANY

UMTS Radio Network Design Engineers

Proj.No 00/79

The WCDMA Competence Center at EDD takes central responsibility in the area of third generation mobile telephony systems based on the new UMTS standard. Therefore we are looking for qualified Radio Network Design Engineers in the area of UMTS/WCDMA. You will be part of our new UMTS Radio Network Design organisation which is developing network solutions for our German customers.

● The position contains the following activities: Complete Cellplanning of WCDMA Systems. Develop Methods for WCDMA Radio Network Planning. Tuning and Optimisation. Support of internal and external customers.

As a suitable candidate you have experience in the area of GSM, TDMA and/or IS-95 cell planning. Additionally you need solid knowledge in Unix and telecommunication. You are flexible, a team player, open minded and self motivated. Fluency in English is essential and German is appreciated. You will be trained in the area of UMTS System Technology and Cell Planning by attending courses and On-the-Job training.

Contact: Ericsson GmbH, Petra Grollich, HR, Petra.Grollich@edd.ericsson.se or Martin Kellner, EDD/K/ST, Martin.Kellner@edd.ericsson.se

ERICSSON CDMA SYSTEMS, SAN DIEGO, CALIFORNIA, USA

UNIX System Administrator (Solaris)

Install new software, repair bugs, train users, offer tips for increased productivity across areas from word processing to CAD tools, evaluate new hardware and software, automate a myriad of mundane tasks, and increase work flow at their site. In general, system administrator enables people to exploit computers at a level which gains leverage for the entire organization.

● This position requires the ability to solve problems quickly and completely, and the ability to identify tasks which require automation and automate them. Must have a solid understanding of Sun Solaris, paging and swapping, inter-process communication, devices and what device drivers do, file system concepts (inmode, superblock), and the use of performance analysis to tune systems.

Must have the ability to program in an administrative language (TK, Perl, a shell), to port C programs from one platform to another, and to write small C programs.

Must have an understanding of networking/distributed computing environment concepts, principles of routing, client/server programming, and the design of consistent network-wide filesystem layouts. Hardware: Sun Systems (E450 to E6500 and SPARC Ultra class). Network Appliance filters - Sun StorEdge and MTT raid arrays, Veritas products, Sun Soft print client and server, Cisco Systems, Solaris 2.5.1, 2.6, 7 and their jumpstart configurations; DNS and NIS.

A Bachelors degree in Computer Science, Engineering or technical discipline and 4 - 7 years experience as a UNIX System Administrator is preferred.

Contact: john.nelson@ericsson.com.

LM ERICSSON ISRAEL LTD

We are providing support and supply to the GSM operator in Israel and to the GSM operator in the Palestinian territories. Our customers' networks are growing rapidly, with a wish to implement new features, they put high value on good support. You will be joining an enthusiastic team in a dynamic working environment.

Our office is located just outside Tel Aviv, walking distance from our main customer premises. To live here, in this Mediterranean climate, with many great beaches, great variety of restaurants and lots of historical places to visit is an interesting experience.

SS Support Engineer, CME 20

● The main responsibilities for this position will be to manage, co-ordinate and participate in network investigations and trouble-shooting activities on highest technical level and to address customers expectations/needs. Provide technical competence for resolving complex problems in the networks. Provide technical advice and assistance to engineers and managers. Transfer knowledge to less experienced team members. Curiosity, interest and the ability to learn new features/functions is important. You would also need to participate, periodically, in the 24-h emergency support.

The competence requirements are: Minimum 4 years working experience on AXE 10 application systems, of which at least 2 years experience should be on CME20/ CMS40 systems preferably verification and/or support/supply. Experience on IN is desirable.

Candidates with excellent trouble shooting skills and experience on other mobile application systems/product lines will also be considered for this position. The candidate should also have good English communication skills, both spoken and written. Driving license is an advantage.

The initial contract period will be for 1 year. Only applications from Ericsson employees will be considered for this position.

BSS Support Engineer, CME 20

● The main responsibilities for this position will be to manage, co-ordinate and participate in investigations and trouble-shooting activities in the BSS area at highest technical level and to address customers expectations/needs. Provide technical competence for resolving complex problems in the radio networks.

Provide technical advice and assistance to engineers and managers. Transfer knowledge to less experienced team members. Curiosity, interest and the ability to learn new features/functions is important. You also need to participate in the 24-h emergency support periodically.

The competence requirements are: Minimum 4 years working experience on AXE 10 application systems, of which at least 2 years experience should be on CME20 / CMS40 systems preferably verification and/or support/supply.

Candidates with excellent trouble shooting skills and experience on other mobile application systems/product lines will also be considered for this position.

The candidate should also have good English communication skills, both spoken and written. Driving license is an advantage. The initial contract period will be for 1 year.

Contact: Tobias Jonsson, FSC Manager, +972 3 900 6023, Tobias.Jonsson@eoi.ericsson.se, Yuval Shoshani, Core Products-FSC, +972 3 9006022, Yuval.Shoshani@eoi.ericsson.se.

Application: LM Ericsson Israel Ltd. ATT: Irene Snir, Human Resources, +972 3 900 6030, Fax: +972 3 903 0952, Irene.Snir@eoi.ericsson.se

ERICSSON TELECOMMUNICATIE B.V, RIJEN, NETHERLANDS

Support Engineer APZ

Goal/Challenge: The Global Response Center (GRC) within the division Business Line Customer Services is having a strategic role within Ericsson's Global Customer Support.

The GRC is the escalation point for all local support organisations (CSO's) worldwide. The GRC makes Ericsson-expertise worldwide available. At this moment the GRC gives support on all Public Networks products.

In the future the GRC will be a part of the integrated support organisation for all Ericsson products, the Ericsson Global Support organisation (EGS). The EGS is located in 3 different regions (Asia-Pacific (AP), The America's (AM), Europe, Middle-East and Africa (EMEA)) thus 24-hrs support, 7 days a week.

We work with normal office hours, where the cases are handed over at the end of the day. The activities will be executed in an international environment.

● Tasks: To handle trouble reports and CSR's, to write emergency corrections, Trouble shooting on testplants and on live site's (sometimes even on-site.)

Required competence: Knowledge of AXE, APZ (Hardware & Software), minimum 5 year experience on AXE within Ericsson, immune to stress and precise, both working in a team as well as independent, good communication skills in English, prepared to work some weekends, knowledge on MHS, onlaga recovery, Plex and ASA.

Background: Verification, Testing, Field Support. To apply: The home base is Rijen. However work abroad for both work and training is one of the possibilities.

Application: Ref no 102930.

Write and verify corrections in both target and simulated environment. Propose solutions. Design and verify TCS subsystem products according to the RPC process.

As a suitable candidate, you are an Ericsson employee and should have experience in design maintenance activities. Any test experience in simulated and target environment as well as experience in the traffic control area is a clear advantage.

Furthermore, the position requires initiative, good communication skills and the ability to work under pressure.

Contact: HR, Simon Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, Maurice Van Mulken, +49 2407 575 701, eedmava@eed.ericsson.se

AHEAD Project Manager

Proj.No 13/M00

● The main responsibility of this position is to establish and run the CAPC Improvement Projects called AHEAD and hereby contribute to the operational excellence improvements of the international organisation.

The main authorities and responsibilities are: Set up of AHEAD Projects, competence build up in all parts of the organisation. Coordinate with Commercial CAPC projects (wireline/wireless) which will deploy and implement the improvements. Active involvement in benchmarking of improvements. Participation in the CAPC Performance Management Net-

work. Coordinate Activities with the SSES organisation (Software and System Engineering Support). Support the CAPC World Class Provisioning Manager in achieving the CAPC Goals.

The AHEAD Project Manager reports to his/her line manager and to the CAPC World Class Provisioning Manager. Potential candidates shall have a sound background in wireless and/or wireline AXE or Open Platform SW development projects. Any previous experiences with quality systems, processes and project management are appreciated.

The candidate needs to have strong leading and communication skills. Last but not least you should have a high interest in moving an organisation AHEAD and see this position as an opportunity for improving our products and our ways of working.

Contact: HR, Simon Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, CAPC Performance Management, Bernd Mueller, +49 2407 575 407, Bernd.Mueller@eed.ericsson.se

General Packet Radio Service (GPRS)

Configuration Manager (technical)

● The challenge for configuration management is to keep control over all objects which are produced and used during the software life-cycle. This includes source code, executables, released products, trouble reports, requirements, test data, third-party products.

Technical means to support configuration management are special databases (CVS, RCS, ClearCase).

BSC in Linköping continues the expansion...

Sub Product Unit BSC in Linköping, Sweden, is staffing up to meet the future. We are looking for a number of persons that want to be a part of our frontliner GSM. The BSC is controlling the mobile switching and radio networks, including both classic mobile and GPRS systems.

Estimates show a growth of a factor 10 within 5 years for the BSC product. In parallel with the continuous development of the very successful GSM BSC product, the BSC organization is developing the world first mobile GSM TCP/IP system leading to the 3rd generation GSM mobile system.

BSC Troubleshooters

ref nr 00-31

To meet the expansion and success of the GSM/BSC product, PLM needs to further strengthen the troubleshooting capacity in the support team.

Today the support team consist of troubleshooters with both Design and FSC background. This has proven to be a very fruitful mix so we therefore welcome the ones with experience from design and/or ASO/FSC work.

The BSC Support team work in close cooperation with our design offices as well as the ASO's and FSC's. This will give the opportunity to experience the power of joint efforts in troubleshooting of high priority issues. Short travels and On-site visits are part of the tasks. Within short, GPRS will be part of the support team responsibility.

Long-term contract is possible for this position.

Contact person: Roland Sevegran, phone +46 13 28 49 68, email: roland.sevegran@era.ericsson.se

BSC Correction Handlers

ref nr 00-32

As part of the Improvement work in building Correction Packages there is now a need to strengthen the BSCPLM correction handling team.

We are looking into the usage of automated correction package handling and for this we need help from experienced correction handlers. Today we use MSS for building the packages and the goal is to automate as much as possible of the correction handling. This includes as well automated tests and documentation.

The AC-A team has the full responsibility for the correction packages from assembly to field implementation. This will give opportunities to take part in AC-A Customer Implementations.

Long-term contract is possible for this position.

Contact person: Roland Sevegran, phone +46 13 28 49 68, email: roland.sevegran@era.ericsson.se

BSC Remote Load Script Designers

ref nr 00-33

To meet the increased usage of Automated Correction Deployment, the Remote Load and Remote Function Change (RFC) capacity needs to be strengthened.

Today TMOS/OSS, OPS script language is used to produce Remote Load and Remote FC scripts that automate the Implementation of the SW packages.

This work will continue and the coming releases will require frequent Implementations and then RFC will be the default Implementation Method. You will get the possibility to Develop Remote scripts and work together with our AC-A and AS Replacement team and do Remote Implementations. (Usually On-Site the first Time) OSS, BSC and Implementation knowledge will be key competence areas for the future and this you will get the opportunity to build up in this position.

Long-term contract is possible for this position.

Contact person: Karolina Örtinä, phone +46 13 32 11 96, email: karolina.ortnas@era.ericsson.se

BSC Simulated and Automated Test Designers

ref nr 00-34

Good testing technology is crucial for the BSC's success. We are therefore looking for new ways of testing our product, in close cooperation with our development projects. This includes new tools, methodologies and test coding techniques. You will be developing and supporting products in the area of simulator based test environment (STE) and automated testing.

You will be working in a team with new solutions, and therefore you are an innovative, result driven team player. The tasks spans from software development to deployment, support and training. Your customers will be software developers within the BSC organizations; five design offices in four countries.

You have an university degree with an interest in Programming techniques like JAVA, PERL or C. Other relevant background is Ericsson mobile systems, AXE 10 software design/test.

Contact person: Dan Appelfeldt, phone +46 13 28 49 96, email: dan.appelfeldt@era.ericsson.se

BSC Trouble Report and Statistics Handling Responsible

ref nr 00-35

There are 1600 BSCs working very well in different places in the world.

However sometimes there are faults reported from customer networks and these have to be handled quickly and corrections needs to be delivered.

To do this there is a connection needed in-between design and ASO/FSC organization. MHS, TR tool and MSS is used for this but of course personal contacts are needed as well.

As part of the BSCPLM Support team you will be the one that connects design with ASO/FSCs and make sure that the correct information flow is started to solve the HOT customer issues. You will have a big and international network that work together on regular basis.

You will be responsible for providing the information regarding TR/AC progress.

As statistics responsible you will as well get the task to propose and produce valid statistics that in a proper way measure the goal fulfillment within BSCPLM TR/AC handling.

With some TR/AC experience, Customer cares approach and cooperation abilities you will be able to fulfill the task.

There is a good, flexible and international support team to help you with this.

Contact person: Roland Sevegran, phone +46 13 28 49 68, email: roland.sevegran@era.ericsson.se

Send Your application to:

Ericsson Radio Systems AB
Center for Radio Network Control
Ulla-Britt Johansson
Box 1248, 581 12 LINKÖPING
SWEDEN
Email: ulla-britt.johansson@era.ericsson.se



Make yourself heard.

ERICSSON 

These provide the basics to differ between versions of objects. Tools like labels, triggers, branches, views etc. help to keep the different version under control. Through scriptsthesetools become a powerful instrument to control projects and products.

For persons interested in technical CM, we provide a good opportunity to quickly speed up in a technically skilled team and take over own responsibility after a short time. We are working with future-proof technology. ClearCase, MultiSite and DDTS (ClearQuest) are not only Ericsson's choice for configuration management but industry's standard. Perl, a scripting language we use to adapt the tools to our needs, is the most popular programming language in the WWW.

Persons interested in this field should have a structured and disciplined approach to tackle problems. The ideal candidate has an understanding of software development. Background in UNIX and scripting languages is a plus as experiences with any kind of configuration management tool.

Contact: HR, Simon Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, Stephan Jacobs, +49 2407 575 627, stephan.jacobs@eed.ericsson.se

Test Support Engineer

Proj.No 15/E00

● Ericsson's GPRS solutions are reaching a final phase with customer deliveries starting this summer. GPRS is a major step forward for Ericsson, leading into mobile packet-switched networks. The new technology requires new tools supporting our verification engineers. The position entails introducing such tools to our staff, supporting the use of the tool and coaching your colleagues. The candidate will keep contacts with the tool suppliers and our partner organisations in Ericsson.

We are looking for a self-motivated engineer with experience in software testing or test tools support. Competence in mobile networks is qualifying. Candidates should show strong analytical, problem solving and communication skills.

Contact: Hans-Thomas Kommer, +49 2407 575 446, Thomas.Kommer@eed.ericsson.se, S. Seebass, HR, +49 2407 575 163, simon.seebass@eed.ericsson.se.

The EED/D/V section is responsible for Verification and Maintenance of the Ericsson Global Packet Radio System. We host projects for node and network verification prior to system release and take care of GSN node and network maintenance after world-wide availability.

Our vision is to take responsibility in network verification of mobile datacom networks. In order to strengthen this network competence we are looking for a

BSS Test Expert

● For this position we are looking for a skilled technical person with at least 3 years Ericsson experience in the verification or maintenance of GSM BSS nodes.

You will be working in a BSS core team providing the competence to drive our datacom verification activities to success.

Activities in GPRS Network level Testing. Interface verification. Integration of BSS. Trouble shooting on BSS with focus on the packet switching part. Supporting integration of mobile terminals into the network.

As an ideal candidate you have worked with verification or maintenance of the BSC. Your sound knowledge of the BSS system enables you to work independently. You understand the basic elements of the GPRS network and you are willing to expand your competence area with mobile datacommunication. You have experience to share your knowledge with new colleagues. Change is normal to you on your way to identify solutions.

Contact: S. Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, Maintn. & Cust. Supp, Thomas Busch, +49 2407 575 178, eedthb@eed.ericsson.se

Strategic Product Manager Transit

Proj.No 80/399

● The Strategic Product Manager (SPM) works with the competitiveness and economical performance of the Transit products in CAPC. For this the SPM requires extensive contacts with the SPM's from our internal Ericsson customers and with the ongoing CAPC projects.

The CAPC customers are the mobile applications GSM, UMTS, TDMA and PDC and the mobile systems NMT and TACS as with the wireline applications for common areas.

The main tasks are to represent Transit area in the CAPC Product Management Network, to identify trends in product development in cooperation with our customers, to propose long term development strategies for the Transit product areas, to see to that competitiveness and economical performance of the products are best possible over the product life-cycle and to perform business opportunity tracing.

In the area of requirement handling your main

tasks are to evaluate incoming requirements and to initiate system studies, to evaluate and act upon assignments received for the product area, to issue Transit requirement specifications, to validate RS's and FS's and being involved in requirements issues in running Transit projects in CAPC.

Required qualifications are a strong technical background in telecom or database industry with experience in AXE10 development and/or system design. Good knowledge of mobile telephone systems. Being able to take initiative and work in a dynamic environment. Excellent communication and interpersonal skills.

Competence in one or more of the following areas is essential: AM System development, Signalling and Protocols, Traffic Control, (Wireless) Charging or ATM.

System Manager Transit

Proj.No 81/399

● The main target is to provide technical and system competence to preserve the Transit development in the Application Core (CAPC).

Your main tasks would be to perform system studies or design in before or in early project phases, to provide technical expertise related to pre-study and feasibility study on Transit products, to provide technical and system competence to support the GSM, UMTS, TDMA and PDC product lines, to participate in pre-studies and feasibility studies for the Transit projects in CAPC, to give support in the design activities in his/her area of competence, to give support to analyze trouble reports on system module level, to participate in RS and other technical inspections regarding his/her areas of competence, and to act as Technical Coordinator in Transit (sub)projects, coordinating technical issues involving several subprojects, involving the related mobile applications projects or involving associated projects.

Required qualifications are a strong technical background in technology, telecom or database industry with experience in AXE10 development and system design, good knowledge of mobile telephone systems. Able to take initiatives and work in a dynamic environment. Excellent communication and interpersonal skills.

Competence in one or more of the following areas is essential: AM System development, Signalling and Protocols, Traffic Control, (Wireless) Charging, ATM or SDL.

Contact: HR, Simon Seebass @eed.ericsson.se, +49 2407 575 163, U/T System Group, EED/U/TG Joe Wilke, eedjow@eed.ericsson.se, +49 2407 575 399.

The CAPC system groups are responsible for the system development of the Transit and Network Access products that are common for many of Ericsson's AXE based systems, both for wireline and wireless systems.

This responsibility includes activities such as running product committees, handling overall technical coordination in the CAPC projects, perform system studies and source system design.

Present challenges are system work for ATM and IP core network solutions for the Universal Mobile Telecommunication System (UMTS) and the Next Generation Switch (NGS).

Group Manager Wireless TCS Design

Proj.No 79/399

● The Transit Development Department in EED is looking for a group manager to establish a new group for Traffic Control design in the Application Core (CAPC).

Traffic Control products are part of the new Transit-AM (TRAM) that is introduced to the mobile product lines UMTS, GSM, TDMA and PDC. CAPC and Transit responsibility is located in EED/U.

Tasks: The general responsibility of the group manager is to plan, lead and the operations of the design group in EED/U/T. He/she has to that the required goals are fulfilled, the needs of the company satisfied, the group is efficient and competitive.

Main authorities and tasks are to implement personnel policies and general rules, to assure that all communication is executed with highest integrity and quality, to perform appraisals and frequent personal development talks, to plan and ensure competence development of the staff, to participate in recruitment and introduce new personnel, to provide the department with resource plans and forecasts, to set-up and coach design teams, to ensure that planned quality assurance activities are implemented and to participate in the EED/U/T Management Team

As a suitable candidate, you are an Ericsson employee and should have a of 5 years AXE-10 software design knowledge. You should be familiar in working in projects. Managerial experience (e.g. as group manager, team leader or project) or experience in the traffic control area is a clear advantage.

Contact: HR, Simon Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, Transit Development Department, Norbert Floeren, +49 2407 575 228, Norbert.Floeren@eed.ericsson.se

System Designer, Datacom & IP

Proj.No 64/399

● As a CAPC System Designer you will perform system studies or design before or in early phases of our CAPC main projects. An important aspect is to find synergies and identify core application solutions between wireline and wireless systems. The type of tasks requires that you can work independently or in teams, take initiative and drive for progress.

To strengthen our capabilities for this type of system work, we are looking for an experienced System Designer focusing on Datacom and IP. You should have more than 3 years of Ericsson experience in AXE10 design and experience of packet switched techniques or platforms is required. Due to the type of work performed, some travelling may be necessary.

System Designer, Intelligent Networks

Proj.No 65/399

● As a CAPC System Designer you will perform system studies or design before or in early phases of our CAPC main projects. An important aspect is to find synergies and identify core application solutions between wireline and wireless systems. The type of tasks requires that you can work independently or in teams, take initiative and drive for progress.

To strengthen our capabilities for this type of system work, we are looking for an experienced System Designer focusing on IN development. You should have more than 3 years of Ericsson experience in AXE10 design and previous experience within Service Control and/or Service Switching Functions are regarded as an advantage. Due to the kind of work performed, some travelling may be necessary.

Contact: HR, S. Seebass, +49 2407 575 163, Simon Seebass @eed.ericsson.se, CAPC System Management, Gert Wallin, +49 2407 575 8058, eedgew@eed.ericsson.se, Robert Ivarsson +49 2407 575 704, eedriv@eed.ericsson.se Ericsson

System Designer, APG40 Characteristics

Proj.No 63/399

● Do You want to be a part of UMTS (Universal Mobile Telecommunication System), NGS (Next Generation Switch) and System 108 while you are working in a motivated area with a high level of productivity, as well as great personal gratification? We are looking for a person who can initiate and run capacity/characteristic issues within the APG40 area.

This includes both investigations and discussions around the characteristics of the APG40 and it's applications. It entails modeling and dimensioning of integrated applications and their environment. You will be required to define mechanisms for making fast and accurate estimations of characteristic behavior on the APG40.

A successful candidate should have at least 2-4 years experience from software design or system design within an AM system. You will need good general technical and communication skills. Knowledge of the NT operating system, the APG40 and previous experience or knowledge of traffic models is a distinct advantage. Since the work requires co-ordinations within the project, travel can sometimes be necessary.

System Designer, APG40

Proj.No 62/399

● Do You want to be a part of UMTS (Universal Mobile Telecommunication System), NGS (Next Generation Switch) and System 108 while you are working in a motivated area with a high level of productivity, as well as great personal gratification?

The APG40 is a windows NT based high availability platform targeted for IO and element management applications. We are looking for a person who can take an active part in developing and introducing APG40 platform into the next generation of open telecommunication systems. This includes both investigations and discussions around the software architecture, applications and interfaces of the APG40 in all parts of the development life cycle.

The CAPC systems management is responsible for the system development of the Transit and Network Access products that are common for many of Ericsson's AXE based systems, both for wireline and wireless systems. This responsibility includes activities such as running product committees, handling overall technical coordination in the CAPC projects, perform system studies and source system design. Present challenges are system work for ATM backbone solutions for the UMTS and the NGS.

A successful candidate should have at least 2-4 years experience of software or system design using software methodologies and technologies such as OO or CORBA. Experience with modern software languages such as C++ is essential. A good knowledge of NT is a strong advantage. Since the work requires co-ordination within projects, travel can sometimes be necessary.

Source System Designer

Proj.No 41/399

● Do You want to be a part of UMTS (Universal Mobile Telecommunication System), NGS (Next Generation Switch) and System 108 while you are working in a motivated area with a high level of productivity, as well as great personal gratification?

We are looking for a person who can take an active part in developing the next generation open telecommunication systems. This includes both investigations and discussions around the system architecture early on in our projects and product structure development together with co-ordination towards ongoing projects within CAPC. You will also be involved in investigations and development of new tools and methods that could be used in the Source System Handling area.

Since it is essential to discuss and investigate the system architecture in the early phases of a project, one Source System Designer is always appointed as team leader for one of our ongoing projects. You would have to take the responsibility for all tasks related to the Source System Handling and co-ordinate those tasks towards the project.

A successful candidate should have 1-2 years experience from software design or system design in an AM based system. Since the work requires co-ordinations within the projects, travel can sometimes be necessary.

Contact: HR, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, CAPC Syst, Mgmt, Gert Wallin, +49 2407 575 8058, eedgew@eed.ericsson.se, Robert Ivarsson +49 2407 575 704, eedriv@eed.ericsson.se

Transit development in CAPC is responsible for design and maintenance for different software parts within the new Transit Application Module and function/system integration test for CAPC. We are looking for an

AXE10 Software Designer

Proj.No 60/399

● We are participating in the execution phase and performing feasibility studies. To strengthen our capabilities in this area we are looking for an experienced SW designer in the AXE 10 area. You should be familiar with PLEX design methods and be able to perform technical studies as well as preparing technical documentation. A first experience in SDL would be an advantage. We are looking for a designer with 2-3 years of experience preferable in the AXE 10 area.

Contact: +492407575163, eedsims@eed.ericsson.se, +49 2407 575399, Joe.Wilke@eed.ericsson.se

Strategic Product Manager,

In ATM/SUP and Lawful Intercept.

● Your task will be product planning for one or more CAPC product area(s), defining the direction of the development of CAPC products based on assessment of competitiveness and economical performance for the life-cycle of the products. You inspect requirement specifications and approve function specifications and FeDs. You order and monitor the development and maintenance work of CAPC products, review financial agreements proposed by other business units and you will do Business Opportunity Tracing.

You need a BS in EE/CE/CS or equivalent, more than 3 years in system design or project management and a strong interest in strategic product management. Besides a broad knowledge in switching systems you need competence in either ATM, CSS7, Data Communications or Lawful Intercept.

Contact: Carsten Bruns, eedcab@dde.ericsson.se +49 2407 575106, HR, Simon Seebass, eedsims@eed.ericsson.se, +49 2407 575163

Performance Co-ordinators

● for our sub Core Product Units (sCPU) Datacom, FCAPS and Transit. The sCPU Performance Manager will work close to the sCPU Manager as well as to the PA's and DU's. He/she will be the interface between Performance Management (Quality, Methods, Tools, CM and WCP) and the sCPU.

The target is to drive improvement work within one sCPU. You will communicate and follow up improvements within the sCPU. You are an active participant in the CAPC Performance Management Network as well as in the sCPU Management meetings and be responsible for measurement of sCPU performance. You will also assist the goal setting for the sCPU.

Qualifications: BS EE/CE/CS or equivalent. At least three years experience from improvement work, quality management and/or project management. Project Management skills. Excellent communication and interpersonal skills. C/C++ knowledge desired for Datacom and FCAPS. Fluency in written and spoken English is required.

Contact: HR, S. Seebass, eedsims@eed.ericsson.se, +49 2407575163, Qual. Mgmt, A. Ringquist, eedart@eed.ericsson.se, +49 2407 575 8052.

Job opportunities at Ericsson Messaging in New York, USA

Ericsson Messaging is the Product Unit created to consolidate Ericsson's messaging business. The Product Unit belongs to the new Business Unit for Internet Applications, BAPP, and is designed to support operators in developing competitive advantage through messaging services. It offers a competence center for technical and business-focused messaging expertise in all market segments and all network standards. The headquarter for Ericsson Messaging is situated in Stockholm, Sweden, with principal operating entities and design units in Sweden and the USA.

Ericsson Messaging-over-IP is a new powerful product portfolio supporting wireless e-mail, voice-mail, fax mail, SMS (Short Message Services) and unified messaging. Messaging-over-IP is prepared for new generations of more advanced services such as video messaging and other services that will become available as part of the 3G world. In addition to in-house development, the PU is also providing a number of third party solutions for the market.

Network Operators and Service Providers Segment (SO) has created a new Product Unit, Product Unit Ericsson Messaging, with objective to increase Ericsson's presence in the rapidly growing messaging market.

Senior Business Consultant

As a Senior Business Consultant in the Marketing Department of Ericsson Messaging, you will be part of spearhead the implementation of customer business advisory and marketing programs in Europe, Africa, Middle East.

In this product unit you will soon discover that in depth customer business understanding and the capability to elaborate with our customers on their business issues is an essential key to success. You will also become aware of our strong conviction that enabling other product units, business units and market operations to knowledgeably speak about and sell messaging is a fundamental factor for Ericsson's success in messaging.

You have many years of experience of the telecommunications industry and has held positions in advanced solutions marketing, business management or consulting. From your own experience, you know how to develop value based selling and customer business advisory. You have a successful track record of marketing total solutions.

You are a creative, entrepreneurial and experienced self starter, intrigued by the challenge to develop and implement a new way of marketing Ericsson's messaging solutions. You are not reluctant to travel, you are a true team player and enjoy sharing your competence and enabling others to perform. You have excellent communication skills. Positions are available in Sweden, USA and Asia.

For further information please contact:
Gunnar Borg, Director of Marketing
+1 516 677 1155
gunnar.borg@ericsson.com

Product Marketing Manager

As a product marketing manager you will be responsible for the product development and definition of the IP Text (SMS-c) messaging product line. The business product manager produces product strategies, product positioning, defines functionality and prepares short and long term market plans. You will be responsible to prepare business cases for the IP Text products and will work closely with marketing and customers.

Wireless Applications System Manager

This position works closely with business product management and technical product management to provide technical support for the wireless applications products within the IP Text messaging product line. You will help to define and refine the overall architecture for the messaging product. As a system manager you will provide technical product presentations to customers and support customer demonstrations at trade shows and customer sites.

Both positions are available in New York, USA.

For further information please contact:
Katie Raftery, Human Resources,
+1 516 677 1042
EMXkraf@am1.ericsson.se

Technical instructor/ Course Developer

We are looking for a dynamic, creative professional to deliver training to our customers on our cutting-edge messaging products.

You will conduct instruction on both hardware and software; develop/enhance instructor-led and self-paced courses; as well as assess suitability to convert instructor-led materials to alternate delivery methods.

Requires a BS or MS degree in computer science, engineering or instructional design and at least 3-5 years experience training in Internet, telecommunications, networking and/or data communications telecommunications field. Strong written/verbal communication, team and independent work skills and experience in delivering technical training courses required. In this position you will travel extensively internationally.

Positions are available in both Kista, Sweden and in New York, USA

For further information please contact:
Katie Raftery, Human Resources,
+1 516 677 1042
EMXkraf@am1.ericsson.se

Support engineer

We are looking for a dynamic, creative professional to perform implementation and support to our customers on our cutting-edge messaging products.

You will perform integrations/implementations/support on hardware and software. Requires computer science, engineering and at least 1-3 years experience in Internet, networking and/or data communications field. Strong written/verbal communication, team and independent work skills and experience in delivering technical solutions. Will also travel extensively internationally.

Positions are available in Kista, Sweden and New York, USA.

For future information please contact:

Christer Grahn, Support manager,
+1 516 677 1000
christer.grahn@ericsson.com

or

Katie Raftery, Human Resources, New York, USA,
+1 516 677 1042
EMXkraf@am1.ericsson.se

Welcome with your application, without delay, marked with "the position you are applying for" and your CV to:

Ericsson Messaging Systems Inc
Katie Raftery, Human Resources
145 Crossways Park Drive West
USA-Woodbury, N.Y. 11797
EMXkraf@am1.ericsson.se



Make yourself heard.

ERICSSON 

Are you looking for a new Challenge ?

The Ericsson GmbH (EDD) is headquartered in the international city of Düsseldorf / Germany and has about 1,000 employees.

We offer you exciting opportunities in a variety of fields, a new and challenging business for Ericsson. All positions require a strong customer focus and the successful candidates should be able to work well within a team environment.

English fluency is essential and a good knowledge of German desirable.

Solution Manager Strategic Development

The area of mobile telecommunications is changing rapidly due to new innovative technologies and new dynamics within the telecommunication market place. The Solution Manager within the Strategic Development area is responsible to elaborate new business- and strategy-development plans covering the mobile communication segments, evolution of Third Generation (e.g. FDD versus TDD, satellite- or WLL-components within UMTS, new allocated spectrum) and complementary technologies (e.g. wireless LAN, Hyperlan).

Key responsibilities:

- Monitor, evaluate and document the technological trends within the Mobile Communication segment
- Attending Conferences, Seminars and/or Working Groups as well as contributing actively to them to ensure lobbying and communicating Ericsson's view accordingly
- Organise and lead workshops and presentations
- Active participation in the global telecommunication community (e.g. authority bodies, telecommunication press, regulation forum) securing that the Ericsson market messages are communicated
- Elaborate competence development plans for employees within the mobile communication technologies
- Positioning towards competitors
- Co-ordination of requirement handling (representing the market view) for the related products/solutions
- Create a cross functional network within Ericsson and maintain links to related Product Units/ Business Units

Competencies, qualifications and experience:

- Profound knowledge in GSM, UMTS or related technologies, and how these are positioned on the German market segment
- Very good understanding about market/customers viewpoint of mobile communication technologies, e.g. worked within a mobile operator organisation before
- The ideal candidate for this position will have a MBA and/or an engineering degree in telecommunications with at least six to nine years of experience in the Mobile Telecommunications field

Solution Manager Radio Network

The Solution Manager within the Mobile Solution Network area defines, releases, maintains and develops verified solutions, with the intention, to create profitable business for Ericsson and to improve customer satisfaction towards Ericsson. The solution area takes the full business-solution-responsibility and the respective local product-responsibility for the following components: e.g. GSM and 3G-Radio Network components (RBS, RNC, BSS) and aspects, GSM evolution, Radio Network Services /Features, Radio access, O&M, TMN.

Her/His tasks are:

- Define, secure and maintain business solutions for the German market, where a market need is identified and a profitable business for Ericsson is possible
- Positioning towards competitors
- Provide EDD accounts in the operator segment with the respective market messages and sales arguments (value statements, solution story, positioning, success-stories)
- Local product responsibility for the components of the solution
- Requirement Handling for the related products
- Handling of Trouble Reports with commercial impact on the product business case
- Create a cross functional network within Ericsson and maintain links to related Product Units/Business Units
- Market communication-plan for new solutions
- Create and maintain evolution plans (for existing solutions) incl. commercial product substitution, maintain product plans and strategies
- Organise and lead workshops and presentations
- Take the technical responsibility in tender projects, Contract analysis
- Able to investigate questions, problems and come up with well suited solutions within his own product area

Solution Manager Core Network

The Solution Manager within the Mobile Solution Network area defines, releases, maintains and develops verified solutions, with the intention, to create profitable business for Ericsson and to improve customer satisfaction towards Ericsson. The solution area takes the full business-solution-responsibility and the respective local product-responsibility for the following components: e.g. GSM and 3G - Core Network Elements, Charging aspects, Services/Features, Circuit Switching System (CSS), Packet Switching System (PSS) and Value Added Services (VAS).

Her/His tasks are:

- Define, secure and maintain business solutions for the German market, where a market need is identified and a profitable business for Ericsson is possible
- Positioning towards competitors
- Provide EDD accounts in the operator segment with the respective market messages and sales arguments (value statements, solution story, positioning, success-stories)
- Local product responsibility for the components of the solution
- Requirement Handling for the related products
- Handling of Trouble Reports with commercial impact on the product business case
- Create a cross functional network within Ericsson and maintain links to related Product Units/ Business Units
- Market communication-plan for new solutions
- Create and maintain evolution plans (for existing solutions) incl. commercial product substitution, maintain product plans and strategies
- Organise and lead workshops and presentations
- Take the technical responsibility in tender projects, Contract analysis
- Able to investigate questions, problems and come up with well suited solutions within his own product area

Competence level for the two positions above:

- Profound knowledge in GSM, UMTS or related technologies, and how it is realised in our solutions
- Deep knowledge in specific product areas including market position
- A profound knowledge about product functionality
- The ideal candidate for this position will have an engineering degree in telecommunications with at least six years of experience in the Mobile Telecommunications field

Customer Solution Manager - Applications, Mannesmann Group

You will be part of our focused efforts to create image, presence and a major market share in the area of applications for the Mannesmann group. Our customers, being ISPs as well as Mobile operators, are moving fast into new opportunities, bringing their position forward in the area of content alliances, e-commerce and mobile internet. We have a very strong and successful business relation, being the main supplier, which we now need to further expand into these areas.

You will be the main responsible for business segment applications, but also working across all segments as addressed by our customers. You will be responsible to, based on a close customer contact and the global as well as local Ericsson portfolios, define complete profitable solutions. The responsibility also means building and shaping our customers needs in order to create new business opportunities.

The successful candidate shall have a solid understanding on how our customers situation is changing as the internet goes mobile, as content and media goes mobile and what opportunities the emerging value chain of mobile internet will mean. Furthermore, we expect you to have a good understanding of Ericsson's applications portfolio as well as WAP, GSM, IP, UMTS and other enabling technologies.

Engineers / Operation and Maintenance Systems

You will work with Support and Supply of Our TMOS-Software, which is used for the support of mobile and fixed

telephony networks, from the user's and systemadministrator's perspective. Your tasks are customer specific integration as well as the execution of installation and integration tests and type acceptances. You will develop complex solutions for our customers on your own authority using the worldwide Ericsson network. Experience in working with TMOS products (OSS,SMAS) is a must.

Engineers / GPRS/UMTS

Your tasks are the integration, test and support of the GPRS nodes (General Packet Radio Services), which connect the GSM world to the Internet world. During fieldtests you will support our customers actively in the technical area. On top of the below mentioned requirements you have ideally experience with mobile communication or the ISP area. Additional knowledge in C/C++ or Erlang/OTP is very welcome.

Engineers / IP Datacom

Your tasks are the design, integration and implementation of complex solutions for our Networks & IP Service products. You will be mainly concerned with the newest Ericsson products for high performance backbones, broadband access and products for integration of new internet services as e.g. IP Telephony. On top of the below mentioned requirements you have good knowledge of LAN / WAN technologies and routing protocols.

For these three vacancies you will be introduced by a training on the job, which will be intensified by courses. You match well with our young international team, if you have a technical degree or appropriate professional experience. You feel at home in the UNIX world as user or administrator. Experience with relational databases, TCP/IP networks, Java or shell script programming would be an advantage.

UMTS Solution Manager, Mannesmann Group

You will be main responsible for our UMTS Access Network Solution towards the Mannesmann Group. This includes to define solutions meeting customer requirements, conduct technical presentations, perform workshops with the customer and interface with the customer in issues related to UMTS Access.

The successful candidate shall have a solid knowledge about our UMTS Access Network Solution and corresponding Products. A good contact network within the Product Unit Wideband Radio Networks is desirable.

For further details or to apply for a position above please contact:

Ericsson GmbH
Bettina Karsten
Human Resources
Fritz-Vomfelde-Straße 26
D-40547 Düsseldorf
eMail: Bettina.Karsten@edd.ericsson.se



Make yourself heard.

ERICSSON 

If you had the freedom to create the perfect job, what would it look like?

The Core Product Unit Application Core (CAPC) is responsible for providing transit switching and network access functionality commonly used by all Ericsson's wireless and wireline systems. CAPC contributes to Ericsson's 3G core network solutions and is heavily involved in system innovation initiatives. CAPC is headed from EED at Herzogenrath/Aachen and consists of CAPC Management, CAPC International Operations, TCS Design and CAPC Verification. For further support of our teams we are looking for a

AHEAD Project Manager

Project-No. 13/M00

The main responsibility of this position is to establish and run the CAPC Improvement Projects called AHEAD and hereby contribute to the operational excellence improvements of the international organization. Potential candidates shall have a sound background in wireless and/or wireline AXE or Open Platform SW development projects. Any previous experiences with quality systems, processes and project management are appreciated. The candidate needs to have strong leading and communication skills. Last but not least you should have a high interest in moving an organization AHEAD and see this position as an opportunity for improving our products and our ways of working.

AXE10 Software Designer

Proj.-No. 60/399

To strengthen our capabilities in feasibility studies and execution we are looking for an experienced SW designer in the AXE 10 area. You should be familiar with PLEX design methods and be able to perform technical studies as well as preparing technical documentation. A first experience in SDL would be an advantage.

CAPC Project Manager Feasibility, Development & Follow-up

Project No.: 48/399

The CAPC project office is managing key projects at the core of all applications. These projects encompass subprojects and associated projects in The Netherlands, USA, Ireland, Finland, Sweden, Norway, England, Spain, Italy, Germany, Denmark, Australia, Mexico, Croatia, Brasil and Greece, covering a vast range of development areas at the leading edge of technology.

We require at least three years proven experience in project management. Good knowledge of PROPS, project planning, budgeting and management methods. Good knowledge of mobile telephone systems and Ericsson business practices would be an advantage. Traveling is a natural part of the job. Furthermore you should have strong interest in people and be willing to develop as a leader.

Group Manager Wireless TCS Design

Project No 79/399

We are establishing a new group for Traffic Control design in the Application Core (CAPC). Traffic Control products are part of the new Transit-AM (TRAM) that is introduced to the mobile product lines UMTS, GSM, TDMA and PDC. CAPC and Transit responsibility is located in EED/U.

The general responsibility of the group manager is to plan, lead and run the operations of the design group in EED/U/T. He/she has to ensure that the required goals are fulfilled, that the needs of the company are satisfied and that the group is efficient and competitive.

As a suitable candidate, you should have about 5 years AXE-10 software design knowledge. You should be familiar with working in projects. Managerial experience (e.g. as group manager, team leader or project) or experience in the traffic control area is a clear advantage.

Methods Coordinator

Project no 21/399

We are responsible for CAPCs performance improvements and performance control. We are a competence center for operations of CAPC international. Our task is to push improvements of methods, tools and processes. As a methods coordinator you will lead the change of our operational improvements into our development projects.

As a suitable candidate, you should have at least two years of software design or process engineering experience within Ericsson preferably within CAPC. You should be communicative and a good team player. Any previous experience with methods, audits and project work is appreciated.

Process Engineer

Project no 69/399

We are looking for people who like to push improvements of methods, tools and processes. You will gain deep understanding of CAPCs operations and be driving improvements in the CAPC organisation. You are responsible for the engineering of our future design methods and development environment.

As a suitable candidate, you should have at least two years of software design or process engineering experience within Ericsson and interest in project management. Being familiar with the CAPC organisation would be an advantage. This position implies the opportunity to travel and you should see this job as a challenge to establish a world class environment.

Performance Manager

Project-No 18/E00

for our sub Core Product Units (sCPU) Datacom and FCAPS. The sCPU Performance Manager will work close to the sCPU Manager as well as to the PA's and DU's. He/she will be the interface between Performance Management (Quality, Methods, Tools, CM and WCP) and the sCPU.

The target is to drive improvement work within one sCPU. You will communicate and follow up improvements within the sCPU. You are an active participant in the CAPC Performance Management Network as well as in the sCPU Management meetings and be responsible for measurement of sCPU performance. You will also assist the goal setting for the sCPU. At least three years experience from improvement work, quality management and/or project management are required.

Source System Designer

Project-No 20/E00

We are looking for a person who can take an active part in developing the next generation open telecommunication systems. This includes both investigations and discussions around the system architecture early in our projects and product structure development together with co-ordination towards ongoing projects within CAPC. You will also be involved in investigations and development of new tools and methods that could be used in the Source System Handling area.

Since it is essential to discuss and investigate the system architecture in the early phases of a project, one Source System Designer is always appointed as team leader for one of our ongoing projects. You would have to take the responsibility for all tasks related to the Source System Handling and co-ordinate those tasks towards the project.

A successful candidate should have 1-2 years experience from system design in an AM based system. Since the work requires co-ordination within the projects, travel can sometimes be necessary.

Strategic Product Manager Lawful Intercept

Project-No 16/E00

Your task will be in Product Planning & Strategy for the CAPC product area Lawful Intercept, defining the direction of the development of CAPC products based on assessment of competitiveness and economical performance for the life-cycle of the products. Beside this you inspect Requirement Specifications and approve Function Specifications and Feature Descriptions. You order and monitor the development and maintenance work of CAPC products, review financial agreements proposed by other business units and you will do Business Opportunity Tracing.

You need more than 3 years in system design or project management. Besides a broad knowledge in switching systems, competence in one or more of the following areas would definitely be an advantage: MSS, TCS, Connection

Service, Security issues, APG knowledge, Charging and/or Lawful Intercept.

System Trouble Shooters

Project-No 67/399

Your main authorities and tasks are to perform analysis of complex system faults and find a solution for these faults, on site support at different CAPC development sites and to support project management in technical issues.

As a suitable candidate you have excellent knowledge in AXE and detailed knowledge in at least one mobile application. You are flexible, show initiative and have good communication & cooperation skills. Experiences from System Verification, Trouble shooting and/or Customer support are required.

STE Project Coordinator

Project-No 68/399

Your main tasks are to coordinate activities in the Simulated Test Environment (STE) for CAPC projects, system and tool studies for the requirement handling, verification of the test environment as well as tool and system support and support towards project management in STE issues.

As a suitable candidate you have good knowledge in mobile telephony systems, you are flexible, show initiative and have good communication & cooperation skills. Experience from System Verification and/or STE test-tools are are required.

System Manager Transit

Project-No 81/399

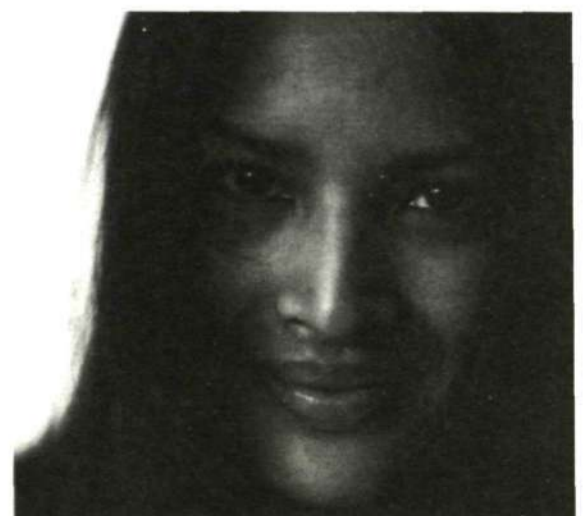
The main target is to provide technical and system competence to preserve the Transit development in the Application Core (CAPC).

Your main tasks would be to perform system studies or design before or in early project phases, to provide technical expertise related to pre-study and feasibility study on Transit products, to provide technical and system competence to support the GSM, UMTS, TDMA and PDC product lines. You participate in pre-studies and feasibility studies for the Transit projects in CAPC and support in the design activities.

Required qualifications are a strong technical background in telecom or datacom industry with experience in AXE10 development and system design, good knowledge of mobile telephone systems. You should be able to take initiative and work in a dynamic environment, you have excellent communication and interpersonal skills. Competence in one or more of the following areas is essential: AM System development, Signalling and Protocols, Traffic Control, (Wireless) Charging, ATM or SDL.

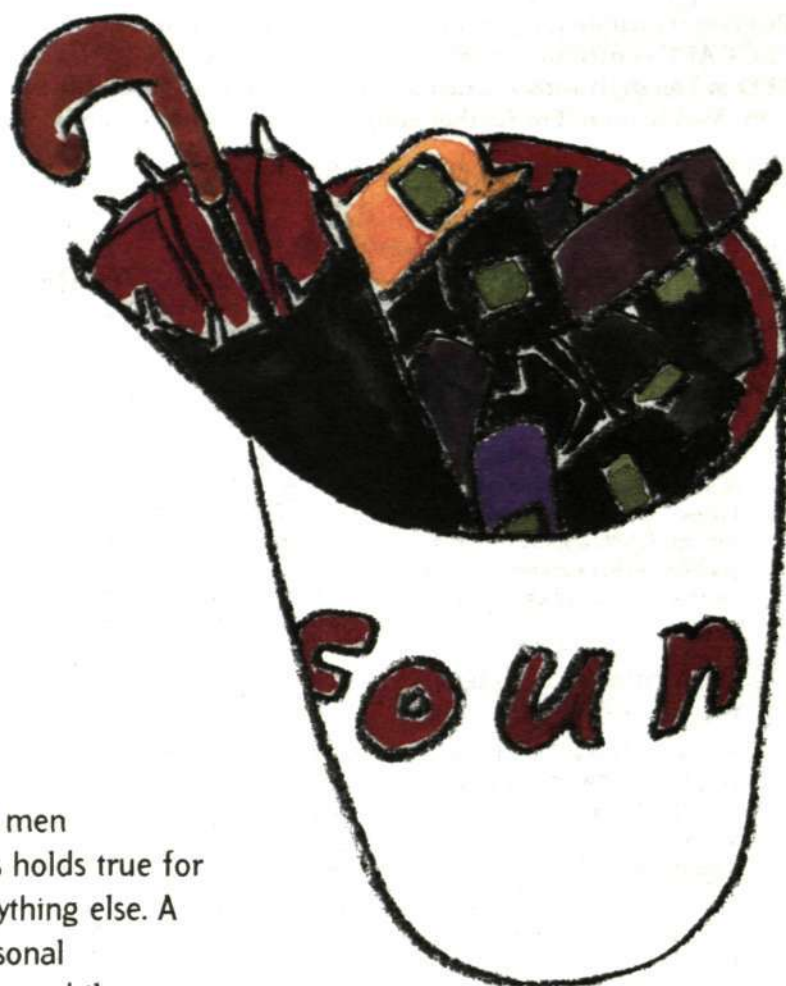
Please contact:

Simon Seebass / Human Resources
+49.2407.575-163
Simon.Seebass@eed.ericsson.se



Make yourself heard.

ERICSSON 



The old truth about women and men communicating in different ways holds true for mobile telephony as much as anything else. A study, conducted by PrimeCo Personal Communications documented the mobile phone habits of men and women.

Umbrellas are no longer the most frequently misplaced items in London. Illustration: Birgitta Ericson

Women call from Venus - men from Mars

Men are:

- 66 percent more likely (than women) to use their mobile phone in the bathroom.
- 67 percent more likely to end up discussing mysterious phone numbers on the mobile phone bill with their significant others.
- 43 percent more likely to erase someone's mobile phone number from memory after an argument.
- 43 percent of men call their significant other "just to hear their voice."
- 30 percent of men admit that they call their significant other and leave romantic messages on their voicemail.

Women, on the other hand, are:

- 67 percent more likely to peruse a partner's telephone bill, looking for suspicious telephone numbers.
- 25 percent more likely to save a romantic phone message in order to listen to it again later in the day.
- 22 percent of women admit that they have gotten into trouble when background noise revealed their true location.

Four out of five men call their loved ones "just to hear their voice". I just called to say I love you...



Photo: Scanpix



The London Underground is a popular form of transport, and a place where many items are left behind. Photo: Lars Pehrson/Pressens Bild

Phone home ET.!

Here are the top ten data/telecom movies as ranked in Ericsson's customer magazine, On - The new world of communication.

1. ET
2. The Matrix
3. You've got m@il
4. The Fifth Element
5. The Saint
6. War Games
7. The Net
8. Sleepless in Seattle
9. Tomorrow Never Dies
10. Sneakers

Mobile phones lost and found

Wireless phones have definitely arrived in the UK. Take a walk around London or ride a double-decker bus and you will see countless numbers of men and women talking into their phones.

Wireless phones are now actually the most frequently lost (and found!) items on London's busses and subways.

An average of 45 telephones are lost each day. The item that formerly topped the list, the umbrella, is taking a back seat to modern technology.

A sign of the times, perhaps?

UPCOMING

April 5-6: 3G Global Symposium, Caracas, Venezuela. 3G mobile systems will be demonstrated for customers and employees.

April 5-7: Mobile Commerce World, Singapore. Ericsson is the main sponsor of the conference.mobilecommerceworld.com

April 10-15: Telecom Americas 2000, Rio de Janeiro, Brazil. Contact will be reporting from this ITU congress.

April 15: Last date for 'early-bird' registration for Stockholm's International Symposium on Services and Local Access, in June 2000. inside.ericsson.se/issls2000.html

UPDATES

Ericsson provides Åland with 3G, which is investing in broadband, third-generation mobile systems and IT training.

Thai operator AES has ordered expansions and upgrades to its GSM network, which will enable a number of mobile data services.

A coordinated effort to introduce e-business has now been decided upon. Several initiatives are underway both centrally and within business segments and units, where GSM Systems has come the farthest.

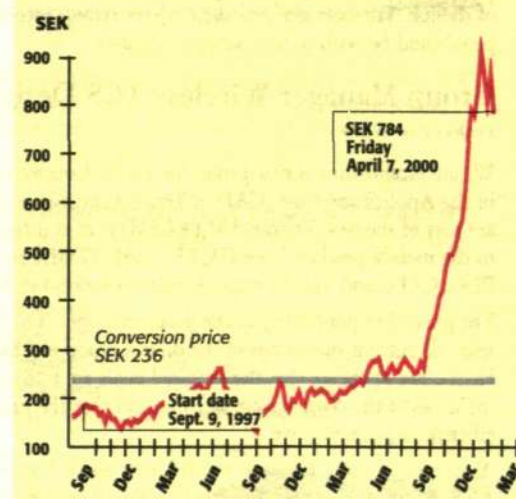
NEW ASSIGNMENTS

Tage Lövgren will head up the new Patent Management unit within the Technology corporate function.

Ulf Wahlberg has been named head of the base station development production unit.

Bo Hildingsson will be the new head of Ericsson in the Czech Republic. He succeeds Kjell Nilsson, who is retiring.

THE ERICSSON B SHARE



An Extraordinary General Meeting of shareholders on September 9, 1997, approved a proposed convertible debenture program. The conversion period extends through May 30, 2003. For additional information, access the website: <http://inside.ericsson.se/convertibles>



contact finance & economy

APRIL 2000



Gary Pinkham helps investors and analysts on Wall Street evaluate Ericsson accurately. His base is in a corner office on Park Avenue, with a breathtaking view from the 27th floor.

Photo: Maria Melin

Our man on Wall Street

Gary Pinkham's mission is to promote Ericsson on Wall Street. He arrived in New York City to be Vice President of Investor Relations almost a year ago. Since then, the number of Ericsson sell-side analysts has increased by 25 percent.

"We like Gary. He knows our business, and above all his knowledge of Ericsson seems boundless," says Tim Luke, financial analyst at Lehman Brothers in New York's financial district.

Presenting Ericsson to the investment community in a new and different way is a major task. But for Gary Pinkham, the mission was not at all impossible.

"I moved to New York from Dallas after fourteen eventful years and many roles at Ericsson," says Gary Pinkham. "My work has been within everything from product development to product management to account development and strategic planning, product marketing and business development. This is a different role for me, but it is still reminiscent of marketing and account development.

His job entails explaining Ericsson's business situation and helping analysts make an appropriate evaluation of the company.

"Ours is a very small operation, it's just myself and an assistant coordinator. We have tried to position the company with a more narrow focus."

Since Gary Pinkham started his work in Investor Relations, the number of sell-side analysts has increased from 22 to 28.

Overwhelming optimism

"Around mid-year of 1999, a negative trend began during which analysts were pretty negative about us," says Gary Pinkham. However, the last six months have been increasingly positive, and now it's almost a challenge to keep the op-

timism down so that they don't over evaluate the company."

One thing in particular is making the financial analysts of Wall Street happy.

"If you look at the next generation in networking, with 3G on the wireless side and Engine on the wireline side, the core network will be the same. At our introduction of Engine to the analysts in December, we got great feedback.

Tim Luke, financial analyst at Lehman Brothers, is impressed. "I think Ericsson is reaping the benefits of a strong restructuring program," he says. "I think it's particularly encouraging to see Ericsson repositioning some of its core wireline product lines, and developing more of an architecture that enables its customers to migrate progressively from traditional circuit-switched networks to more IP-based networks."

Comments and reports like these increase Gary Pinkham's optimism about Ericsson's Wall Street future. But how will he work to position Ericsson as the gorilla of the Wall Street financial jungle?

"Well, half of my time is spent discussing the sell-side analyst's earning model. But my strategy is to talk about the drivers and the industry and actions that were taken, an assessment of our models, instead of just talking figures. Of

course, I also address the guidelines to the spread sheet, but I try to minimize that as much as possible."

When it comes to his own role, Gary Pinkham is humble.

"It's not about what I have done here. Things have changed. We have gone through a volatile period. We issued profit warnings, and management had given unachievable expectations in terms of revenue growth. We also had trouble with the mobile phones, causing earnings problems. All of that combined, plus some uncertainty in terms of what our strategy and target was, generated unstable share prices."

He adds, "The vision of global Internet and next-generation networking is settled. Since then, people have been rallying around us. They have really started to understand what we are trying to achieve, and appreciate our position in the marketplace."

Only earnings count

To position Ericsson firmly on Wall Street is a challenging task. Success must be met with more success to make the investor community happy.

"The only thing that really counts on Wall Street is earnings," Gary Pinkham emphasizes.

"The analysts don't care about what you did last year, it's what you've done this quarter, and what your prospects are for the next year or 18 months that count. So what we have to do is to deliver on their expectations. And the expectation of course is that we should increase revenue by about 20-25 percent this year. Our operating margin should be better than ten percent of revenues. Right now the gating factor for those operating margins is the performance of the mobile phones."

Charlotte von Proschwitz
freelance journalist

CONTENTS

How much is a whole heap?

Ericsson reported pre-tax earnings of USD 1,921,700,000 for the 1999 financial year.

Does anyone really know how much money such an incomprehensible sum represents? Let's try putting it into perspective.

Lars and Sven, two Swedish brothers aged 18 and 20, just moved away from home and are sharing an apartment near Stockholm. They would like to head down to Ibiza for a week of fun in the sun. Suddenly, their travel budget is increased to USD 1,922 billion. A last-minute charter costs USD 235 – let's say 270 dollars after airport taxes and miscellaneous fees. The brothers would like to bring along some friends. No problem. They can invite 7,124,000 buddies – the entire population of Switzerland, as a matter of fact.

Lars and Sven live for the moment and therefore want to eat only their favorite foods. So every morning, they share a box of Sugar Puffs cereal and a liter of milk. Both lunch and dinner consist of a Big Mac Meal.

For USD 1,922 billion, Lars and Sven can enjoy their daily menu for quite some time, or exactly 256,870 years.

Should they listen to their mother for once and replace one of their McDonald's meals with baked beans and a carton of juice, they could stretch their budget even further for a total of 397,892 years.

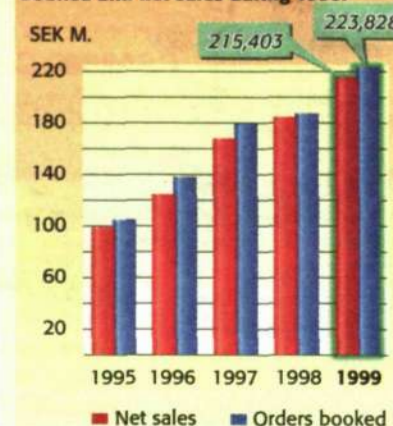
Lars is addicted to Snickers bars. If he wanted to spend the money on chocolate instead, he could buy 2,340,857,142 candy bars – enough for the entire populations of India, China and Indonesia.

Well, enough of the mathematical acrobatics. If you have a headache from trying to keep up with the figures, then you might as well know that USD 1,922 billion is enough to buy 600 million bottles of aspirin.



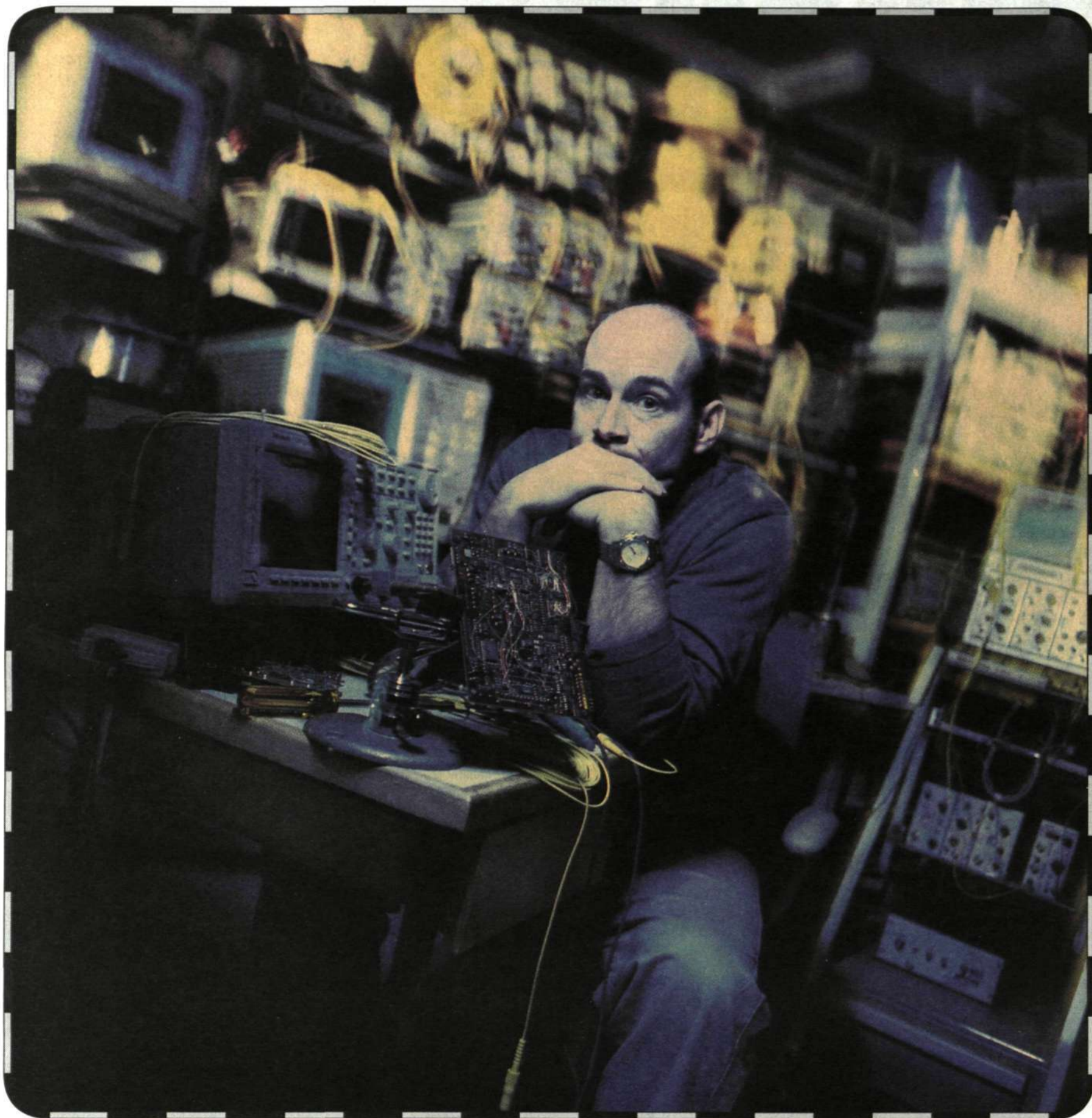
NET SALES AND ORDERS BOOKED 1999

Ericsson saw an increase in orders booked and net sales during 1999.



News Graphics: Paves Media

Hooray. Your 10 Gbps prototype finally works.
Oh, no. Sales just sold 1,100 of them.



COMPUTING
TELECOM
VIDEO



CSA8000 Communications Signal Analyser and OTS9000 Optical Test System An explosion of worldwide network traffic is pushing us all to 10 Gbps. Perhaps faster than we'd like. Make sure you can effectively duplicate your 10 Gbps successes time and again - thanks to test equipment specifically created to make your measurements. Quick. Get up to speed. Call Tektronix or visit www.tektronix.com/10Gbps

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Ericsson's CFO Sten Fornell systematically points out the factors contributing to Ericsson's turn around after a weak first six months.

Photo: Lars Åström

Turnaround came quickly

During the first half of 1999, Ericsson's earnings were weak and there was significant negative cash flow. Sometime around the middle of the year, however, there was a turnaround.

Contact asked Ericsson's CFO, Sten Fornell, to explain the factors behind the poor results during the first six months of the year and how those problems have since been overcome.

"1999 was difficult in many ways," says Sten Fornell. "Simultaneous with sluggish development and production of new mobile phones and a slowdown in demand in the important Chinese market, was the adjustment to a new organization. Moreover, the restructuring program was implemented and, as is usually the case, negative fallout from restructuring usually comes first. This is true both of the costs and the associated fear that can easily spread."

Despite all that, 1999 was a good year, as is clear from the annual report, which emphasizes several bright spots.

"Invoicing during 1999 increased by 17 percent while the size of the workforce remained unchanged," emphasizes Sten Fornell. "We experienced growth of over 40 percent in our core area, Mobile Systems, which was greater than the market as a whole. We were also encouraged by a noticeable turnaround at Wireline Systems and in mobile phone production, which took off towards the end of the year. Altogether, the fourth quarter was the best in the company's history."

The first six months were tough, however. Negative cash flow was a hefty minus SEK 18.7 billion. In other words, there was significantly more money flowing out than was coming in. Sten Fornell cites several reasons for this.

"Earnings were weak, quite weak in fact,

during the first six months. Only one quarter of the year's earnings is attributable to the period between January and June. Moreover, a number of important company acquisitions influenced cash flow."

According to Sten Fornell, the company's focus on its new organization and restructuring was a contributing factor that somewhat overshadowed other business. The same was also true for fixed capital. Both inventory and accounts receivable increased.

"It is imperative to continually focus on what's important. Of course, one can invest a little more during certain periods, but over the long term, better results can be had by remaining focused. This also shows that the commitment is real and not simply a fleeting fancy."

"A great deal can be gained by simply expressing an interest in these issues," says Sten Fornell. "Our customers almost always pay their invoices, but with varying degrees of promptness. We made a special point of looking into this, determining the causes for late payments, for example. Were our customers dissatisfied or were the contracts unclear?"

Increased industry insight

Another area of review was customer financing, which aims to help promising customers

financially. This resulted in increased efforts to find an appropriate creditor that was willing to assume the risk. Increased control within the industry is important for financiers, and is an area to which Ericsson can actively contribute. Cash flow for the entire year ended at minus SEK 2.4 billion. In reality, this meant a positive cash flow of SEK 16.3 billion during the second half of the year. According to Sten Fornell, positive cash flow is important for several reasons.

"It's a sign of profitability and efficient operations, which our customers particularly appreciate. It also creates greater freedom to financially back up falling markets or acquire companies. Since analysts and investors place a great deal of emphasis on cash flow when they evaluate a company, it's also important for increasing the company's value – the ultimate measure of success. It also becomes easier to attract and retain both customers and employees. It's an upward spiral."

Budding optimism

The annual report also mentions cost increases. Several new earnings units were formed under the new organization. In many instances, such as at product units, more or less complete "companies within companies" were formed, with their own finance and market operations. Financial reporting quadrupled, increasing costs.

"At the end of summer, we reviewed the wealth of reports, deciding which ones were not needed at all, which could be produced less often, and which information could be simpli-

fied," says Sten Fornell. "We reduced reporting by almost half. In conjunction with this, the areas of responsibility for product units changed, giving them greater opportunities to focus on product development."

Attitudes towards the restructuring changed over the course of the year. Sten Fornell speaks of a budding optimism.

"Both within and outside of Ericsson, there was an increased realization that we are working in a rather remarkable industry with fantastic growth opportunities," says Sten Fornell. "Changes, which at first felt defensive, became something positive. Ericsson does, however, need to change and adapt the organization to new conditions more rapidly. Hopefully, we've learned something valuable from all this."

Sten Fornell emphasizes new, concrete steps being taken within Time To Market and Time To Customer as the company moves into the future. Simply put, it means being the first on the market with the best products and solutions, using cost-efficient methods.

"If we succeed at this, customers will be satisfied and we'll be able to save billions in the process."

As CFO, what does he think will be important in the future?

"To formulate goals for every part of the company so that all employees are involved in significant challenges that have a clear direction. That will ensure sound involvement."

Maria Paues

contact@lme.ericsson.se

Around Ericsson in 84 pages

A few weeks ago, Ericsson's annual report was published. It summarizes all the important events that occurred within the company during 1999.

The annual report not only contains financial reports, but also information about strategies, products and developments within various market areas and customer segments. This supplement aims to provide a simple overview of the main points included in the annual report.

Over 480,000 copies of the annual report, in both Swedish and English, are distributed, providing the single most important source of information to shareholders. Stock market analysts read it from cover to cover and it is used as source material for many journalists and researchers.

Ericsson issued a year-end financial report at the end of January, presenting the most important portions of the financial statements. The annual report, which was released approxi-

mately five weeks later, contains more information and a more detailed account of earnings.

Contact's Finance & Economy supplement provides you with a sampling of the information that can be found in the annual report. Those who are especially interested in what is going on within the company should, of course, read the annual report. The annual report is available on the Internet and is easy to order.

Much of the content within the annual report is dictated by rules and regulations. Var-

ious stock exchanges where Ericsson shares are traded, have special requirements regarding what type information should be available in the report. Other items are regulated by the Companies Act, while the financial markets have their own special requirements regarding the information they want. Consequently, some portions of the report can be a little more difficult to wade through than others.

For the most part, the report is easy to understand and well presented. It is certainly worth your while to devote a little time reading the annual report.

Patrik Lindén

patrik.linden@lme.ericsson.se

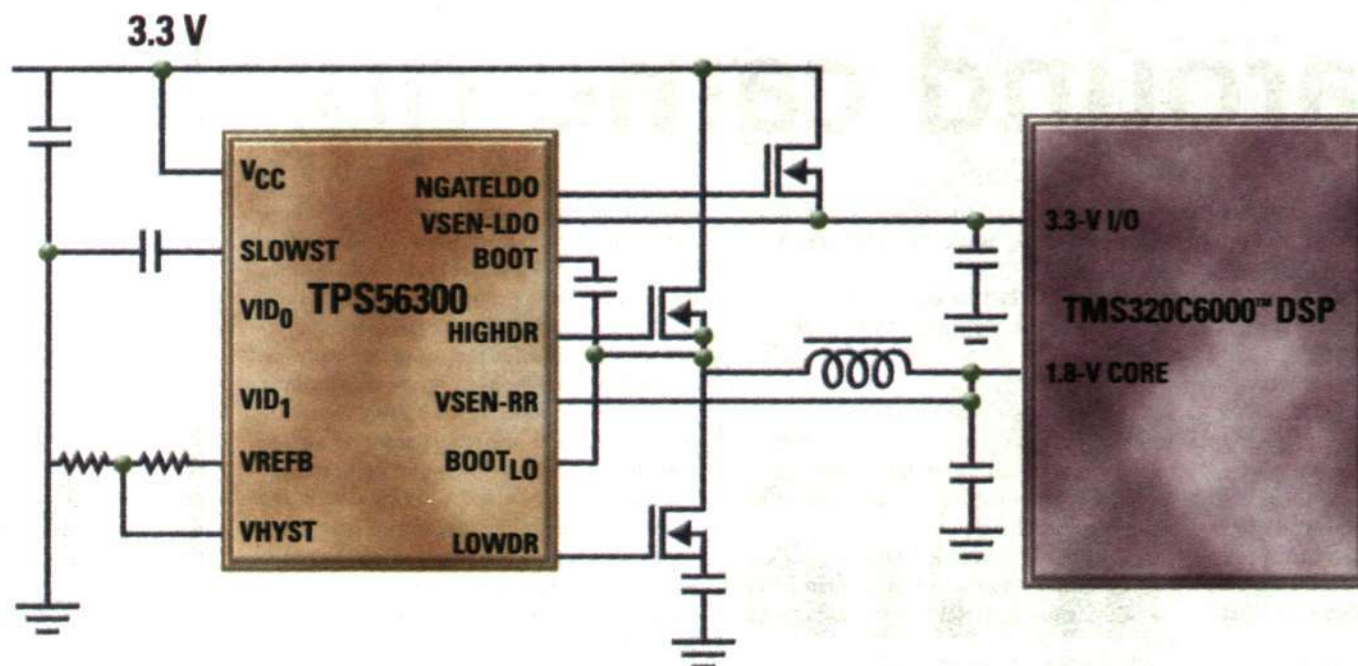
The annual report can be ordered by sending an e-mail request to:

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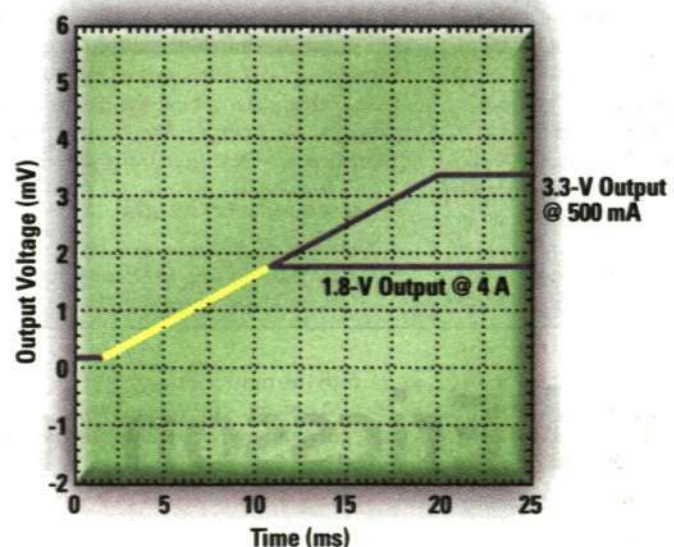


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THE WORLD LEADER IN DSP AND ANALOG

 TEXAS
INSTRUMENTS

Good year for the Ericsson share

The Ericsson share has become an attractive investment for the international market. Last year was the first year in Ericsson's history that the company had more shareholders outside Sweden than in its home market.

Ericsson shares are bought and sold in six different countries. In addition to Sweden, where most shares are traded, the share is also listed on stock exchanges in Germany, the UK, France, Switzerland and the US.

There are two types of shares: series A shares and series B shares. One series A share is entitled to one vote at the Annual General Meeting. One series B share is entitled to one-thousandth of a vote. Most trading in Ericsson stock is conducted in series B shares.

The majority of all series A shareholders are

situated in Sweden. They are mainly concentrated in two ownership groups, the Wallenberg sphere and Handelsbanken, which thereby have the greatest influence over the company. These two ownership groups can have considerable influence over Ericsson despite small investments.

Ericsson introduced series B shares, which carry only a fraction of the voting rights enjoyed by series A shares, in 1929. The company needed fresh capital to sustain business growth, but its owners were unwilling to relinquish their control over the company. The

original idea for B shares was spawned by Ivar Kreuger, a well-known Swedish businessman.

The first year that Ericsson had more owners outside Sweden than within its home country was in 1999. Sweden still accounts for the most shareholders with 45 percent. Investors in the US account for the largest foreign ownership interest in Ericsson, followed by the UK and Germany.

A large number of private individuals and small investors own Ericsson shares, but the majority of all shares – about 90 percent – are owned by Swedish and international institutions.

Shareholders in Ericsson had a very good year in 1999. The share price increased 189 percent, the largest increase in modern times.

Ericsson was not the only strong-perfor-

mance share in 1999, however. The entire Stockholm Stock Exchange was up nearly 66 percent based on general index, a yardstick in which Ericsson has a dominant role. General share price trends in 1999 were exceptionally favorable. But there were also some fluctuations.

Ericsson, however, has become more direct in its communications with the financial market, which also makes it easier to evaluate the company and its shares. Ericsson's aim is to provide the market with accurate information that will reduce fluctuations in its value caused by rumors or breaking news.

Patrik Lindén

patrik.linden@lme.ericsson.se

Shares are Birgitta's hobby...

Birgitta Nordström focuses on both long-term investments and high-risk ventures. Share trading has become a hobby, and she spends about two hours every day studying the market.

"I start my day reviewing stock prices in the morning newspaper. Then I read a financial newspaper and watch text-TV," she says. "It's probably a good thing I don't have my own computer, because I'd probably spend even more time watching the market. And I really do have to go out and take a walk once in a while."

Birgitta became interested in the stock market when she and her former husband divorced about 20 years ago. She had entrusted the family's economy to her husband, but when they separated, she was forced to learn more about the stock market.

"I joined a share savings association and became more and more interested."

Her original portfolio included Ericsson shares, and she has increased her shareholding over the years.

"I'm really pleased with my Ericsson shares. They have performed well, despite some recent volatility. I sold 400 shares in January to realize a profit. Otherwise, it wouldn't be any fun."

Birgitta has no plans to sell the remaining 1,600 Ericsson shares in her portfolio. Her investment in Ericsson gives her some degree of financial security, and the investment is long term.

"Ericsson is a solid Swedish company," she says. Birgitta is not afraid to take risks, however, and also owns shares in more speculative IT-companies.



Birgitta Nordström reviews the stock prices every day. Photo: Jezzica Sunmo

"It's exciting when you're not really sure how the stock will develop. But I only buy the more speculative stock with money I can afford to lose."

Birgitta Nordström is now looking forward to a busy season of annual general meetings.

"It should be fun," she says.

Maria Paues

kontakten@lme.ericsson.se

... but for Tim, it's a job

Tim Luke is a financial analyst who specializes in Ericsson and telecom. He works for Lehman Brothers, a global investment bank, and offers advisory services to financial institutions, companies, governments and global capital markets in all parts of the world.

"I recommend that my customers buy Ericsson shares based on the company's unique investment potential. Supported by the strong growth of wireless communications, and the fact that Ericsson is the broadest based company in the telecom industry, the company commands a unique position today," says Tim Luke, and continues:

"Ericsson's strength lies clearly in its comprehensive product portfolio in several key sectors. The company also has a very broad customer base."

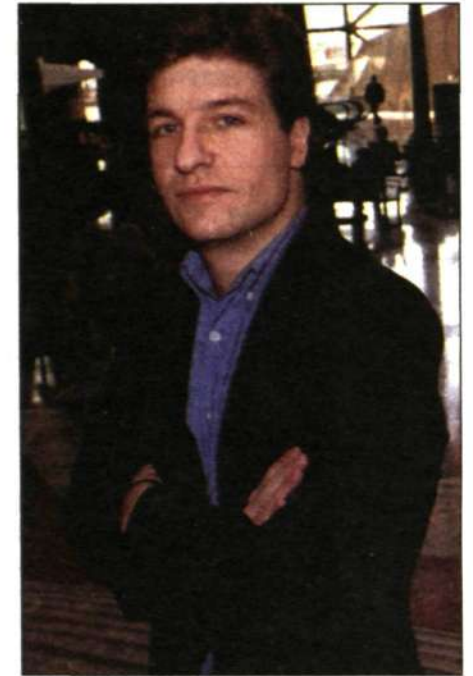
He believes the future lies in the present potential to integrate traditional networks with new networks featuring Internet capabilities.

"This is already happening, thanks to the launch of Engine, which has created a model for the integration of customers in IP-based networks."

Tim Luke's office is next to the World Trade Center in New York City. He has a fantastic view of the Hudson River and the Statue of Liberty.

The hallways at Lehman Brothers are filled with excitement and anticipation.

"Ericsson has a unique position today. The company will double its share of GSM, CDMA and, now, WCDMA. There will be a rebirth in the mobile telephony sector. The process of structur-



Tim Luke is a financial analyst specializing in Ericsson. Photo: Maria Melin

al change is well-worth the price," says Tim Luke.

When asked about Ericsson's future development, he replies:

"Ericsson will be a good investment as long as development continues in the mobile communications sector."

Charlotte von Proschwitz

freelance journalist

THE SIX OWNERS WITH THE MOST VOTING RIGHTS CONTROL MORE THAN 80 PERCENT

The largest owners in terms of voting rights

	Voting rights	Share capital
AB Industrivärden	28.0	2.4
Investor AB	22.3	3.5
Wallenberg foundations	16.5	1.4
Svenska Handelsbanken's pension fund	5.0	0.5
Skandia	5.0	1.1
Handelsbanken's superannuation fund	4.8	0.4

If the list were extended to include the 12 owners with the most voting rights, their control of the company would extend to slightly more than 90 percent. The Wallenberg or Handelsbanken spheres are behind 11 of the most powerful owners. Fjärde AP-fonden is the only outsider at 10th place.

Largest trading volumes in Stockholm

The stock exchanges trading the most Ericsson shares

	1999	1998
Stockholm	48	39
USA (Nasdaq)	22	30
London	29	30
Other	1	1

Ownership by country

	1999	1998
Sweden	45	50
USA	33	30
UK	6	6
Germany	4	4
Other countries	12	10

THE MARKET VALUE OF ERICSSON SHARE

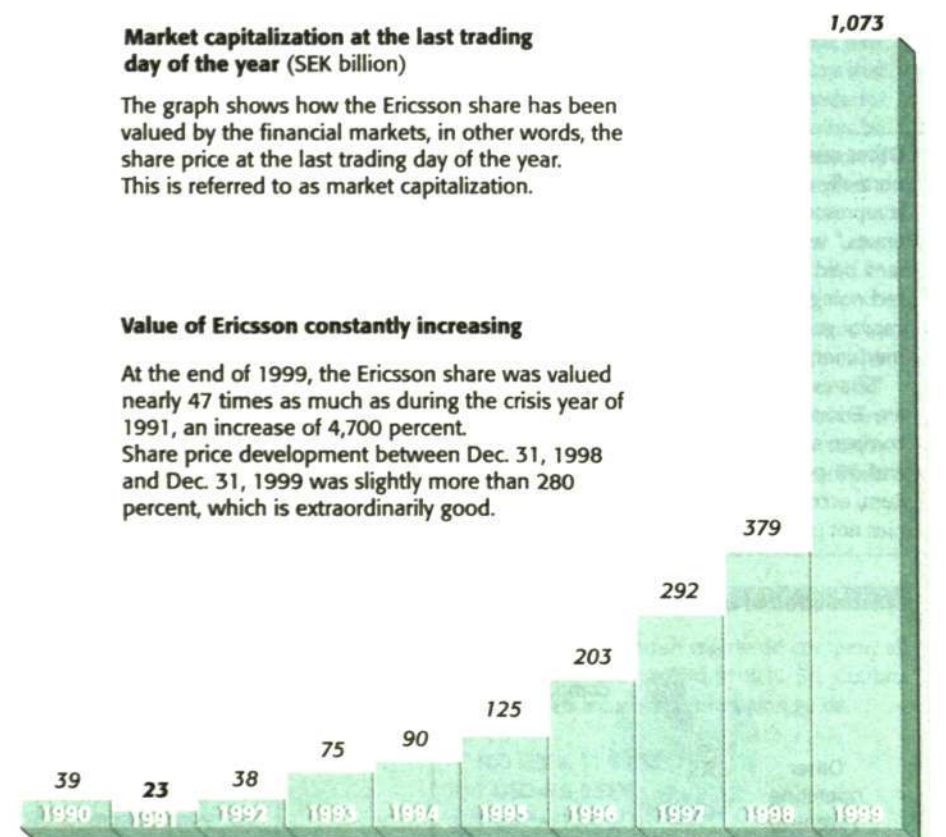
Market capitalization at the last trading day of the year (SEK billion)

The graph shows how the Ericsson share has been valued by the financial markets, in other words, the share price at the last trading day of the year. This is referred to as market capitalization.

Value of Ericsson constantly increasing

At the end of 1999, the Ericsson share was valued nearly 47 times as much as during the crisis year of 1991, an increase of 4,700 percent.

Share price development between Dec. 31, 1998 and Dec. 31, 1999 was slightly more than 280 percent, which is extraordinarily good.



Graphics: MIKAEL PARMENT

Key indicators of a company's success

A year-end financial report shows how a company is doing. It is important information to shareholders, analysts, employees and parties with vested interests in the company. A year-end financial report is comparable to the tax return that is filed every year by private persons. The difference is that Ericsson prints 485,000 copies of its financial statement in the annual report, which is read by people in all parts of the world.

All companies prepare financial statements on activities in the preceding year. This includes one-man companies as well as global corporations. A financial statement is a summary of the company's financial position. The most

important elements in a year-end report are the income statement and balance sheet. They are similar to presentations of a family's household finances.

The income statement shows the financial

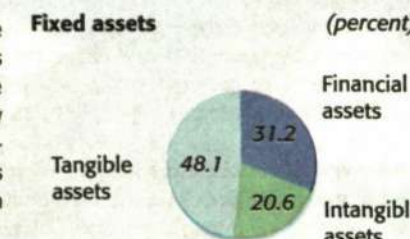
results of business operations during a given year. It also shows sources of everyday revenues and expenses. The balance sheet, on the other hand, shows a general review of the company's financial standing, not only during the preceding year. It presents a summary of the company's liabilities and assets. Compared with a private household, you might say the income statement is a presentation of your income and living expenses, or bills. Similarly, the balance sheet shows your savings and assets, and liabilities. For

a private household, your assets would include your home and car, and any savings. Liabilities would include the mortgage on your home, for example.

These two pages present a review of Ericsson's income statement and balance sheet for 1999. It is a somewhat simplified presentation, with explanations of all items shown. For a complete presentation, see Ericsson's annual report for the year, which also includes greater detail and references on every item.

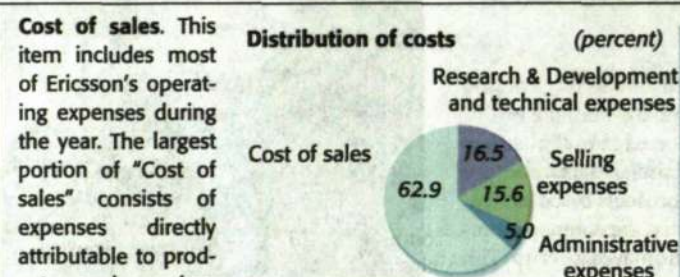
Assets are divided into two different categories. Fixed assets consist of buildings, machinery, computers, cars and other vehicles, etc. - assets with life spans of three years or more. Current assets consist of assets the company intends to sell or which arose through sales. They also include the company's cash and bank deposits, which amount to SEK 15.6 billion.

Fixed assets are divided into three subgroups. The largest group consists of **tangible assets**, which include buildings, land and machinery. They comprise assets that carry certain value. **Financial assets** consist of shares and participations held by Ericsson in other companies.



Intangible assets are more difficult to understand. They include patents and brand names, for example, items that obviously have value but cannot be bought and sold in the same way as buildings. They also include acquired goodwill assets that arise when Ericsson buys companies for more than the total value of the acquired company's tangible and financial assets. The difference is referred to as goodwill, which may comprise a strong customer base, for example, or a well-known brand name.

Net sales reflect the amount of sales invoiced by Ericsson during 1999. All of the money was not necessarily paid to Ericsson during the year. The total amount of money invoiced by Ericsson and not yet paid by customers is shown under accounts receivable. See the balance sheet on the next page.



Cost of sales. This item includes most of Ericsson's operating expenses during the year. The largest portion of "Cost of sales" consists of expenses directly attributable to products and services sold by Ericsson. This may include raw material costs, for example, as well as parts and components purchased by Ericsson from independent suppliers. It also includes costs incurred for services, as well as wages and salaries for production and installation.

"Research and development and other technical expenses" represent expenses not directly attributable to any given product or service sold during the year. Development costs incurred by Ericsson in 1999, for example, may be attributable to systems not yet marketed by the company.

"Selling expenses" consist of wages, salaries and other expenses incurred by the sales organization. They represent costs that are not directly attributable to a specific order or customer, and include such items as production of marketing and other sales promotion materials.

"Administrative expenses" consist of expenses for corporate staff and executive management. They also include costs for all employees who do not work with production, development or sales and include, for example, the CEO's salary, head office personnel and costs incurred to produce Contact.

Financial expenses consist mainly of interest income and dividends from securities

Financial expenses. This item consists mainly of interest expenses for loans raised by Ericsson. A minor part of the item consists of expenses for convertible debentures.

Other revenues consist of revenues that do not normally arise from ordinary sales. The majority is represented by the item "Other operating revenues," which includes items such as licensing fees paid by other companies to use Ericsson technologies, patent income, commissions and capital gains from sales of Ericsson companies, machinery and other assets.

"Shares in earnings of associated companies" are Ericsson's share of earnings reported by companies in which Ericsson owns between 20 and 50 percent of control (voting rights). The item, accordingly, consists of profits by companies not controlled by Ericsson.



Net sales	215.40
Cost of sales	-200.28
Other revenues	2.47
Financial income	2.27
Financial expenses	-2.97
Minority interest in income before taxes	-0.51
Income before taxes	16.39
Taxes	-4.26
Net income	12.13

Minority interest in income before taxes. This relatively cryptic item consists of the percentage of profit to which minority interests in Ericsson are entitled. It applies to companies in which Ericsson does not own 100 percent of all shares.

Taxes. This item consists of the company's income tax. It does not reflect income tax due for payment by employees, accordingly, or value added or other tax. In addition to Sweden, Ericsson pays tax in virtually every country where business operations are conducted.

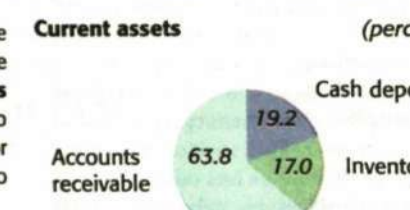
Net income. This item is exactly what it says - net income, in this case a profit of SEK 12 billion. Approximately SEK 4 billion is paid as dividends to Ericsson's shareholders. The rest is retained in the company and used to finance investments. Most references to profit specify profit for the year before tax, which amounted to SEK 16.4 billion in 1999. Since taxes vary between countries and often change from one year to the next, it is usually advisable to compare profit before tax, but it is always profit after tax which remains at the disposal of the company.

Assets	
Fixed assets	51.36
Current assets	151.27
Total	202.63
Liabilities	
Provisions	22.55
Other liabilities	108.72
Total	131.27
Minority interest in equity of consolidated subsidiaries	-2.18
Stockholders' equity	Assets - less liabilities and minority interests = 69.18

Ericsson's **total liabilities** amount to SEK 131.27 billion.

Assets less liabilities and minority interest in equity of consolidated subsidiaries amounts to SEK 69.18 billion. This total is referred to as **stockholders' equity** and consists of money invested by shareholders and accumulated over the years. Balance sheets usually list stockholders' equity as a liability, which always leads to equal amounts of assets and liabilities. Stockholders' equity, accordingly, is treated as a liability owed to the company's shareholders, which is why the entry is listed as a debit.

Current assets, like fixed assets, are divided into three categories. The largest category consists of **accounts receivable**, which are debts owed to Ericsson by other companies, or money that Ericsson may expect to receive but has not yet been paid.



Inventories are virtually self-explanatory. This item represents the value of products and goods stored at Ericsson installations. It includes inventories of both materials and products that have not been sold or delivered.

Cash deposits are exactly that - assets held in banks by Ericsson or cash on hand for payments of wages and salaries and other expenses.

Total assets. Ericsson's total assets at year-end 1999 amounted to SEK 202.63 billion.

Unfortunately, assets are not the only entry. Companies also have **liabilities**. In this simplified presentation, liabilities have been divided into three types.

Provisions. This item consists of money allocated by Ericsson for known expenses that were still not paid or were not due for payment at year-end. It includes tax payments the company knows it has to pay and pensions that must be paid in the future. Provisions are also made for certain other risks. For example, Ericsson must always be prepared to pay fines if deliveries are late or if Ericsson is held liable for product malfunctions during a product's guarantee period.

Other liabilities. This item is just about as simple as it looks. It consists of money Ericsson owes to other parties, including long-term liabilities such as convertible debentures issued to employees. It also includes short-term liabilities, which may be something as simple as an invoice Ericsson has received but will not pay for another 30 days.

Minority interest in equity of consolidated subsidiaries. This somewhat complex item quite simply means that minority ownership interests in Ericsson are entitled to a share of capital in the company, also referred to as stockholders' equity. It is a minus entry for Ericsson.

CURRENCY CONVERSION

As Ericsson is a Swedish registered company all official figures are quoted in SEK. So, Contact has provided a currency conversion guide.

- 100 SEK = 11,5 USD
- 1 USD = 8,6 SEK
- 1 GBP = 13,8 SEK
- 1 euro = 8,3 SEK



US is once again the top market

Sales increased in all market areas during 1999. The largest increases were in North America.

As a whole, the Europe, Africa and Middle East market area experienced an 18 percent growth in sales during 1999.

The fastest growing market in relative terms was Belgium, with a 147 percent rate of

growth. Spain, meanwhile, experienced the greatest increase in absolute figures, climbing from SEK 7 billion to 13 billion.

Even Turkey and the UK showed strong growth during 1999. Sales in Russia fell by 55 percent and in Denmark by 40 percent. Finland and Norway also experienced downturns.

On the other hand, the North America market area experienced a 39 percent increase in

sales to SEK 24 billion, making the US Ericsson's single largest market. Sales in Canada increased by two percent.

Within the Latin America market area, Mexico was the brightest star with a 74 percent increase in sales. Operations in Brazil were also favorable. As a whole, sales increased by 19 percent within the market area.

The Asia Pacific market area experienced a 5

percent rate of growth, following a stable 1999 and the regional economic crisis the previous year. Great differences were noted within the region, however. Sales in China decreased by 16 percent, while Japan saw a 76 percent increase and India a robust 82 percent.

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ERICSSON'S TEN BIGGEST MARKETS

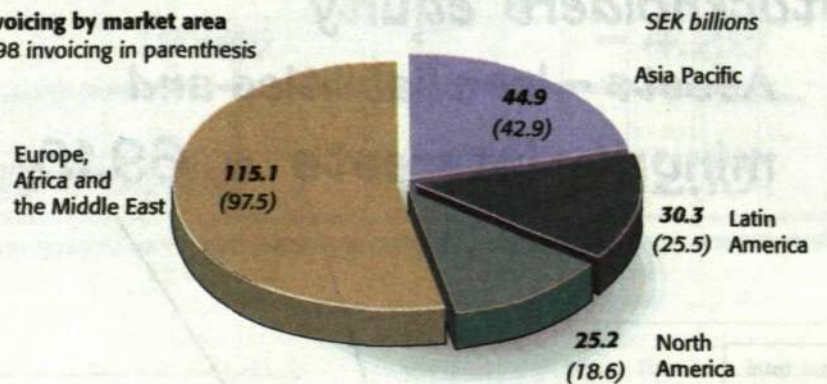
The US reclaims the top spot from China.

Turkey moved up from a tenth place position in 1998 to number six in 1999. Meanwhile Germany dropped two notches and Sweden went from its sixth place ranking to be number nine on the list.

		Percent of net sales	Sales in SEK billions	Rank 1998	Rank 1999
1	USA	11	23.6	2	1
2	China	9	18.8	1	2
3	UK	7	15.9	3	3
4	Brazil	7	14.3	4	4
5	Spain	6	13.0	7	5
6	Italy	6	12.7	5	6
7	Turkey	5	9.9	10	7
8	Japan	4	8.6	9	8
9	Sweden	4	7.6	6	9
10	Germany	3	6.0	8	10

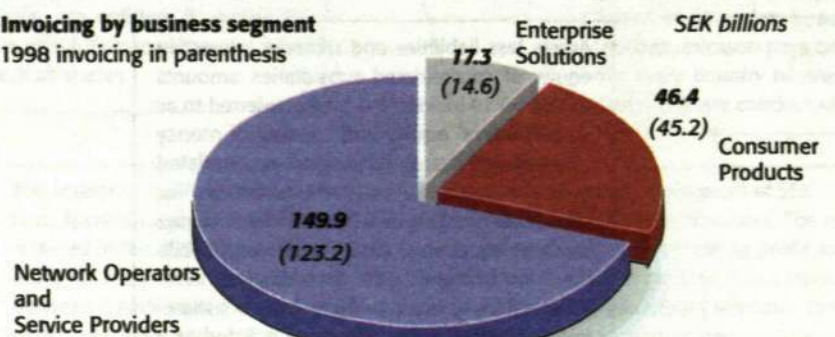
INVOICING IN 1999

Invoicing by market area
 1998 invoicing in parenthesis



The figures for 1998 have been adjusted to coincide with the new market area organization that was implemented on January 1, 1999.

Invoicing by business segment
 1998 invoicing in parenthesis



Successful year for both mobile and wireline

The Network Operators and Service Providers business segment, which is clearly Ericsson's largest segment, is also its best in terms of performance. The segment accounts for 69 percent of the company's invoicing. During 1999, operations grew by over 40 percent.

Market conditions for mobile systems were especially good. The number of mobile subscribers increased by 53 percent last year, while more than 60 million new Internet subscribers were added during 1999. Last year, Ericsson also became the first company in the world able to offer its customers all mobile standards, following its acquisition of the infrastructure division of the US company Qualcomm.

Standards for the third-generation mobile phone system (3G) were also set last year, in Ericsson's favor, whose recommended technology was chosen as the standard. In anticipation of

3G, Ericsson has received the most orders for GPRS, which is the first step towards third-generation systems. The huge amount of interest in mobile Internet has also favored the segment.

Operations are also going well on the wireline side. Currently, there are 150 million AXE lines worldwide, with more lines sold during 1999 than in any previous year.

Several major operators have also selected Ericsson's Engine solution for their transition from a classic circuit-switched telephone network to an IP network. Engine is the name of Ericsson's migration solution, which enables operators to handle IP traffic in their existing networks.

As part of an effort to strengthen Ericsson as a supplier of total solutions, the Ericsson Services business unit was formed, offering a portfolio of service offerings aimed at operators and Internet providers.

Patrik Lindén

Enterprise Solutions busier than ever

Quite a bit happened within the Enterprise Solutions business segment during 1999.

Development operations are now more focused on IP applications and mobile solutions.

A new business unit was established, Ericsson Business Consulting, which will provide companies with business solutions and services for mobile Internet. The segment's traditional operations, business switch solutions based on the MD110, sold more units than

ever before. While invoicing increased, the segment's operations did not show any profits. However, the business segment is of strategic importance since it is involved in the business market that is driving the development of the mobile Internet – the future of multimedia communication. During 1999, Enterprise Solutions began working on a new sales organization with a greater emphasis on indirect sales channels, i.e. distributors.

Patrik Lindén



Sleek design: Ericsson's T28.

Telephone delays and high costs led to lower profits

1999 was a mixed year for the Consumer Products business segment. While more new phone models were introduced than ever before, profits were down sharply.

Delays in telephone shipments, due partly to a component shortage, were one reason. The T28 telephone was, for example, unveiled in January but did not go on sale until the autumn.

The segment consists primarily of mobile phones, although a new Home Communications business unit was formed during 1999. The unit will develop products for the wired home. Ericsson's ScreenPhone, the cable TV modem PipeRider and cordless home phones are a few product examples.

Weak profitability was mainly due to high development costs for new models, along with a significant portion of sales occurring in

the low-price segment where margins are smaller. In terms of volume, 1999 was a record year. A total of 31 million mobile phones were sold, compared with 24 million in 1998.

Production capacity also increased over the past year. A new plant was opened in Malaysia, a second joint-venture company opened in China and the expansion of production in Brazil continued. Production among external partners also increased.

A number of new accessories were unveiled last year. Included among them was Chatboard, which connects to mobile phones making it easier to write SMS messages.

An FM radio and an mp3 player for mobile phones were also among the new products. Significant investments in brand-building were also made last year.

Patrik Lindén

A New DSP-MCU Core Architecture For Telecom Applications



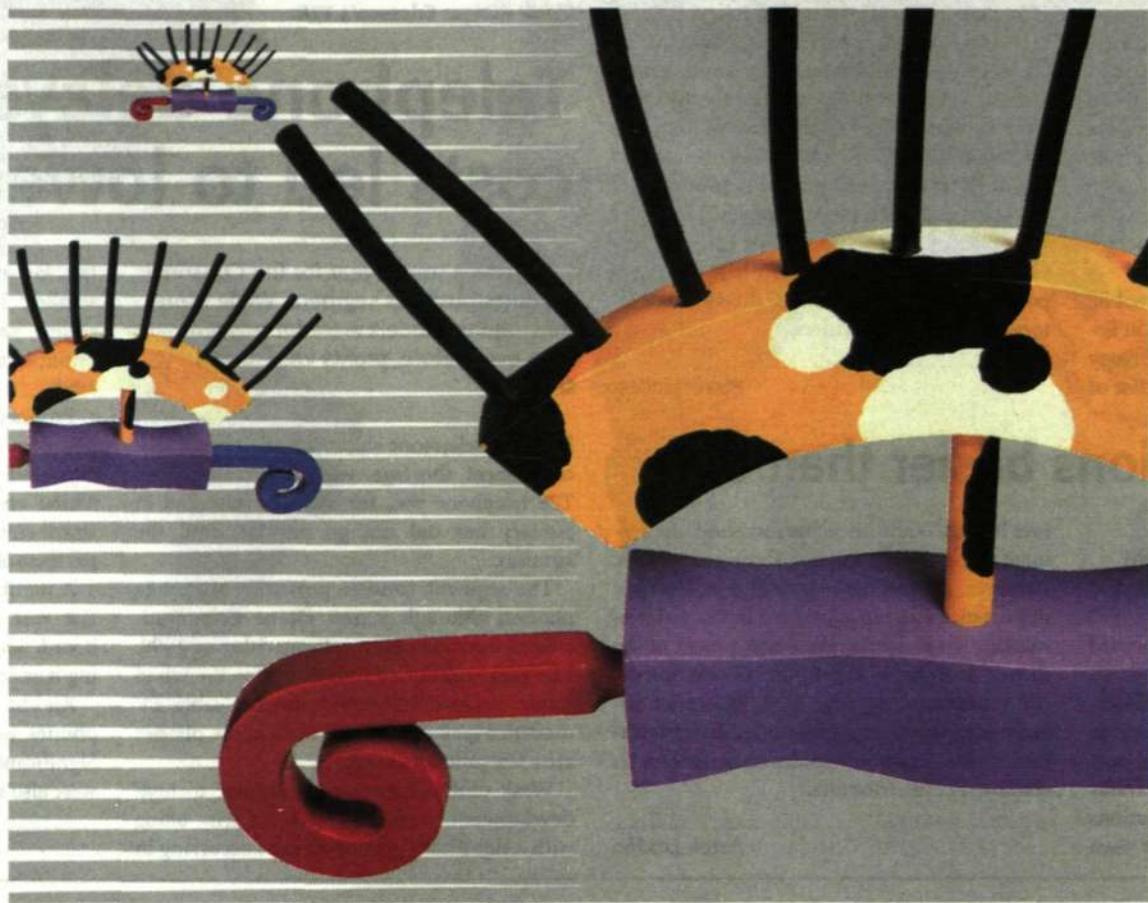
The ST100 DSP-MCU core brings new levels of power and design flexibility to embedded applications in a wide range of advanced custom system-on-chip Telecom and Networking applications. It combines high DSP performance provided by a 128-bit SLIW instruction word, the MCU performance of a 32-bit instruction word and the code compactness of a 16-bit instruction word. In addition features like full scalability and easy to use development tools make the ST100 the core of choice wherever high performance, low power consumption and fast time to market are all essential. For more information call +46 8 587 74400 or see us on the web at www.st.com/st100.

ST100 Main Architectural Features

- ❑ 32-bit Load/Store Architecture for Microcontroller and Vector DSP code
- ❑ Dual Data Calculation Units (2 ALUs, 2 MACs)
- ❑ Compiler Friendly Architecture and Instruction Sets
- ❑ Scalable Architecture extendible to 64-bit
- ❑ 3 selectable fixed length Instruction sets
- ❑ Provides a wide range of addressing modes
- ❑ Most instructions have predicated execution
- ❑ 40-bit data registers for extended precision
- ❑ Zero-overhead Loops
- ❑ User Supervision Modes

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Environment and business

It's easy to think that environmental issues come second as soon as there is a choice between the environment and business. But if you read Ericsson's environmental statement for 1999, you'll come away with quite a different impression. It emphasizes the fact that environment and business go hand in hand. Environmentally adapted solutions provide competitive advantages and cost savings.

The common denominator is saving energy, and the campaign slogan is "better for business - better for the environment." In other words, the business operations benefit from a system and products that are designed for minimum impact on the environment. The primary reason for this is that environmental requirements are being tightened both by government authorities and by customers. In other words, the less energy that switches, base stations and mobile terminals use, the more attractive they are on the market.

The environmental report also attempts to show, quantitatively, how profitable the environment is. The generally accepted measurement for the environmental impact is carbon dioxide emissions measured in tons. That figure can also be used in comparison with the number of employees or level of sales.

A comparison between various branches shows that the IT and telecom segments are, as a whole, an incredibly energy-efficient alternative. In general, IT results in the release of between 0.2 and 3.7 tons of carbon dioxide per SEK million in sales. That can be compared with 100 tons of carbon dioxide in the aviation industry, or 190 tons for shipping transports. The conclusion is that IT plays an important role when it comes to creating the energy efficient and long-term sustainable society that was decided on at the UN meeting in Kyoto in 1998. More than likely, the Kyoto goals are only possible to obtain through the help of IT solutions.

The report is also available on the Internet. It explains how Ericsson managed to meet its environmental goals for 1999 and what its new goals are for 2000. It also provides examples of working with environmentally adapted design of products, the new materials database, quick analyses of material content, acquisitions and requirements on suppliers, and dealing with used equipment.

Lars Cederquist

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Major personnel changes

Simply looking at the total figures, not much appears to have changed with regards to Ericsson's employees during 1999. There was a reduction of around 400 people out of a total workforce of 103,300. But that is far from the whole story. Many people changed jobs within Ericsson. Firms were acquired and incorporated into the company. Others companies were sold and new operations started up, while others were shut down.

Fiscal 1999 was, perhaps, the most active year ever on the personnel side. A total of 8,000 employees left Ericsson during the year, while another 7,600 joined the company. Mobility within the company is, and always has been, great. This is an asset for Ericsson. Restructuring is not a process that happens at a single moment in time. It is a continually ongoing process.

Winners in the future

It wasn't like this ten years ago. At that time, Ericsson employed 70,000. More than half of them worked in what was then known as the Public Telecommunications business area, which was dominated by the AXE switch. Customers were large, state-owned telecom admin-

istrations. Going back fifty years, the situation was almost exactly the same. The rate of change is faster today and there are no signs that it is slowing down. In the future, the winners will be those companies who can best handle change and quickly redeploy their resources.

In order to ensure that things will go well for Ericsson in the future as well, a conscious effort is under way to recruit new personnel from universities and colleges around the world. Ericsson has increased its presence at schools and has better relationships with universities and colleges.

Part of this effort involves a two-year global trainee program that was started during 1999. There were several thousand applicants for the

17 positions. Knowledge and expertise cannot simply be obtained from the outside, however. Major efforts have also been made internally to increase expertise.

Study on the Web

Last year, the single largest campaign ever at Ericsson was launched, known as the competence shift. The campaign aims to increase knowledge among employees about how the New Telecom World operates, about new technology, new business logic and the new marketing situation facing the company. The campaign is completely web-based and would not have been possible without the new technology.

At the GSM Systems business unit, a similar initiative was launched known as the knowledge step, where 4,500 employees were trained in data communications. The knowledge step will be utilized by other business units as well.

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ERICSSON'S EMPLOYEES

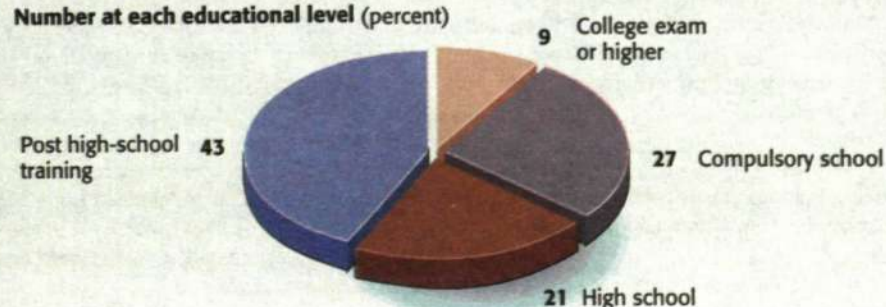
Number of employees by geographic region

	1999		1998	
	number	percent	number	percent
Europe, Africa and the Middle East	70,900	68	74,900	72
USA and Canada	12,200	12	9,800	9
Latin America	8,200	8	7,800	8
Asia Pacific	12,000	12	11,200	11
Total	103,300		103,700	

Number of employees per business segment

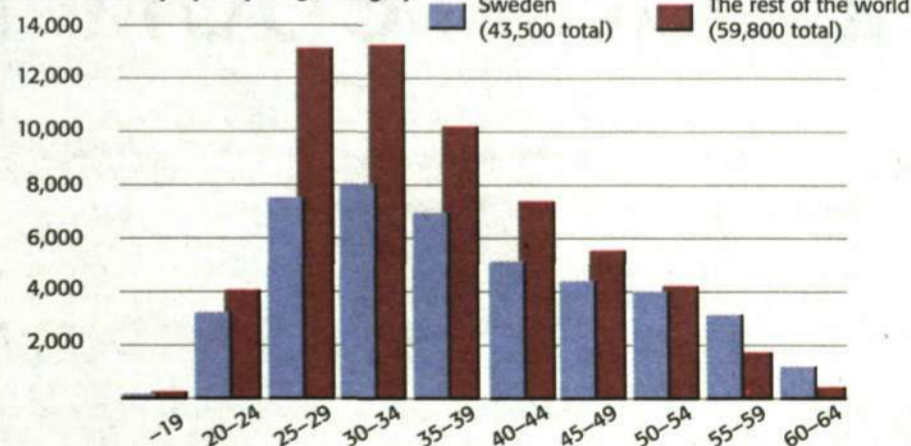
	1999	1998	percentage change
Network Operators and Service Providers	64,695	68,645	-6
Consumer Products	16,446	14,193	16
Business Solutions	9,615	9,966	-4

Number at each educational level (percent)



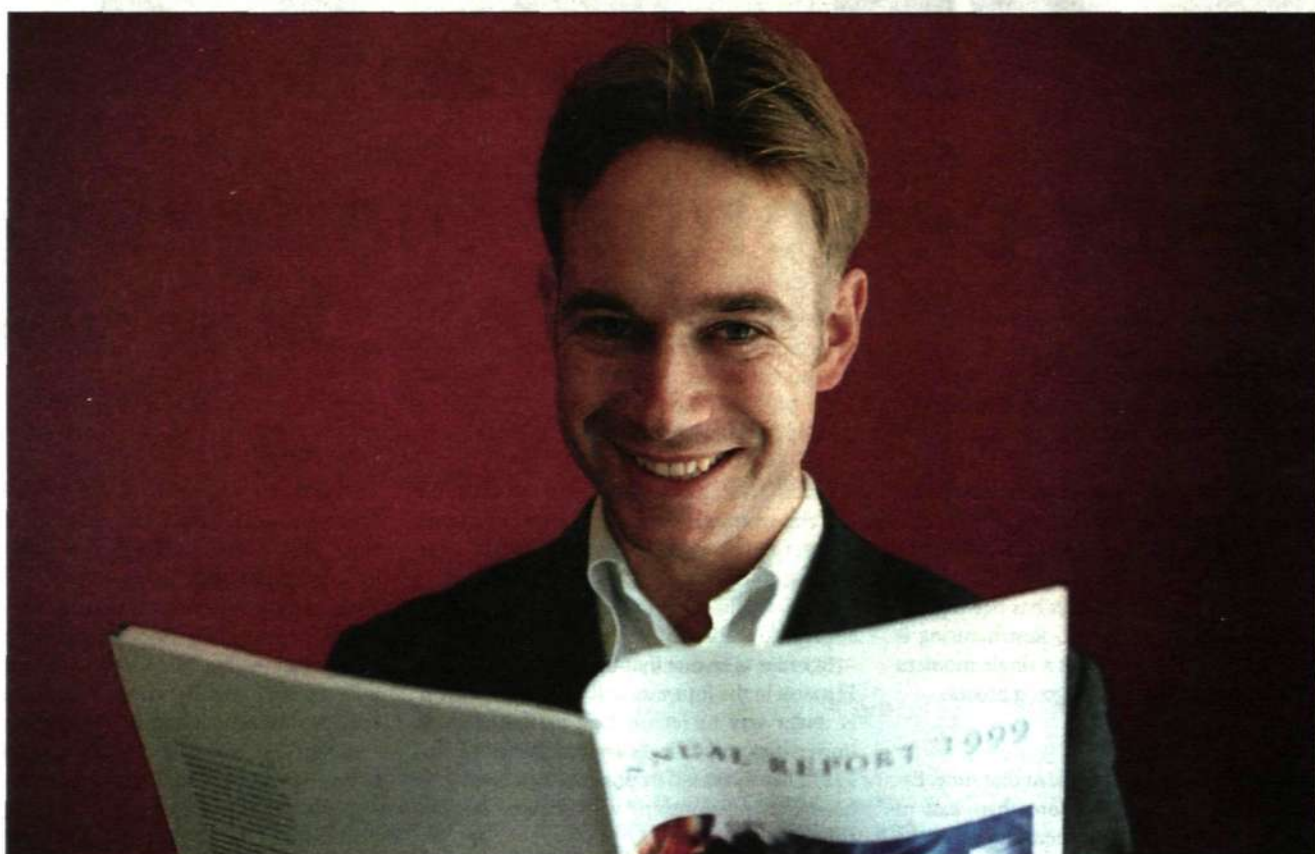
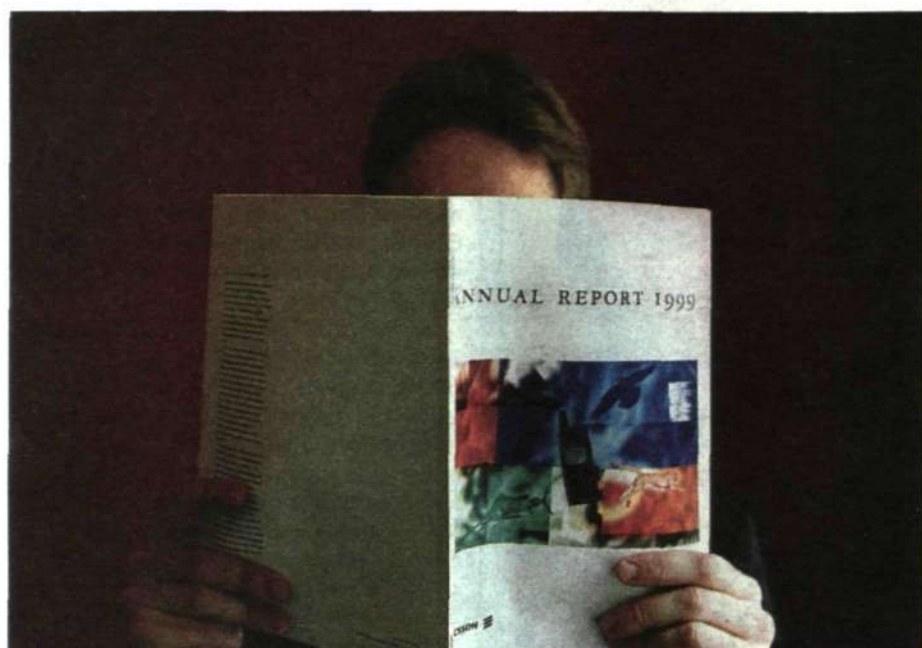
AGE AND GENDER

Number of employees per age category



Gender distribution

Average number of employees in the company	1999		1998	
	Men	Women	Men	Women
Europe, Africa and the Middle East	51,716	20,196	52,365	19,661
USA and Canada	8,189	3,985	6,421	3,533
Latin America	6,571	2,054	6,279	1,837
Asia Pacific	7,826	4,429	7,303	4,086
Total	74,302	30,664	72,368	29,117
In Sweden	30,254	12,939	28,907	12,647
In the EU	47,368	18,868	48,260	18,446



Jonas Blomberg, an analyst with Redeye, thinks that Ericsson's annual report is surprisingly good.

Photo: Lars Åström

The annual report is the company's most important document for sharing information with the financial markets. But what does the market think about Ericsson's chronicle over the past year's events?

Contact met up with Jonas Blomberg, a stock market analyst and founder of the Redeye analysis company.

Annual report is a joy to read

Surprisingly good! It's logically structured with sections that provide a very clear picture of both the product areas and geographical markets," says Jonas Blomberg of Redeye.

Jonas has followed Ericsson and other companies within the IT and telecom industries for several years, including as an analyst for Handelsbanken Markets and Nordiska Fondkommission. He thinks that Ericsson's annual reports have sometimes been stodgy, boring productions with little news. The 1998 issue, with Sven-Christer Nilsson's mission statement, was better, while the 1999 report is even more of a step in the right direction.

"It's good that the company shows how various processes are handled, such as product development and strategy. And it was very interesting to read about how Ericsson is working on becoming more competitive by improving Time To Customer.

"It's fairly unusual to see such a good description of strategies. Usually, annual reports tend to be fairly retrospective documents, he adds."

Jonas Blomberg believes that the annual re-

port is evidence that Ericsson is on its way back.

"In many ways, 1999 was an in-between year for operations and Ericsson suffered both in terms of its image and financially. Consequently, it's especially important to be forthcoming. The company is trying to provide a picture of what went wrong and the direction it is taking. The annual report exudes self-confidence and explains, in a convincing manner, how the company will emerge from last year's slump."

Seldom anything new

Large companies such as Ericsson are generally analyzed very closely. A hundred or so analysts in Europe and the US follow the company's every move, in addition to the media's coverage of the company.

Consequently, annual reports seldom contain any surprises, nor is that the intention since all the important figures should have already been released in the year-end financial report. Still, the annual report fulfills an important function in that it provides a comprehensive overview of how the company perceives its situation.

"The figures are already known, although the notes sometimes clarify certain items in more detail. However, the most interesting aspect is that the company has the opportunity to express how it views its own situation. We know that every word is worth its weight in gold, especially in the President's statement."

Often, it is the President's statement that Jonas Blomberg and his colleagues turn to first when a new annual report shows up. The most important issues facing a company are discussed there, and the President is generally the only person to speak on behalf of the company.

"One positive aspect about the 1999 annual report is that Ericsson has quoted several people by name, from business area managers to heads of research."

Jonas Blomberg also praises the graphic design, with its clear layout, good diagrams and attractive photos of new products – "the products that the company is staking its future on," as he says.

"Last year's annual report was not at all as appealing graphically, it was somewhat muddled and almost had the feel of an advertise-

ment. Nor was the information as penetrating. This year's version has more substance and even more stringent. It could serve as a good model for future annual reports," says Jonas Blomberg.

Some information lacking

In other words, high praise for this year's annual report. So, are there any shortcomings? Jonas had hoped for a more expansive description about the company's expectations for its collaboration with Microsoft.

"When the collaboration was announced, it was described as the most important alliance in the company's history. Consequently, it would have been logical to announce more of the plans surrounding it.

"The annual report could also have been more detailed in its description of the situation with Ericsson's competitors; there can never be too much of that. But, perhaps it's not a fun subject, considering the company was surpassed in several markets during the year," says Jonas Blomberg.

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