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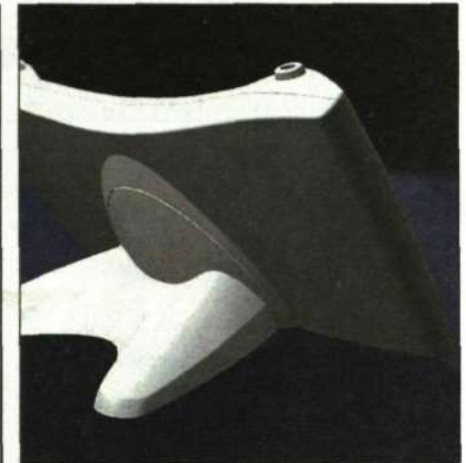
"In a small, remote community new technology takes on an entirely different significance than in bigger cities. I hope that this can give us a technical edge," says Marcus Antonsson, project manager for WAP testing in Vara. "With WAP, the water treatment plant in Vara can be controlled by mobile phone and companies can send e-mail and surf the Internet over mobile phones. That saves time and allows greater flexibility."

Photo: Marie Ullnert

WAP gives small towns technical edge

WAP technology is simplifying life in small towns. The town of Vara in central Sweden is participating in the EU's Infolville IT campaign, allowing ordinary people to test the advantages of new technology. Ericsson Business Consulting's WAP solution demonstrates how small companies can work more efficiently and from remote locations. It will open the way for an entirely new customer segment.

16-17



Model of Screen Phone M5210.

Screen Phone entices many to surf

With its sleek design and an inviting interface, it is intended to entice us to surf and chat. Especially people who would otherwise never buy a computer.

Ericsson's Screen Phone is a small, simple computer and telephone in one. It will change the way people communicate. Meet the people who developed it.

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Vodafone picks Ericsson for 3G

Vodafone Airtouch, the world's largest mobile operator has chosen Ericsson as its supplier of 3G equipment.

Vodafone, which has 8.5 million GSM subscribers, recently purchased the most expensive 3G license in the UK.

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NEWS

Locating distress calls

Estonian Mobile Telephone will become the first operator in the world to use Ericsson's GSM integrated positioning system. It allows emergency call centers to localize mobile phone distress calls.

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New solutions at Eurolab

Ericsson's Eurolab is a research and development center located at three cities in the heart of Europe. Exciting solutions for existing and third-generation mobile phone networks are being created here.

11-13

450 new jobs in Brazil

Ericsson is hiring nearly 450 developers for new research facilities in Campinas and Fortaleza in Brazil. The centers will develop software for TDMA, CDMA and AXE.

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Ericsson in society

Ericsson demonstrates social responsibility by getting involved in everything from natural disasters to education. Read how Ericsson views its role and how the world views the company.

Supplement

Cambodian rebirth

Cambodia's mobile telephony is expanding along with its tourist trade.

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WORLD WATCH

Contact tests out I-mode, Japan's mobile portal.

framkom

The Swedish Institute for Systems Development - SISU, and the Institute for Media Technology - IMT, have joined forces and created a multi-faceted company that focuses on research and development called Framkom.

Framkom is a strategic partner for the research, evaluation and development of media and communications technology. We create, refine and provide knowledge and innovation. We do this in multi-faceted teams in order to strengthen our customers' competitive advantage.

At Framkom, people who possess superior skills in the fields of IT, media and behavioural science have the opportunity to develop their skills and become sought-after leaders. If you would like to join us as we form a company for the future, then contact Aleksander Marlevi, MD.

Ragnar Bäck plans on winning 3G battle

His region includes eighteen nations extending from the North Cape to Gibraltar in the south. Currently he is battling for 3G licenses, 3G contracts and workers. One of Ericsson's most experienced players, Ragnar Bäck has thrown himself into the 3G race.

It is the middle of May. A half-hour before the interview, a press release is issued confirming that British operator Vodafone has chosen Ericsson to be the supplier of its 3G systems.

This is Ericsson's biggest 3G order to date and the fourth one it has received.

"We expected that we would land this order, but the competition was stiff," says Ragnar Bäck, who has arrived in Stockholm to meet with representatives of the French telecom council. When not traveling, he works at Ericsson's London office at 1 St. James's Square.

It has been three months since Ragnar Bäck became the head of the Western Europe market area.

The area includes 18 countries, all of the EU nations plus Norway and Switzerland. Ragnar Bäck did not find it especially difficult to take on his new role.

With over thirty years' experience at the company in positions such as President of Ericsson in the Netherlands and in Italy, he has plenty of experience in the field.

Even if Western Europe is one of the areas that Ericsson sells the most to – the area accounts for 40 percent of the company's invoicing – there are still things that can be improved.

TTC and centralization are key

The Time To Customer (TTC) business process is an important tool. Countries in Western Europe have made differing amounts of progress in their work to reduce the amount of time between orders and deliveries.

"We have to exert a great deal of energy on further reducing delivery times. For example, we've introduced new delivery routines which, in some cases, mean that we have to renegotiate contracts with our customers. They have to approve our new ways of doing business. Centralization of certain operations is another piece of the productivity puzzle."

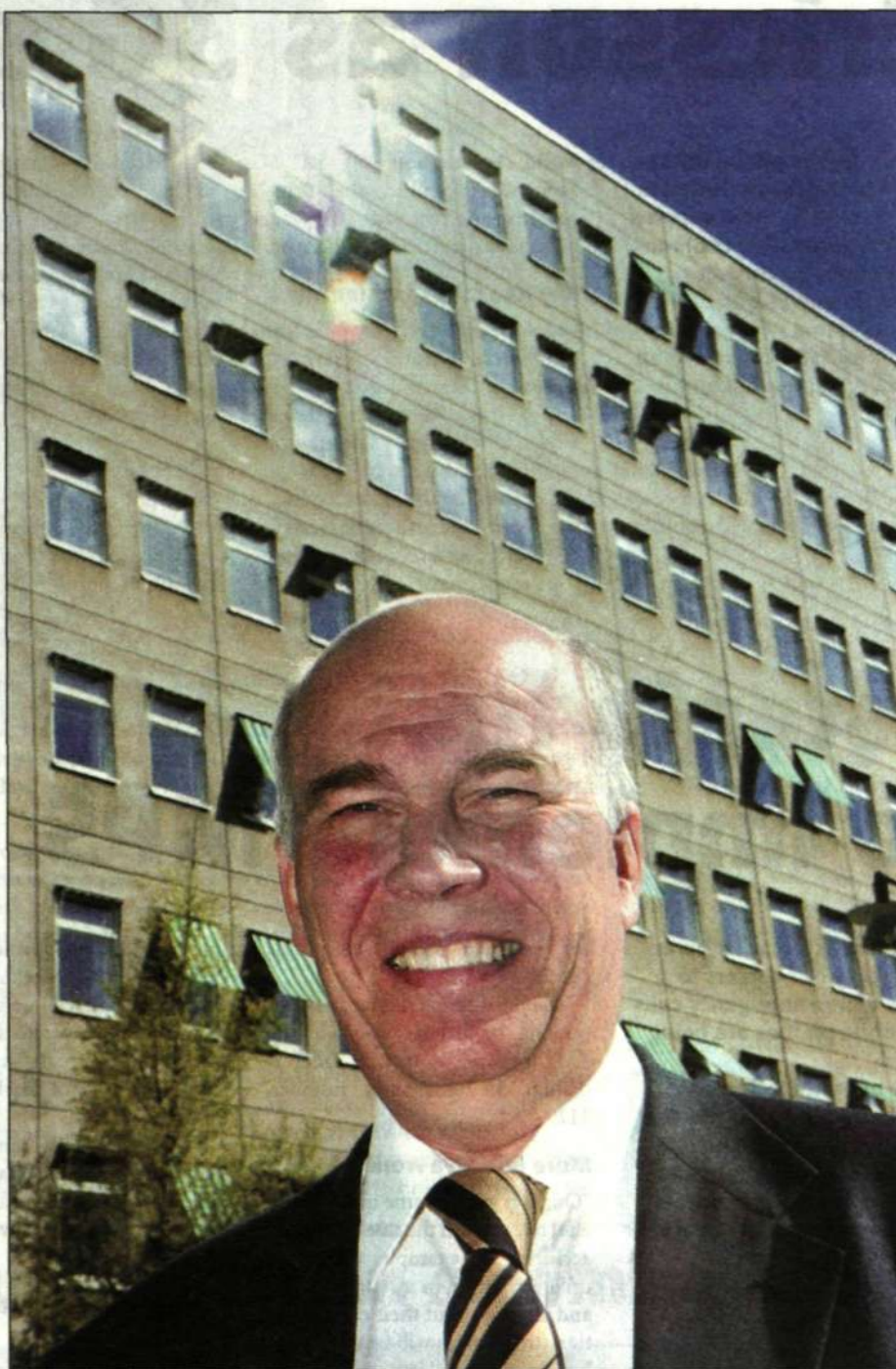
"Employees who, for example, work on implementation need to be flexible and prepared to work throughout Europe in order that we can quickly redirect our resources to the countries where they are needed most."

"This is especially true now that many countries will be installing GPRS (a technology that enables data graphics over GSM networks, editor's note) and eventually 3G systems."

"It's a question of competitiveness. Some of our competitors have made much more progress than we have in working in this manner."

Centralization is also a delicate issue. "We must always be close to our customers," says Ragnar Bäck who sees primarily two major challenges this year.

The most important is that Ericsson win as



Ragnar Bäck is enjoying his new position as head of the new Western Europe market area. With 30 years' experience at Ericsson, he will ensure that the area further increases its profitability.

Photo: Lars Åström

many GPRS and 3G contracts as possible, and that these are also delivered on time.

Finding the appropriate expertise is the other major challenge. The new campaign, "Data Competence Shift," is partly aimed at identifying which competence gaps need to be filled in within the area of IT.

Best known for mobile systems

When Ragnar Bäck was President of Ericsson in Italy, he implemented serious cutbacks throughout the organization. Is he planning any such reorganization now?

"The union usually always inquires as to whether it isn't enough with the cutbacks and reorganization that has already occurred. But I

see change as a continually ongoing process. The company and the people who work there always need to develop and change."

What kind of image does Ericsson have out in Europe, that of a hot IT company or of a more traditional telecom company?

"It varies from country to country. In most countries, we're best known for being really strong on the mobile systems side. In the UK and Italy, we're also known for our business solutions. Even if our brand is strong in Europe, we can do better. We need to become better known as in data communications."

It was in February of this year that Europe, the Middle East and Africa were divided into



two market areas. Ragnar Bäck assumed responsibility for Western Europe and recently Karl Alsmar was appointed head of Central and Eastern Europe, the Middle East and Africa.

Ragnar Bäck is enthusiastic about his new job and has always relished new challenges.

"Since I started as a trainee 30 years ago, there's never been a dull moment at Ericsson."

Even if Ragnar Bäck has lots to do, he plans on allowing himself a few weeks of vacation at his family's summerhouse in northern Italy, where he can relax.

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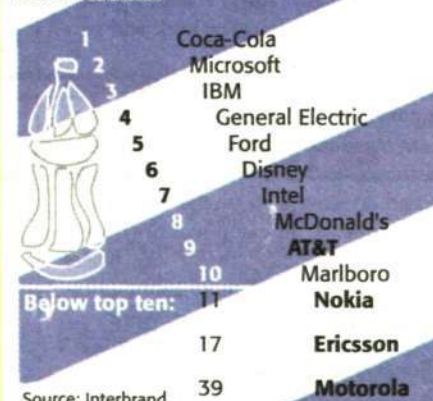
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DID YOU KNOW THAT...

Ericsson brand is world's 17th most valuable



IN BRIEF

Million dollar US order

► American operator VoiceStream Wireless has purchased GSM and WAP equipment from Ericsson totaling USD 350 million. The contract extends over several years and primarily involves upgrading the operator's GSM 1900 network to be able to handle mobile Internet.

New employer for 130 workers

► The 130 Ericsson employees who work with telecom equipment containers, so-called shelter solutions, will be getting a new employer.

Applied Power Incorporated (APW) has signed a letter of intent with Ericsson that provides for outsourcing of operations, while simultaneously offering employment with the new owner.

Affected operations are located in Sweden, Brazil, Spain, Turkey and the UK.

Ninth joint venture in China

► Ericsson and Heilongjiang Mobile Communications have started a new joint venture in the Chinese province of Heilongjiang. The new company, Heilongjiang Ericsson Technology Company, is Ericsson's ninth joint venture in China. The company will work on design and implementation projects, software upgrades and technical support.

New GSM expansion

► The Chinese operator Guangxi Mobile Communications Corporation has just signed a contract with Ericsson for the expansion of its GSM network. Ericsson's largest joint venture partner in China, Nanjing Ericsson Mobile Communications Company, will supply the system.

Collaboration between Ericsson and Guangxi Mobile Communication was initiated back in 1992.

Ericsson host for symposium

► Ericsson and Telia will be the hosts of the International Symposium on Service and Local Access (ISSLS), which will be held in Stockholm between June 18-23.

The global symposium has been held every other year since 1974. The theme this year revolves around Access for all kinds of services and adaptations to an IP dominated world. Ericsson and Telia are the primary sponsors and both Ericsson's President Kurt Hellström and Telia's President Jan-Åke Kark will participate.

The symposium is an outstanding opportunity for Ericsson employees to learn more and is very suitable for taking customers to. More information on how to sign up is available on the website.

On June 21, Ericsson will organize a "Power of Mobility" theme day, where visitors will find out more about Ericsson's role in the New Telecom World.

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Vodafone selects Ericsson as 3G supplier

British mobile phone operator Vodafone has selected Ericsson to be its main supplier of third-generation (3G) mobile phone equipment.

Vodafone was one of the five operators who recently purchased 3G licenses when they went up for auction in the UK.

Vodafone paid GBP 5.96 billion for its license, the most expensive license to be issued by the authorities.

The UK is the first country in the

world to auction off its 3G licenses. Altogether, the British government received GBP 22.5 billion for the five UMTS licenses.

Key role for expansion

Vodafone's 3G system will go into commercial operation during 2002 and subscribers will then have access to services such as the Internet, video conferencing and numerous multimedia services.

Ericsson and the British operator have been conducting joint tests for 3G multimedia services, and both companies have, through these

tests, received practical experience in how 3G systems can be utilized.

"It's great that Vodafone has selected Ericsson, who will now play a key role in assisting the operator to expand into 3G. There's a long-standing business relationship between Vodafone and ourselves," says Ericsson President Kurt Hellström.

Speedy rollout

"We are delighted to further strengthen this relationship by working together on the speedy rollout of our UK 3G network";

comments Peter Bamford, Chief Executive of Vodafone UK.

Vodafone launched its first mobile phone system in the UK back in January 1985, with equipment supplied by Ericsson. The system in use at the time was a TACS system.

In addition to the agreement with Vodafone, Ericsson has also signed four other agreements with NTT DoCoMo, Japan Telecom, Mobiltelefon of Åland and 2G Ltd. of Finland.

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Estonia first to implement MPS

It is now easier for Estonian emergency call centers to locate where emergency calls on mobile phones are being placed.

The operator, Estonian Mobile Telephone, is the first in the world to have an integrated GSM positioning system. The technology, developed by Ericsson, is expected to be widely adopted throughout the industry in coming years.

Ericsson has highlighted the fact that positioning will be one of the most important driving forces for mobile Internet. Ericsson's Mobile Positioning System (MPS) is the first network-integrated positioning system for mobile networks.

The first commercial system is now operating under the direction of the Estonian opera-

tor Estonian Mobile Telephone (EMT).

The positioning service makes it possible to localize where in the EMT network a mobile caller is dialing the emergency number, 112.

More effective work

"Our job will become much more effective now. In the case of a traffic accident, for example, where the caller might be in a state of shock and unsure about their exact position, this service will be very helpful," says Harry Hein, head of Estonian emergency services.

Estonian Mobile Telephone is the largest mobile phone operator in Estonia, with approximately 260,000 subscribers, and has stated its strategy to be one of the most modern operators in Europe.

Big market opening up

"There's an enormous amount of

interest in mobile positioning services all over the world. I'm convinced that this will be something that all mobile operators will have within a couple years," says Göran Swedberg, head of marketing for the MPS solution.

MPS technology can also be used by taxi and trucking companies to direct traffic or for various safety services that involve tracking a vehicle.

Competitive production

A number of system suppliers and application companies are working on developing competing positioning technologies for mobile usage. Network integrated solutions are one part of GSM networks and correspond to the GSM standard.

Nils Sundström

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New report dismisses mobile phone health risks

According to a new report commissioned by the British government, it is not possible to prove that there are any health risks associated with mobile phone use.

The investigation was undertaken by the Independent Expert Group on Mobile Phones and has received a great deal of attention throughout the mobile phone industry.

The report shows that there is no clear evidence to prove that the electromagnetic fields surrounding mobile phones and radio base stations should be considered unhealthy.

"It's incredibly important that these issues are being dealt with.

It's important to acquire facts and not speculate," says Jan Ahrenbring, Vice President Marketing and Communications.

In the report, British authorities recommend that European limits be followed when it comes to radiation emissions from mobile phones. Currently, allowable limits in the UK are somewhat higher than the rest of Europe.

The report suggests that children only use mobile phones when absolutely necessary. Children are subject to twice as much radiation from mobile phones as adults, since their skulls are thinner.

That makes them more sensitive

to electromagnetic radiation. The report also includes work by the British industry organization, Federation of Electronics Industry (FEI), to which Ericsson belongs, together with other mobile phone manufacturers and British operators.

In a press release, FEI writes that industry will continue to support independent international research according to the recommendations of the World Health Organization.

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Ericsson causes economic boom

Ericsson's importance to the Swedish economy has increased fivefold over the past ten years. Today, the company accounts for 15 percent of Sweden's exports, and 2.6 percent of the country's GDP. That was the news from a recent report issued by Merita Nordbanken.

Economists Monica Nelson Edberg and Rejo Heiskanen have specialized in the importance of Ericsson and Nokia for their respective home countries. The presentation is part of Merita Nordbanken's evaluation of the economy. Despite the high figures, Monica Nelson Edberg does not see any great risk in allowing one company to be of such great importance to the Swedish economy, writes Dagens Industri.

"Ericsson generates a cluster of companies around it that soon stand on their own feet, and in time, can become new, large companies," she says, referring to companies with connections between the Internet and telephony.

Last year, Nokia's share of Finland's GNP amounted to 3 percent. The company accounts for 20 percent of Finland's exports.

Ulrika Nybäck

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Thanks to Ericsson, employment within the telecom industry has increased by 7.8 percent per year since 1993. Photo: Lars Åström

Several lose homes in blast

None of the 500 Ericsson employees who work in Enschede, in the Netherlands, was seriously injured by the massive explosion at a fireworks warehouse there last Saturday.

Several people have, however, lost their homes and a few all of their possessions. Peter Assarsson, an employee at Ericsson Erisoft, was on temporary assignment there and found himself in the middle of the devastated area.

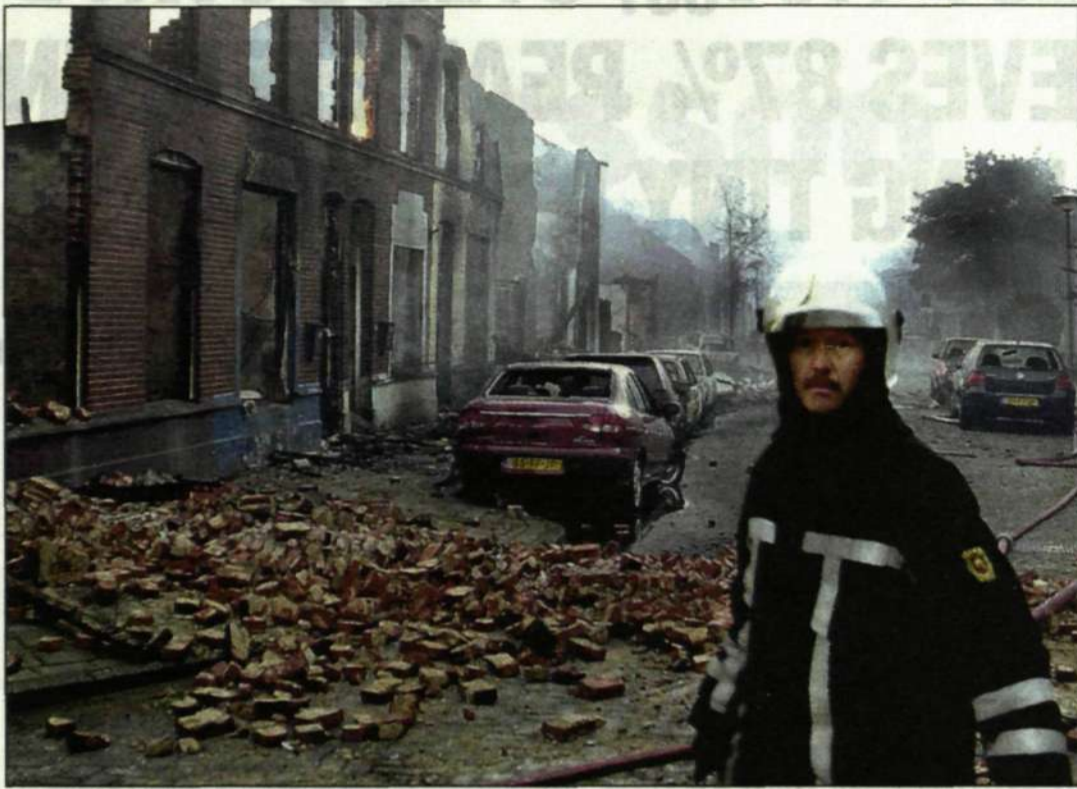
Cleanup following the explosion is still ongoing within the city. To date, 17 bodies have been recovered, although police estimate that number will rise to over 20 once building rubble is removed.

Peter Assarsson, of Ericsson Erisoft in Umeå, was on temporary assignment in Enschede and was in one of Ericsson's guesthouses, just one building away from the warehouse.

He was injured by glass shards and his ribs were bruised when a brick wall collapsed. After spending a night at a hospital for observation, he returned home to Sweden.

"At first, it sounded like fireworks and people gathered on my street, facing the warehouse, in order to see what was going on. Then a popping sound was heard and I took shelter behind a brick wall in the building," says Peter Assarsson.

Seconds later, the warehouse building exploded and the shockwave blew out all the windows in



Ericsson employees in Enschede, Netherlands, escaped serious injury from the fireworks warehouse explosion last week. However, several lost their homes and possessions. Photo: Scanpix/ Harm Meter

the area. Following that, two more powerful blasts occurred, shattering the brick wall where Peter Assarsson was taking shelter.

"It was dark out and burning everywhere. The exit to my building was filled with smoke and full of debris, so I was forced to flee through the neighboring building, which was on fire, in order to get out into the street," says Peter Assarsson.

Altogether, ten Ericsson employ-

ees in Enschede lost their homes or have been unable to return to their residences within the area of devastation around the fireworks warehouse.

"We've provided assistance to those who haven't been able to arrange their own accommodations, and also provided economic assistance," says Ericsson's site manager Ge Klein Woiterink.

He who also explains that Ericsson offered technical support to the

emergency workers. Ericsson's facility in Enschede is situated four kilometers away from the fireworks warehouse and was not affected by the blast. The facility, a research and development center, develops products for WCDMA bases stations and wireless telephones and multimedia terminals for Home Communications among other items.

Nils Sundström

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HELLO THERE



Leda Penolazzi...

...moved from Ericsson in Italy to Ericsson Radio Systems in Kista for a few months to work on the radio network in the technical tenders for UMTS, which is a third-generation mobile system.

What do you work with in Italy, and how long have you been working with Ericsson?

"I began at Ericsson Telecomunicazioni in Italy four years ago, directly after completing my studies. Before coming to Sweden I was working as a product manager in the areas of base station systems and radio access. When I go back to Italy at the end of June, I will devote myself to helping Ericsson's local company with technical support for UMTS, particularly with respect to the radio network parts. The radio portion most often counts for the biggest part of an UMTS tender. Working with UMTS is fun. This is new technology, and being part of it from the start is exciting. There's a lot to learn."

Do you have any colleagues from other Ericsson companies who are here in Sweden and working with the same assignments as yourself?

"Yes, right now there are eight of us working at the Wideband Radio Network (WRN) product unit. I am the only one from Italy. The others come from Spain, Austria and the Netherlands. In addition to working with radio network, I have had the time to take two technical courses, and I will be participating in a seminar before returning home."

What has been most valuable during the months you have spent in Sweden?

"Apart from the technical knowledge that I have gained, I have developed an excellent contact network, particularly among the designers here in Kista, with whom I work very closely. They are the ones that I turn to with questions from the local companies and the operators."

Have you had a chance to see Stockholm?

"Yes, on the weekends I've been able to do some sightseeing. I've seen Gamla Stan and the Wasa ship. Our department has also organized some outings for those of us from outside the country. Spring in Stockholm has also shown itself from its best side."

Gunilla Tamm

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Engine tour pays visit to Rome

► For over a half year, Ericsson has journeyed around the world, presenting its solution for how telephone operators can successively convert to broadband and IP on their fixed networks.

At the beginning of May, it was time for Rome and the Italian, North African and southeast European market. Ericsson's solution, Engine, was presented to hundreds of decision-makers from leading operators in some twenty countries.

"The primary goal of the tour or road show is to draw attention, to get customers to understand that Ericsson is very advanced and that we have the solutions for the future," says Carl-Johan Andrén, project manager for the tour.

An important element in the tour is to inform and to get local companies involved. In a future issue there will be a more detailed description of how Ericsson inspires its customers. It will also explain the Engine phenomenon in greater detail.

Bluetooth train steaming ahead

With a WAP and Bluetooth equipped mobile phone, some Swedish railway passengers are now able to book tickets directly on the train, confirm their seats and connect both to the Internet and corporate intranets.

Ericsson is teaming up with the Swedish State Railways (SJ) in the world's first trial of Bluetooth technology in a public setting.

"This will make train travel much more convenient and productive. Our customers have a strong need for communication on the train. They want to be able to read and send e-mail, surf the Internet and prepare themselves in other ways prior to meetings," says Tony Nydén, head of IT technology and infrastructure at SJ.

During the trial, Ericsson's access system for Bluetooth will be available at the central station in Stockholm and in two X2000 railway cars. The system combines



Ericsson's system is being tested on the Stockholm-Sundsvall railway line and allows customers access to the Internet.

Photo: Lars Åström

Bluetooth technology with GSM, WAP and Web technologies.

The solution also allows passengers to access information on connecting trains, which track they are departing from and any delays.

With Bluetooth, the system also knows where the user is. This opens the possibility for locally adapted information, such as information about special offers from nearby stores. The trial service will be evaluated by SJ.

"SJ is a major player and with this project we want to show that we can

put together a system solution that combines cutting-edge technology with the applications of tomorrow," says Mats Granryd, sales representative at Ericsson Sverige AB.

As yet, there are no commercial Bluetooth products available on the market.

But by 2002, an analyst firm DataQuest anticipates that there will be 200 million products with Bluetooth units built in.

Nils Sundström



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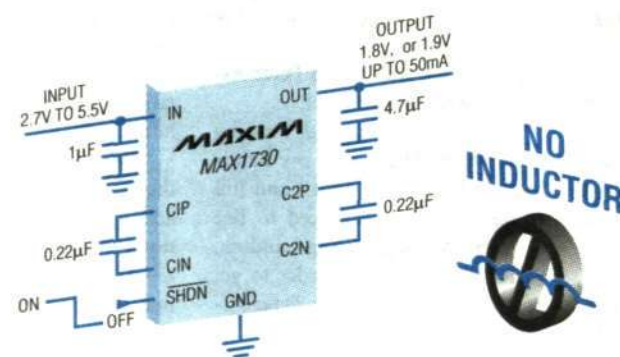
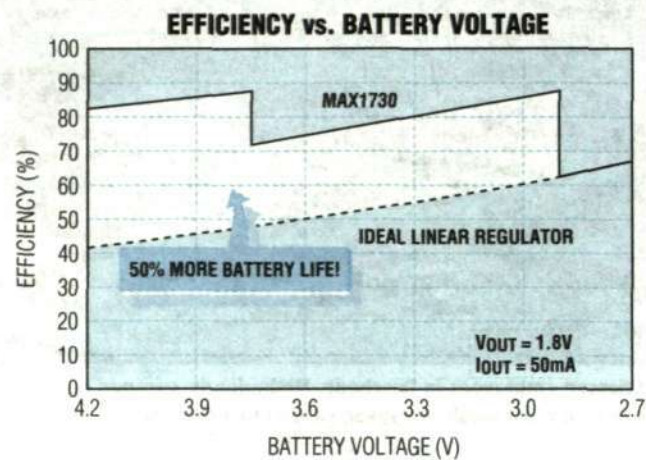
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Love bug doesn't bite at Ericsson

The "I love you" data virus that ravaged the world's e-mail systems recently encountered stiff resistance at Ericsson, which was virtually unaffected by the pesky bug.

"I am pleased and proud that we were able to withstand the love bug," says Stig-Göran Flemström, problem manager at Problems and Change, a division within Ericsson IT Services that works with strategies for thwarting virus attacks.

The love bug appeared at about 10:00 a.m. Central European Time. Stig-Göran Flemström and his colleagues at Ericsson IT Services isolated it in a secure environment.

"We tested it and then informed our colleagues in Dallas. Within an hour, preventive measures were being taken all over the world. The "I love you" virus could have caused enormous damage, but because our routines and the information we provided were effective, we survived the attack virtually without any major impact on business operations".

"The virus infected files. It then went out on the Internet, downloaded data and sent a password to an address in the Philippines,



Stig-Göran Flemström

which was probably involved in some way. The virus also spread by mailing a copy of itself to every address in the recipient's address book."

Virus vaccine

Problems and Change works with strategies for thwarting virus attacks.

"If there was a vaccine available, then viruses would pose no threat," says Stig-Göran. "Today, we try to take preventive measures. This means frequent external monitoring. We often use Trend, a company that works with virus prevention,



Viruses must be handled carefully. This applies to both the computer and the biological varieties. The principles are the same. Isolate the virus and neutralize it.

Photo: Scanpix

and regularly check the FBI's website."

Lately, Problems and Change has been working to define very clear routines for fighting virus attacks.

"We were forced to be brutally honest with ourselves after a major attack a few years ago," relates Stig-Göran Flemström.

"No one had any overall responsibility for that incident. The virus attack fell between the cracks. One person was responsible for the network. Another was responsible for the e-mail system. The virus, however, did not respect that division of

responsibilities. We know quite a bit about viruses, and quite frankly, they're rather primitive."

Global control

"The critical aspect is SMTP traffic, which handles external e-mail transfers over the Internet. Viruses arrive with an e-mail, but as long as it stays in your inbox, there is no danger," explains Stig-Göran. "The problems occur when they contain an attachment that is opened in Microsoft programs, such as Word or Excel."

Problems and Change coordi-

nates virus prevention globally. The group in Kista monitors Europe and Africa, from the North Cape to the Cape of Good Hope, and is in constant contact with their colleagues in Kuala Lumpur (Asia and Oceania) and Dallas (North and South America), which monitor their respective continents.

Ulf Schönberg
freelance journalist

www.itservices.ericsson.se/operationalstatus/problems/virus/index.cgi

Eckhard Pfeiffer – new Board member

The new members elected to Ericsson's Board of Directors earlier this spring are two of the real heavyweights in the international business community: Niall FitzGerald, from the Dutch-British Unilever Group, and Eckhard Pfeiffer, former CEO and President of Compaq.

Anyone using one of the Internet search engines to find Eckhard Pfeiffer will not be disappointed – he scores more than 5,000 reference hits on Altavista. He is a key player in the computer industry.

It was some four months ago that he was offered a seat on the Ericsson Board.

"I was very pleased, they don't consider just anybody after all."

He has always been well acquainted with Ericsson.

"Although I still have not visited Ericsson, as the president of a global company you tend to keep an eye on all the big players."

Eckhard Pfeiffer believes he has a lot to contribute to the work of the Ericsson Board, having headed a global company in the infocom sector and had previous experience of international Board work, primarily in the US.



Eckhard Pfeiffer

"There are considerable differences between Boardwork in the US and Europe," he explains. "The Board of Directors plays a more active role in the US, and the European trend is heading in the same direction. The Board is the vital link between the shareholders and the company and one of its tasks is to maintain the balance between the interests of both parties. I believe that the experience I have gained on other Boards, as well as my extensive network of contacts in the industry, can be of benefit to Ericsson."

With a hint of embarrassment, Eckhard Pfeiffer admits that his mobile phone is not an Ericsson model.

"But that's something I intend to rectify before too long," he promises.

And, just in case anyone was wondering, Eckhard Pfeiffer is no relation to movie star Michelle Pfeiffer.

"Unfortunately, the name is all we have in common," he concludes wistfully.

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ECKHARD PFEIFFER

Eckhard Pfeiffer comes from Germany and is 59 years old. After completing an MBA in Dallas, Texas, he began a 20-year career with Texas Instruments, rising to the position of European manager and head of Group marketing. When he moved to the then unknown company Compaq in 1983, many people thought it was an odd career move.

In 1991, Eckhard Pfeiffer became President and CEO of Compaq, and the company has prospered since then. In spring 1999, he resigned from Compaq. Since then he has worked on various Boards and been involved in venture capital for newly established Internet companies.

He is a member of a number of Boards, including that of General Motors and the Advisory Board of Deutsche Bank.

A total of 13 persons are members of the Ericsson Board. The third non-Swedish member, in addition to Niall FitzGerald and Eckhard Pfeiffer, is Irishman Peter Sutherland.

NEWS ON THE ACCESS WEBSITE

The latest IT news can be found on the intranet. Access magazine, which is now an e-zine, covers nearly everything relating to IT use at Ericsson. Here is a summary of the latest articles.

accessmagazine.ericsson.se

► Controlled openness – individual access

One of the most important and more demanding tasks in achieving controlled access to Ericsson's infrastructure is the definition of individual users' access privileges for

the infrastructure's functions. One way of working is role-based access administration.

► Open networks – retained security

Ericsson's market, customers and clients are changing rapidly. These changes have led to several efforts to re-organize networks for new ways of working.

Network systems must comply with the new openness in the IT industry, while placing high demands on security to ensure that systems can be trusted to play new roles in our personal lives.

► Clear focus on IT development

Ericsson needs an IP map, according to Luiz Meca, IT manager at Ericsson in Brazil. "A map would clearly specify the focus for IT development for both business managers and IT professionals," he says.

► IT Service investing in stable mail service

When you send e-mail, you naturally expect it to be delivered quickly.

Such is not always the case, however, and to improve delivery, Ericsson IT Services has started the

project Managing Mail at Maximum Stability.

This will result in overall control of development, support and operations, using Exchange as the new e-mail platform.

► Demands on IT support

Ericsson is facing a number of new challenges, as well as business opportunities. This demands a new type of IT support.

"IT must support and enable Ericsson USA's e-business initiative," says Ron Cox, at Ericsson Data Services in the US.



The 1st in 3rd Generation Testing. NetHawk 3G Analyser is the first of its kind: a fully loaded, powerful PC-based tool for 3G testing. And no wonder: it comes from the highly respected NetHawk product family. The NetHawk 3G Analyser represents the NetHawk family values – the clear vision and flexibility having its roots in telecommunication testing.

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NetHawk 3G – the flexible platform for 3G testing.



I-mode is a real winner

Contact has previously written about the Japanese mobile portal I-mode, a highly successful service offered by NTT DoCoMo. Contact's tested I-mode in Japan.

Anywhere you walk in Tokyo these days you see people fiddling with their mobile phones. Few of them seem to be talking, though. What are they doing? They are surfing the Web with the help of I-mode, checking the latest stock quotes, the weather report, reading the headline news or sending e-mails. Or using some of the other 7,000 I-mode services available.

I-mode is already the leading mobile Internet portal in Japan, with more than 5 million users.

However, most users don't use I-mode for actually surfing the Web but rather for accessing special I-mode sites, offering easy-to-digest information for which I-mode's transmission speed of 9.6 kbps is quite sufficient.

Window of opportunity

It's easy to get started. You just press the I-mode button on the handset, and choose from a variety of services on the menu. You soon realize that they range from extremely useful to pure entertainment.

I-mode banking is very popular. Services include checking of account balances, money transfer within or between banks, and foreign currency.



Japan's I-mode portal provides access to more than 7,000 services. Jan Kind tried an I-mode phone in Tokyo and was impressed.

Photo: Jan Kind

Already more than 200 Japanese banks are available through I-mode. Trading services – such as monitoring and buying/selling stocks – are also getting increasingly popular.

Latest news on handset

All leading Japanese newspapers have joined I-mode, making it possible to read the latest news on the I-mode handset. You just click on the heading for the news item you want to read, and scroll the text of the article on the screen.

Since the size of the screen is limited, so is the amount of text you can practically read. But if you just need a brief summary, the space is quite sufficient.

With the help of I-mode, you can check the weather for your region – and put in alarms to warn you if the weather turns bad.

If you for example click Tokyo, and choose the risk level for bad weather to, let's say 80 percent, your handset will beep to warn you as soon as a rainfall approaches. And

you will be sure to bring your umbrella when you leave home.

One key reason for the quick acceptance is that the I-mode handsets are very similar in their appearance and feel to ordinary mobile phones. They don't look very complicated to use – and they actually are not.

Size a problem

But as a result of their limited size, the I-mode handsets also have their pitfalls. It's not easy to hit the keys when the keypad itself is half the size

of a credit card. And because the screen is so small, viewing ordinary Internet sites is next to impossible.

Another reason for the quick acceptance of I-mode is pricing. The cost for a handset is about JPY 15 000 (about USD 135), compared to about JPY 10 000 (USD 90) for an ordinary mobile phone. The monthly fee charged by the operator, NTT DoCoMo, is only JPY 300 (USD 2.75).

But even more important is the affordable cost for using the services. The price is based on the amount of data transmitted – not on transmission time – and as a consequence the I-mode user can always be connected.

The cost for transmitting one data packet on I-mode is JPY 0.3. This means that the cost for an ordinary e-mail is JPY 2–4 (2–4 cents), and a banking transaction some JPY 20–40.

Shows the potential

After having tested I-mode, I feel it's no coincidence that it has made such a success in such a short time. It definitely has the prerequisites for a market success: a wide selection of services, an attractive pricing and an easy-to-use technology.

And for the rest of the world, I-mode gives an indication of how our life with WAP will look in a near future.

Jan Kind

freelance journalist

US main market for Nokia

Out in the real world there is a competitor named Nokia. A company that has been especially successful on the mobile telephone side.

Earlier this spring, Contact had the opportunity to meet the head of Nokia's US operations in New York during a lunch at the Finnish-American chamber of commerce.

Imagine a funny, energetic, bearded man with a special talent for logistics. Meet Kari-Pekka Wilska, President of Nokia Inc. in the US. Since he started working for Nokia way back in 1973, Wilska has held a number of leading positions. Included among them are leadership roles at Nokia Cellular Systems and Nokia Telecommunications.

"I've been through Nokia's ups and downs for 27 years," says Kari-Pekka Wilska.

"In December 1972, I received an offer from Nokia and told my mother about it. She was rather upset and said, 'Why would you, an engineer, want to work for Nokia? They make rubber boots!' I replied, 'Mother, you're wrong. They also make toilet paper...' Since then, the company has really changed and become a large telecommunications company."

Head office in Dallas

Currently Nokia employs 55,260 people worldwide. Last year alone, 12,367 new employees were hired.

"Our head office in the US is located in the Dallas-Fort Worth area," says Kari-Pekka Wilska. "Currently 7,000 people work there. We entered the American market in 1984, and already then were considered among the 100 best companies to work for. Our primary tool for branding in the US has been the Nokia Super Bowl in New Orleans."

Today, around 60 percent of Nokia's business consists of mobile telephones and another 29 percent of infrastructure for those telephones. The remainder, as Kari-Pekka Wilska puts it, are miscellaneous other business operations.

Incubator for future products

Nokia consists of three different business groups. Nokia Mobile Phones oversees handsets and terminals. Nokia Networks builds infrastructure for mobile systems and public telecom networks. Nokia Mobile Communications, together with Nokia Ventures, is an incubator for various technical development areas for future products.

"And then there are Nokia's research centers. Currently, 31 percent of Nokia's employees work in research and development. Nokia spends USD 1.8 billion annually on research and development, corresponding to almost 9 percent of sales. We have 17,000 employees who work at 52 research centers in 14 countries. It's truly a global organization."

The US is currently Nokia's



Kari-Pekka Wilska is President of Nokia in the US. He has been with the company for 27 years.

Photo: Marie Melin

biggest market. It accounted for USD 3.4 billion in 1999. China came in second place at USD 2.4 billion, followed by the UK, Germany and France.

"Last year, our net sales grew by 48 percent to USD 20 billion."

Kari-Pekka Wilska believes that it is dangerous to rest on one's laurels.

"In just three years, everything has changed completely at Nokia. The deals are bigger and the actual business areas are completely different."

"Being the market leader creates totally different conditions and challenges. In the old days, we never thought about having a well-known brand, only about creating a product. Two or three years ago we decided to build up our brand. Today, Nokia is the world's eleventh most widely known brand. We've surpassed the local manufacturers in the US."

Charlotte von Proschwitz
freelance journalist

Telecommunications union approves 3G specifications

Radio Assembly, the highest body within the International Telecommunications Union (ITU) overseeing radio issues, has now approved radio specifications for IMT-2000 – the third-generation mobile phone system.

The decision came in the form of a recommendation that can be used by countries that do not have their own standardization bodies for mobile telecommunications technology.

"This decision was expected and completely in line with our efforts. The recommendation is very important for the licensing process of third-generation mobile systems in different countries, and can also be used for market purposes in discussions with various customers," says Håkan Ohlén, head of access standardization at Ericsson Corporate Technology.

Approved standard

The ITU, a UN organization, cannot set standards, only provide recommendations. Back in November 1999, the working group within the ITU involved with 3G specifications made a preliminary decision regarding recommendations.

Work this spring has determined that specifications for radio technologies included in IMT-2000 have been approved as the standard within every regional or national standardization organization.

All solutions

Altogether, IMT-2000 includes five radio technologies, including the three nationwide alternatives, UTRA/WCDMA, UWC 136/Edge, and cdma2000. Ericsson has solutions for all of these alternatives.

Operators choose technology according to frequency bandwidth, their particular needs and the mobile phone system they are currently using.

Two technical alternatives are available for limited surface coverage, DECT and the WCDMA-based TDD, which also exists in a Chinese variation called TD-SCDMA.

3G-equipment has already gone into production and several contracts have been announced. Ericsson, for example, has four 3G customers. These deals are in accordance with ITU specifications.

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Sensuous Screen Phone makes surfing a pleasure

Bright colors, smooth contours and a screen that's just the right size. Small enough to rest on your knee, no cords to get tangled and no handset to hold against your shoulder. Ericsson's Screen Phone is a phone and a computer combined. Although it uses advanced technology, design and user-friendliness are its most important features.

After a long day at work, most people don't want to sit down in front of a computer to send e-mails or surf the Net.

While resting in their favorite chair, however, many people would be willing to have a small screen on their laps that allows them to order sushi for dinner with a few clicks, or phone a few friends and work together with them on the drawing for the boat they want to build this summer.

All this can be done without the constraint of cords, a handset or a keyboard.

"Screen Phone is going to change the way people communicate. It will reach completely new groups of people who wouldn't dream of buying a computer today," says Björn Kläboe, who managed the product during the initial software development phases at the Home Communications unit in Kista.

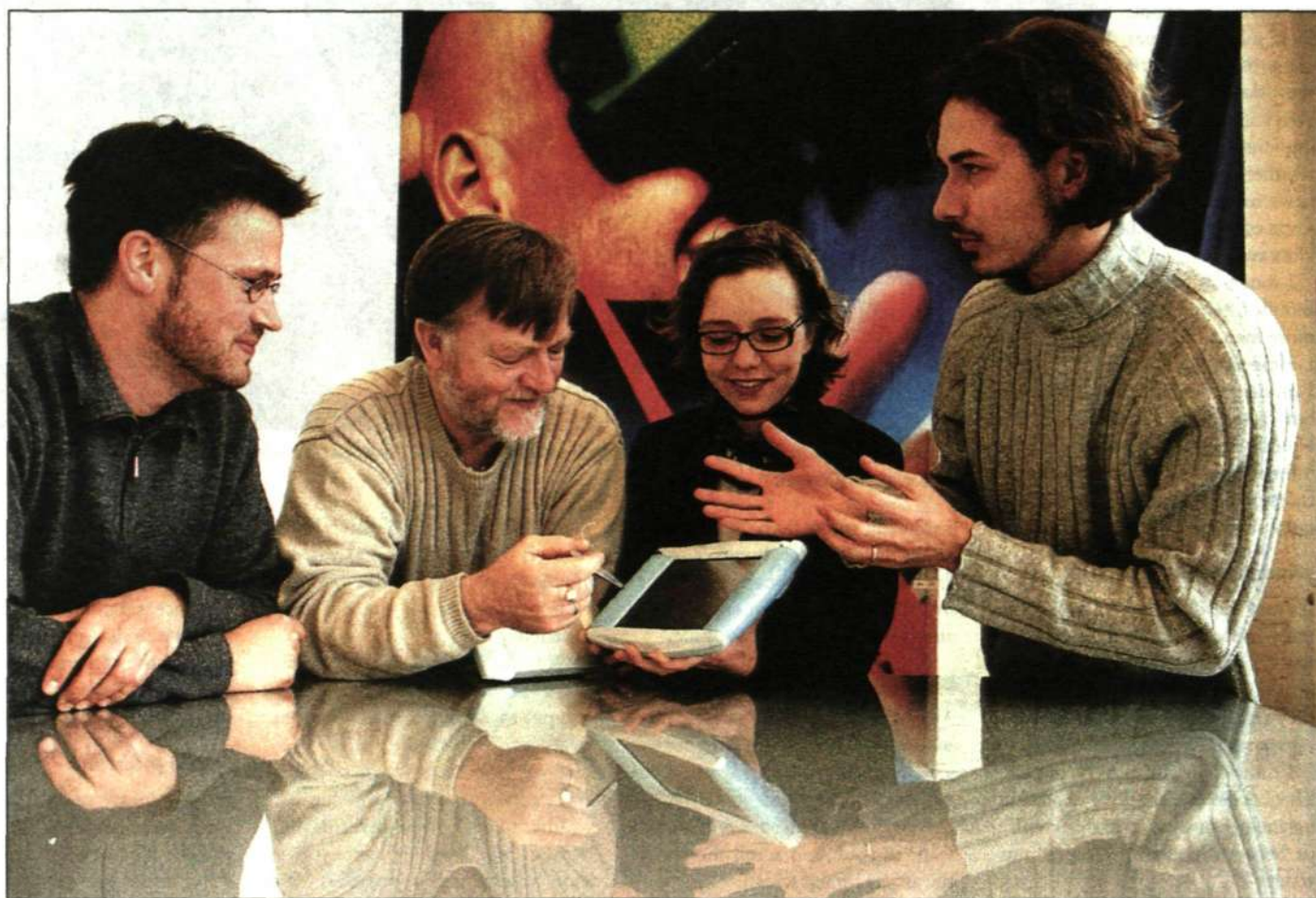
The people who have worked on the project since the start took both their own preferences and the communications needs of the intended target group as a starting point. Thereafter, four separate marketing studies confirmed that they were on the right track, even if some details needed to be changed.

"Screen Phone is a fun thing. I personally wanted a small, sleek device that I could use when I'm lying in my hammock and that would allow me to surf the Net and make phone calls without needing a table or a cord," says Mårten Skoger, art director at the same unit, who adds that computers and telephones are too associated with work.

Screen Phone is something that people want to use. It is designed to be attractive and pleasing to hold.

"I want people to be happy when they see it and to feel that it is fun to use," says Mårten Skoger.

"We know that people have an emotional relationship with devices. The design is what the



A clean design and an appealing interface should encourage even inexperienced users to surf the Net and send e-mail. Stefan Magnusson from design consultants No Picnic and Björn Kläboe, Cecilia Ericsson and Mårten Skoger from Ericsson knew right from the start what they all wanted.

Photo: Lars Åström

user sees first, and the device must therefore draw attention to itself and be pleasing to look at," he continues.

Design played a central role from the start, and design consultants No Picnic were contracted at an early stage in the project.

"We wanted as clean a product as possible. No keyboard, no handset and no buttons. Once you turn on Screen Phone, it should be self-instructing," says Stefan Magnusson, industrial designer at No Picnic.

He brings up a box from the basement full of early models in all shapes and sizes. An entire summer was devoted to sketching ideas, cutting cardboard and creating clay models. Size, shape and graphic language emerged quickly.

"It is important not to just sit at the computer when you are creating a product. You have to make lots of models to find the right feeling, size and form," says Stefan Magnusson.

Similar products from Ericsson's competitors helped the designers concretize their own ideas,

although in most cases these products, with their thousands of buttons and accessories, served as examples of what to avoid. From the first gestation of the idea and throughout the development process, the Screen Phone was shaped by a humanistic perspective that puts people, not technology, first.

Most people couldn't care less if we use Bluetooth technology or the Linux operating system. They are attracted by the shape and the design and expect the device to be easy to use, almost self-instructing. Then they see the interface and the applications, which must also be intelligent and inviting," says Björn Kläboe.

Screen Phone was shown for the first time at the CeBIT data and telecom exhibition in March.

"Standing there among the crowds and thinking 'Wow, I created this!' was really fantastic," recalls Stefan Magnusson, visibly moved by the memory.

Ulrika Nybäck

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SCREEN PHONE HS210

- A cordless display functions as a computer and phone combined. It is primarily intended to be used for Web surfing and sending e-mail.
- A touchscreen eliminates the need for a keyboard. Instead, users enter information with their fingers or a pen included with the unit.
- Users can either write or draw with the pen or click on a keyboard displayed on the screen.
- Screen Phone will be available in US stores by year-end and in Europe shortly thereafter.
- The market for home communications terminals is expected to be worth USD 100 billion within three to five years. This is equal to today's market for home PCs.



Working with cardboard and clay was important for getting the right feeling for size and shape from the start.



Photo: No Picnic

From advanced to super-advanced, Ericsson's Eurolabs in Aachen, Nuremberg and Hildesheim are developing the mobile telephone systems and services of the future. This is where the visions for how mobile networks should look in five years - an eternity in the world of IT - are conceived. Welcome to the Mecca for technology enthusiasts.

Young, global, and cool technology

The cafeteria provides the opportunity for a first impression of the Eurolab - a mix of differences and similarities. Everyone speaks English, but the pronunciation reveals a variety of nationalities.

A small number of women can be seen at the tables, and the occasional "older" person. If I didn't know the average age was 32, I would have guessed it was lower.

Ericsson Eurolab in Aachen uses several tactics to attract the right people. And they have been highly successful. Today, 740 researchers and engineers, from 43 countries are working here. This is where tomorrow's mobile phones and systems are being developed.

Aachen itself is a quaint city with cobblestone streets, pleasant restaurants and just about everything within walking distance. But the location of the city is probably worth even more. If you have a car, you can be in the Netherlands or Belgium in ten minutes, in Paris in four hours, and in the Alps in five.

What is it that attracts engineers and researchers from all over the world to the Ericsson Eurolab?

"Presumably, it is the combination of all those things, but for most people, the chance to help develop new technology and new solutions is the most important factor," says Kristian Toivo, who is in charge of all Eurolab operations in Germany.



Kristian Toivo

Fast growth needed

Ericsson Eurolabs develop systems and solutions for third-generation mobile systems, an

area in which Ericsson aims to be the leader. Consequently, the Eurolabs need to develop rapidly, stretching the limit of what is possible in terms of speed. By the end of the year, they will have to hire about one hundred engineers and researchers.

"We must become even better at spreading the word about what an exciting area of technology we are working in. One way is to have employees talk about their work to college and university students, and we must also make it as easy as possible for new employees to move here and bring their families with them," Kristian Toivo believes.

"Regardless of how understaffed and pressured we may be, we must still be generous enough to send our own personnel to Ericsson sites in other countries," he continues.

Creative recruitment ideas

Eurolab employees are already using several approaches to make the workplace better known among students.

Researchers and engineers from Ericsson give lectures at colleges and universities. On a small scale, the Eurolab has begun to hire high-school students to participate in a three-year trainee program.

It is also common that university students work here one or two evenings a week to extend their student loan money - currently there are about forty students working part-time. The Nuremberg Eurolab offers a similar program for students.

The open culture attracts people from all over the world. Many students are very keen to be in on the development of tomorrow's technology. Employees take on responsibility at an early stage and conduct their own projects.

"Students who have trained with other companies apply for jobs here precisely because they want to be in a more open working climate," explains Simon Seebass, human resources manager at the Eurolab in Aachen.

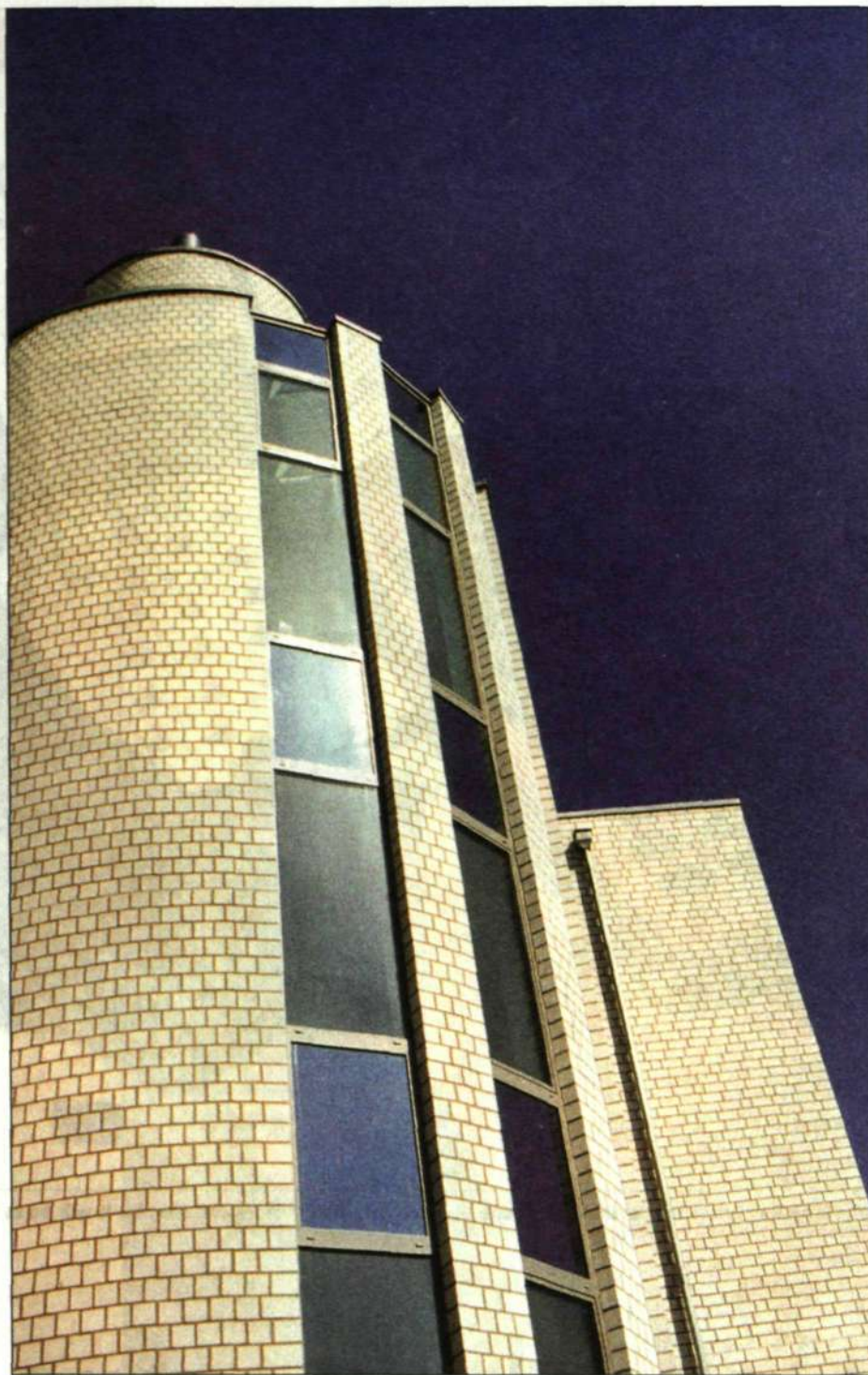
The companies competing for fresh talent in Germany today are Siemens, Bosch and Deutsche Telekom.



Simon Seebass

Ulrika Nybäck

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After outgrowing its offices in Herzogenrath, the Eurolab in Aachen moved parts of its operations to new offices in a modern building closer to the city center that is more suitable for customer visits.

Photo: Ulrika Nybäck

HUGE UNDERTAKINGS FOR THE THREE EUROLABS THIS YEAR

- Launch GPRS
- Build the first test network for WCDMA
- Deliver a PDC-P system to Japan
- Recruit 200 more employees
- Launch GSM version 8.0 to prepare networks for packet data
- Launch sales of the A2618 WAP telephone this autumn





The A2618 is Ericsson's latest WAP phone. Available in many colors and shapes, it will be in the stores this summer.

Photo: Ulrika Nybäck

Hot phone from Nuremberg

It has been called "the people's phone", or "WAP for the people". In the midst of all the Eurolab's software development, a small group in Nuremberg is working on the development of Ericsson's latest WAP telephone. The A2618 - a personal cell phone, priced low enough that everyone can now afford to "wap."

Soft contours. Some say it looks like a Nokia. Many colors and styles - from classic and business-like gray to jazzy, colorful patterns sure to appeal to a younger target group.

"If everything goes as planned, companies and organizations will be able to design their own phone patterns.



Bernd Möller

Naturally, this requires certain phone production volumes, but the idea itself, that the phone should express your personality, is important," says Bernd Möller, who has driven the project from the start at the Eurolab in Nuremberg.

Phone development is a deviation from the lab's normal operations. The Eurolabs in Aachen, Herzogenrath, Nuremberg and Hildesheim devote a great deal of energy to developing third-generation mobile-telephone networks, and to squeezing, via the GPRS and PDC-P systems, the last drops out of the second-generation circuit-switched networks. (GPRS and PDC-P are mobile standards that can handle packet-switched data via second-generation circuit-switched networks.)

The exception is a small group at the Eurolab in Nuremberg that has worked, and sometimes

struggled, to develop a WAP phone that everyone can afford.

WAP over SMS

To ensure that the A2618 would be priced low, a simpler technology for Net surfing was used - WAP over SMS. The technology is intended to give customers a preview of services that will be possible once the 3G networks are fully deployed.

It might even create demand for both 3G services and Internet phones. But even with SMS technology, which today operates over circuit-switched networks, it is possible to access such services as a restaurant guide, booking show tickets and online banking.

To reach as broad a target group as possible, Nuremberg project manager Bernd Möller and his colleagues at Mobile Communications in Lund decided to create a unified platform for the phone - meaning that the basic components are to be the same in all A2618 telephones.

The phones are then adapted to different mobile standards and markets - that is, Europe and the US.

In stores this summer

The colorful WAP phone, introduced at CeBIT, will be available in stores this summer.

"Everything has gone according to plan so far," explains Bernd Möller, displaying a project chart. "The A2618 is to be produced in very large volumes, and even though we have planned production in detail, it will be exciting to see how it all works out."

The large volumes are needed in the rapidly expanding mobile-phone market. The GSM market alone doubles every year. Bernd Möller relates that the development work for the phone was sometimes difficult, but at the same time it was a lot of fun.

"For my colleagues, the greatest challenge has been to put up with me sticking my nose into everything. I have to feel that I know exactly what's happening," he says, laughing. "By the way, I presume I'll be able to read your article before it's printed?" he asks, a little nervously, before we part.

Ulrika Nybäck

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Nuremberg is famous for the wall enclosing the city and building from the 12th century. Previously, the city was dominated by heavy industry, but today IT companies are taking over. Lucent is currently the city's largest, but Ericsson is quickly catching up.



Real-time images and video on phones next year

The Eurolab in Aachen is currently developing a product that will allow news broadcasts with sound and video to be received on a WAP phone even before 3G networks have been built. The new system will be launched in slightly less than a year.

The Eurolab devotes much of its time and energy to developing third-generation mobile networks. However, it also focuses on developing solutions that are compatible with both the GSM and the GPRS networks, while giving customers a preview of future services.

Right now, the Eurolab in Aachen is working on a solution for sending video over the packet-switched GPRS network, which does not support speeds as high as the 3G networks will. The product is a part of the WebOnAir family.

"News is an example of what works well with the new product, which does not yet have a name," explains Magnus Andersson, who is strategic product manager.

From video to stills

He brings out a handheld computer and quickly retrieves a file. After a few clicks, a video image appears on the screen and a news presenter's voice is heard, commenting the events on the screen.

"If you enter an area with your phone or handheld PC where coverage is not as good, or surf at a time when many other people are also surfing, you'll notice a difference," explains Magnus Andersson.

"Instead of the image breaking up or freezing, as often happens when you surf the Internet, the solution excludes certain layers of data and lowers the data speed," Magnus Andersson explains.

To show what the image looks like if the coverage becomes weaker, he clicks his handheld again. The image is transformed from video to stills that change every three seconds. The dif-

ference is noticeable, but is not terribly important, since – with the news presenter's voice continuing to comment on the images – the context is clear.

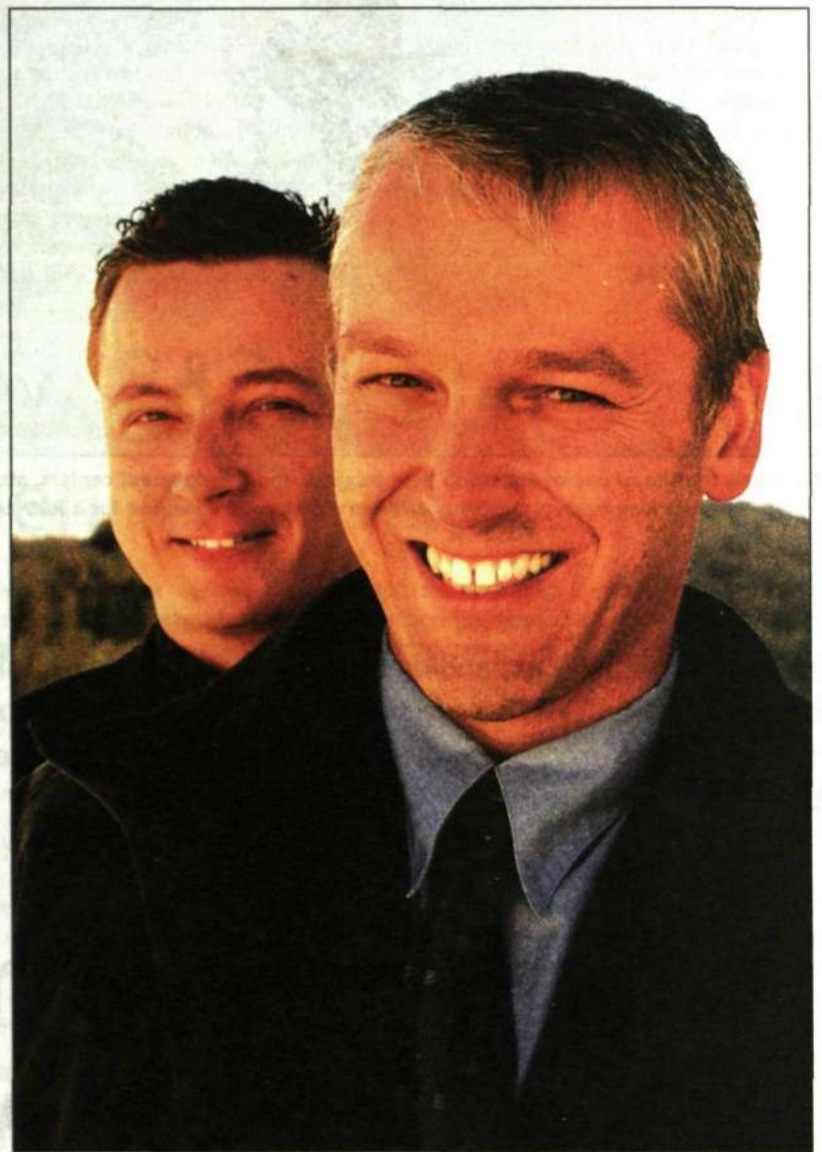
Preview of 3G services

The WebOnAir solution separates video information into layers and can send only one layer if the network does not have enough capacity for more. Image quality is somewhat coarser, but the image remains intact and does not freeze for an uncertain period.

"The idea is to create demand for this type of service," says Ralf Wellens, manager of the Application Design department at the Eurolab. "It is important that both operators and end-users are made to understand what the next-generation of networks can offer," he believes.

Ulrika Nybäck

Magnus Andersson, left, and Ralf Wellens demonstrate that acceptable video can already be shown on WAP phones at GPRS data speeds.



New server streamlines wireless Web

Surfing with a cell phone has to be fast – otherwise, you might just as well ask someone on the street. With this idea in mind, a smart server that selects and sorts information for the customer was developed.

It will be a few years yet before the third-generation mobile telephone networks are fully deployed. The demand for 3G services will need to be met, however, since there are now both Internet-hungry customers and several mobile phones and handheld computers with WAP capabilities.

A group of engineers at the Eurolab in Aachen have developed a server that functions as a filter, selecting the information the user wants – always the latest and always in accordance with the user's preferences. The new product is called the WebOnAir Information Server.

More spontaneous lifestyle

"The new server makes the wireless Web a lot faster and much more fun, even at the speeds supported by GPRS, which is packet data for GSM," says Ralf Wellens, manager for the application design unit that is developing the product.

The server could be put up on the Internet and perhaps financed by advertising. Another alternative is to place with the operator, allowing filtering to be offered as a subscriber service.

"When you surf the Web with your cell phone, you want to be able to access the right information very quickly, otherwise you won't use the services. People have neither the time nor the desire to spend twenty minutes or more looking for the information they want – which is what it can take on the Internet today," says Stephan Skiba, strategic product manager for the server at the Eurolab application design department.

"For example, you might just want information on restaurants that are open, that serve

food you like and that you can afford," he explains.

Mobile Internet opens the door to a more spontaneous lifestyle. It is no longer necessary to plan trips in great detail. Impulsive travelers can now order last-minute tickets using their cell phones, book their hotel rooms at the airport (by phone) and make restaurant and theater reservations when they arrive at their hotels.

The server knows where

The Mobile Positioning System tells the server where you are. The server then finds the names of the restaurants and hotels in your location.

In the future more information will be retrieved from the mobile network.

Ericsson's Jambala solution, for example, which is an open development platform, will allow the server to find out how long the mobile phone has been off, in order to supply the user with the latest information in various areas.

To enable the server to select information and news, users must first provide information

about their interests via a website. They also can adapt and extend these settings via a WAP-enabled phone.

Euro 2000

The Information Server is continuously being developed, but an initial version has already been sold.

It is currently being used by the German government to distribute information on the water levels of rivers to freighters trafficking them.

During the Euro 2000 soccer championships in the Netherlands, the Information Server will be deployed by an operator to provide soccer fans worldwide with information on the latest game results.

"We are expecting at least eleven new customers for the Information Server this year," says Ralf Wellens.

The server has been developed for use in existing mobile networks, as well as GPRS and 3G networks.

Ulrika Nybäck



Stephan Skiba



Fortaleza, the site of one of Ericsson's new research and development centers, attracts not only tourists, it also offers a good standard of living. Fortaleza also hosts a university and can offer good condition for a R&D center. Photo: Lars Åström

Mobile telephony is expanding rapidly. Internet usage is taking off. It used to be that Latin America lagged one to three years behind Europe. Today, however, there are already clear indications that Latin America is keeping pace with the latest trend towards mobile Internet.

Mobile Internet hot in Latin America

Although mobile Internet is still in its infancy, I believe that it is already taking hold in Latin America. Now we have to develop a number of applications and collaborate with operators," says Bengt Forsberg, head of the Latin America market area.

In many ways, Brazil is leading the way, although the trend is spreading throughout many of the countries in the region.

Currently, 15 million Brazilians own mobile phones. Ericsson expects that number to increase to 23 million by year end.

Prepaid subscriptions are growing faster than any others. Between 70 and 80 percent of all new subscriptions signed with operators are prepaid.

"Until recently, people haven't been able to afford mobile phones, but with deregulation and increased competition, prices have fallen. Owning a mobile phone is now economically viable for a large number of people," says Lars Jehrlander, Vice President at Ericsson in Brazil.



Lars Jehrlander

taken off. Eight million people in Brazil now have Internet access. Both interest in the Internet and efforts within that field have increased in many Latin American nations, especially Brazil and Argentina.

Spanish portals popular

Diginet, which purchased Ericsson's Engine solution last year, is expanding its broadband network to medium-sized companies using LMDS radio technology. Their campaign has been very well received. Moreover, in just the past few months, Spanish and Portuguese language portals have sprung up - a necessity in order for the Internet to appeal to a wider audience.

However, Internet access remains very expensive for the average person. Most people who surf the web do so at work. An Internet subscription is ten times as expensive for the average Brazilian wage earner compared with an average American salary. "Mobile Internet could be very significant in this



Gerhard Weise

regard. It's quite probable that a large number of Brazilians will simply skip over the Internet with network hook-up and connect directly via mobile data services," says Gerhard Weise, President of Ericsson in Brazil.

That appears to be the likely scenario. Computers are and will remain an expensive purchase for individuals. On the other hand, an increasing number of people are buying mobile phones. Once they become familiar with them, taking the next step of using new data services will not be as great as buying a computer.

Higher speeds

Interest among operators is also a good indicator that mobile Internet is a hot item. Customers such as the Brazilian operator Tess are introducing mobile circuit-switched data services. SMS is becoming increasingly common, Unified Messaging is in greater demand and in some countries investments are being made in CDPD packet data technology for the American TDMA system.

CDPD involves higher data transmission speeds and continuous connections to data services, just like GPRS packet data technology



The people at the factory in Brazil has busy days, due to the strong growth of the number of mobile phone users. Currently 15 million Brazilians have a mobile phone.

ly popular, Ericsson and other companies in the industry will have to promote development. In Chile, Ericsson recently started up a WAP academy. Mobile Internet institutes were also established in Mexico, Brazil and Argentina.

"I believe that our role as catalyst is more important here than in Europe and North America. In those areas, numerous other players are also driving development. We have a big task in trying to educate," says Bengt Forsberg.

Just as important as educating operators is the effort to help Ericsson's own employees in the region become more knowledgeable about mobile Internet and datacom.

"Increasing their expertise is high on our list of priorities. Wireline Systems' Get Insp(w)ired campaign is, for example, very important. Most people are beginning to understand that it's important to keep up to date, that it's up to every individual to take the initiative to educate and train themselves," says Bengt Forsberg.

3G the next step

The next step is, of course, third-generation mobile systems.

Currently, there are already a number of collaborations involving EDGE, including with Telefónica in Chile and Brazil, Telecom Personal in Argentina, Movilnet in Venezuela, Telcel in Mexico and ATL and Telesystems in Brazil.

"We hope to soon be able to sell EDGE in Brazil. However, development could take time since, in many cases, it is an entirely new business model that operators, as well as the rest of us, need to learn. It's a new way of receiving payment and there are many new players in the market," says Lars Jehrlander.

Constructing WCDMA networks in Latin America could be much more complicated. A large portion of the new frequency spectrum specified for 3G is already in use.

In order for mobile Internet to become real-

Brazil drives growth

Economic stability, a strong growth rate and deregulation of many markets in Latin America are among the primary reasons why Ericsson has done so well in the region over the past two quarters. Sales increased 58 percent during the first quarter of this year.

"Following a slow start last year, we saw how a renewed belief in the future returned during the fourth quarter. Devaluation in Brazil last year strengthened the economy, which has contributed towards a stabilization of the entire region. Global markets have improved and the US market continues to churn along. In particular, Mexico has been swept up by the enthusiasm in the US," says Bengt Forsberg.

Sales in Mexico increased during the first quarter by 280 percent compared with the same period one year ago. That was the second largest increase in the region.

Only Argentina, which experienced a five-fold increase in sales, showed stronger growth but from a significantly lower level.

The effects of deregulation, which has occurred in many countries, are now becoming sharply noticeable.

In Mexico, operators Telmex and Telcel made large investments during the first quarter to strengthen their positions prior to the is-

suance of additional licenses and in response to increased competition.

"We feel that it's a very dynamic period of development at the moment, especially on the mobile side, but also in terms of fixed networks, where we continue to see major investments."

However, Bengt Forsberg wants to point out that nothing is guaranteed.

"When crises rock global markets, they are clearly felt in Latin America. Now and again, countries in this region are also affected by earthquakes, floods and other disturbances. The flood in Venezuela, for example, caused significant damage, which will take time to repair."



Bengt Forsberg

Mia Widell Örnung

New R&D center open in Brazil

Ericsson is opening new research and development centers in Campinas and Fortaleza in northern Brazil. Investing around USD 55 million this year, the goal is for the centers to employ 600 people in research and development by year-end.

"In addition to the fact that Brazil is, in many ways, driving development in Latin America, there is also favorable access to skilled labor as well as tax advantages," says Gerhard Weise, head of Ericsson in Brazil.

Hardware design began at Ericsson in Brazil as far back as the 1970s. At the beginning of the 1980s, software development for AXE was relocated there. Today, the mission is being expanded to include software development for the American CDMA and TDMA mobile phone systems.

Collaboration with Canada

The centers will also conduct software development for TDMA mobile switches in collaboration with a product unit in Canada.

"Our operations already employ 140 designers. While Brazil has very good prospects it will, of course, be a challenge to expand as rapidly as we have envisioned," says Hugo Österlund, at Ericsson headquarters, who is involved in the construction of the new research and development centers.

Moving some development of second-generation mobile phone systems to Brazil will free up capacity at other research centers.

"Units such as CDMA Systems in San Diego have a difficult time finding the resources necessary for development work on projects such as the third-generation cdma2000 system," says Hugo Österlund.

Location raised eyebrows

The fact that Ericsson has chosen to locate development of second-generation mobile systems here instead of developing more current 3G systems has raised some eyebrows.

"We've got to start somewhere. While it may seem as if we're locating less advanced development work here, the fact of the matter is that second-generation mobile phone systems are not at all obsolete and will continue to operate for many years. We have to focus on new development for them as well," explains Hugo Österlund.

"Moreover, we're also planning to focus on popular areas such as datacom, IP and 3G to-



The people at the factory in Brazil has busy days, due to the strong growth of the number of mobile phone users. Currently 15 million Brazilians have a mobile phone.



Rapid development in Brazil has led to antennas appearing everywhere.

ly popular, Ericsson and other companies in the industry will have to promote development. In Chile, Ericsson recently started up a WAP academy. Mobile Internet institutes were also established in Mexico, Brazil and Argentina.

R&D CENTER

Ericsson's research and development centre in Brazil will develop software in the following areas:

- Mobile switching for TDMA (in cooperation with the Canadian product unit)
- AXE (in cooperation with Ericsson Germany)
- CDMA classic products (in cooperation with CDMA Systems in San Diego)

As a result, Ericsson in Brazil is looking for system designers, software designers, testing staff, project leaders and configuration coordinators.

If you would like to know more contact hugo.osterlund@lme.ericsson.se

Mia Widell Örnung mia.widell@lme.ericsson.se

gether with leading universities in Brazil," he adds. The development centers have to both recruit new employees and provide additional training to existing employees.

Improving skills

Currently, fifty Brazilian designers are in Boulder, San Diego, Athlone and Nynäshamn for training on new systems that the Brazilian centers will be working on.

In order to further improve skills, 40 persons from development centers around the world will be hired on long-term contracts.

As a result of this new program, Ericsson in Brazil will outgrow its current facilities in São Paulo.

The new development centers are being located in Campinas, 100 kilometers north of São Paulo, and in Fortaleza, 4,500 kilometers to the north. The main development center will be located in Campinas, an area that is known as Brazil's Telecom Valley since several of the largest players in the field are located there.

Both cities are home to reputable universities.

Mia Widell Örnung



Mobile Internet is not just for technology-starved urbanites. Vara on the plains of Western Sweden is the site for Infoville, one of the EU's most ambitious IT projects to date.

In Vara, ordinary people are being given a chance to test the technology in everyday life. WAP solutions provided by Ericsson Business Consulting are an important part of the trials.

Sören WAPs the water works



The early summer heat creates a laconic lull in Vara. The fields are aglow with rape-seed flowers. All the super-cool Internet companies in Stockholm seem very far away.

Sören Gustavsson, who is a municipal service technician at Vara's water purification plant, pours a cup of coffee in the control room and summarizes personnel availability during the week. The complex system for water and sewage for which he and his colleagues are responsible must be monitored around the clock, every day of the year, with minimal resources.

"This makes our work much easier," says Sören, holding up an Ericsson R320 WAP phone. "We already know how tomorrow's technology is going to work."

Leaks found by phone

With his WAP phone, Sören can check water flows, valve openings and other settings. Armed with this information, he can take action in the event of an accident. Valves and pumps can be controlled directly from the phone.

"Particularly when leaks occur, it is important to be able to shut off the water in different areas to see where the pressure drops. Now we can even stand right at the leak and redirect the water, thus minimizing stoppages during repair work," he says.

There are usually about 20 incidents per day. When he is on call during evenings and weekends, Sören can check each alarm himself and respond appropriately in the event of a leak.

"Everything is much easier with WAP," says Sören, adding that price will determine whether or not a WAP system is installed after the trials.

WAP technology has proven valuable for the

"The WAP phone makes our work easier. If there is a leak, for example, we can redirect water flows directly at the site, thus minimizing stoppages during repair work," says Sören Gustavsson, maintenance engineer at Vara Water Works.

Photo: Marie Ullnert/Kamerareportage

Vara Water Works, which serves 16,500 municipal residents and an area of about 700 square kilometers.

WAP saves time

There are ten water works, 30 pumping stations and five purification plants throughout the municipality. A PC-based system is used for daily monitoring and remote control. The WAP solution complements this system.

"We have high requirements with respect to security, water purity and sewage treatment. We use a lot of chemicals in our processes, and it is extremely important that the correct dosages are used, that the water has the correct pH value and

that the correct levels are maintained in reservoirs," says Gunnar Nord, director of the Vara Water Works.

"WAP technology saves us time," he continues. "I'm constantly finding new applications in our work. We could make water analyses available over the Internet, for example, or order spare

Nils Sundström
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INFOVILLE

Infoville is an EU project that is currently being conducted in seven regions throughout Europe over a three-year period ending this year. The project is 40-percent financed by the EU and includes such applications as e-commerce, distance learning, tourism and municipal services.

The objective is that companies contributing technology should help to develop new IT services

for the general public and for public authorities. In addition to the WAP trials, the project work in Vara includes an intranet and a municipal website being built by Telia. There is also a distance education project in which municipal residents can learn more about the Internet by using the network. To date, about one thousand of the municipality's 16,500 residents have taken advantage of the offer.

parts, read water meters in customers' homes and get a graphical representation of the current status of the water and sewage system over the phone."



Ingenious tool for small-town businessmen

Technology that is simple to use, works as expected and gets the job done quicker. That was the verdict from the 15 persons who participated in the WAP project in Vara.

In addition to the municipal water works, three companies participated in the WAP project. Using their WAP phones, participants were able to read e-mail, book meetings and surf the Net over a period of two months.

Two companies were even able to make portions of their business systems accessible so that users could retrieve sales reports and enter orders directly via their mobile phones.

"This was a very eager test group that was not spoiled by having an abundance of IT resources," says Nils-Erik Engström, who was Ericsson's manager for the Vara project.

Marcus Antonsson, who was the municipality's project manager, agrees.

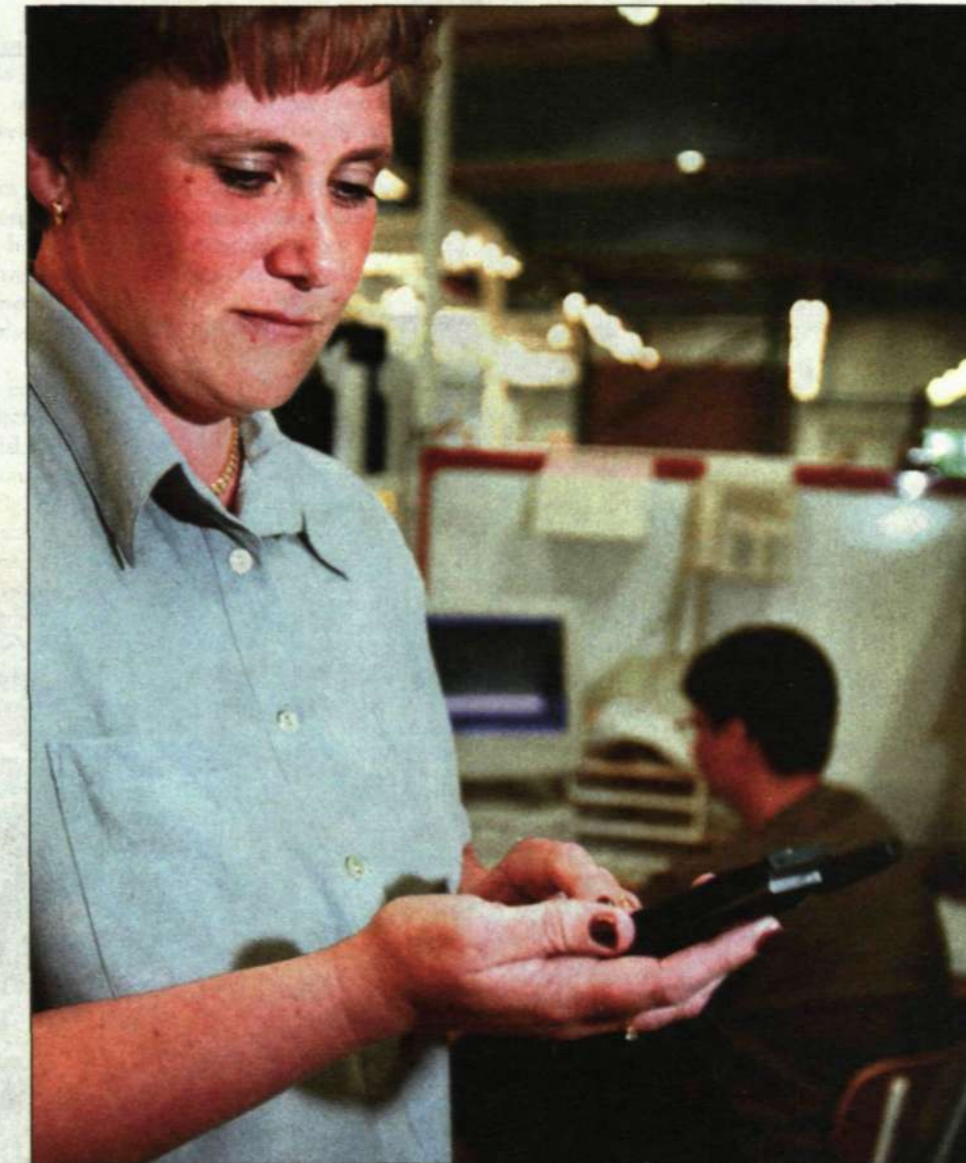
Getting a head start

"In a small municipality where distances are great, technology has a completely different impact than in a big city. I hope that these trials will give the participating companies and Vara municipality a head-start," says Marcus Antonsson.

He sees several applications in municipal work in which mobile Internet would be valuable for mobile workers.

"We already have a WAP website with telephone numbers and e-mail addresses for all municipal employees," reveals Marcus Antonsson.

"Other possible services would be to allow municipal employees who provide home care services to access medical records and door codes



"Very addictive," says Ingegerd Eriksson, administrator in the IT department at Asko Cylinda, which was one of the companies that participated in the WAP project in Vara. With Ericsson's R320 WAP phone, Ingegerd can read and send e-mail and access her calendar.

via WAP before making their visits. IT personnel could also coordinate services in schools and other municipal operations. Fire inspectors could print out their reports on the nearest fax

machine after inspecting public buildings and issue the report directly," he continues.

One of the companies that participated in the WAP project was Asko Cylinda in Jung outside Vara, which has 600 employees. The company develops, manufactures and sells dish washers, washing machines and dryers. Much of its production is exported.

Two sales representatives and two persons in the IT department tested the WAP services, which provided remote access to the Internet, e-mail and calendars.

Quick help

"Very addictive," says Ingegerd Eriksson, who is an administrator at the IT department and also works with hardware and software installation and support.

Not being tied to her desk when reading and sending e-mail is one of the greatest advantages, she feels.

"I haven't used SMS before, so using a mobile phone for sending messages took some getting used to," admits Ingegerd Eriksson.

IT manager Christer Hofling relates that he had some difficulty connecting in the beginning but that Ericsson was quick to help.

Being able to access information with a WAP phone is a capability that he finds very useful.

"This technology is an excellent way of accessing small amounts of information in a small format. It's really only the imagination that sets the limit for what you can do," concludes Christer Hofling.

Nils Sundström

www.digitalsites.infoville.net

www.vara.se/infoville

wap.vara.se

Attractive solution for new customer group

For Ericsson, the WAP project in Vara provided a test of services for companies and the municipality. What was unique was not the technology itself, but rather that it was a total solution for a small town. Ericsson was responsible for both operation and maintenance of the infrastructure.

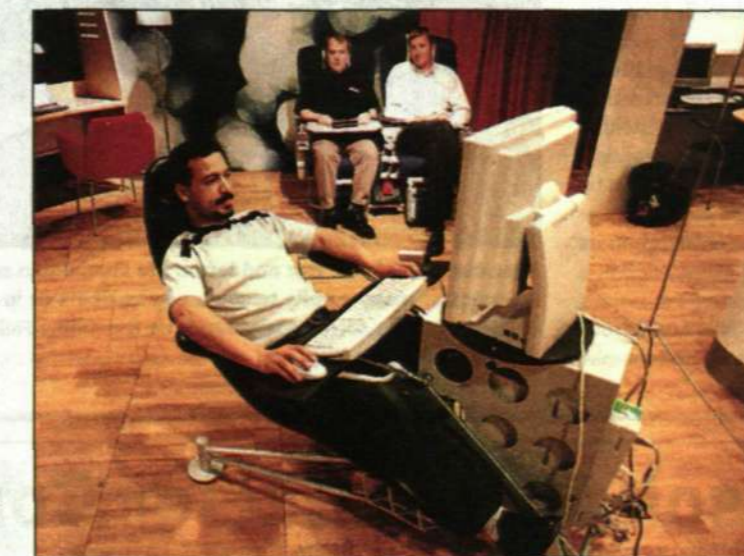
"We will use the experience from Vara to introduce this WAP solution in our product portfolio. Small companies and municipalities are a very attractive target group for mobile Internet solutions," says Lars Jansson, who was the principal manager for Ericsson WAP efforts in the Infoville project.

Companies that are not themselves able to invest in a WAP server and an extranet system can join forces to build a common infrastructure for mobile Internet.

Solution for all markets

"This is a solution that we can package and sell in all markets," says Bertil Yvling, at Ericsson Business Consulting, who is responsible for new customer segments and municipality businesses.

"With this type of services, we can reach a



The core technology for the WAP service in Vara comes from Ericsson's Future Office Studio in Älvsjö, where different user scenarios are tested. System designers include Mohssine Chabraoui (foreground) and Torbjörn Sjökvist (background). Also shown is project manager Lars Magnusson.

Photo: Lars Åström

customer segment consisting of municipalities and what we call telecities. There are cities with a new telecom infrastructure that wish to develop new services in such areas as e-commerce, tourism and other applications where wireless access can provide a new flexibility."

In just a short time, Ericsson was able to develop applications for the tests in Vara and a secure system for remotely accessing company intranets. Ericsson is also responsible for operation and maintenance of the WAP equipment.

"We have focused on what users want. WAP

technology should provide a simple means of working more efficiently," says Lars Jansson.

Together with a team from Ericsson Business Consulting, Lars developed the WAP solution based on user scenarios from the unit's Future Office Studio in Älvsjö outside Stockholm.

Municipals show interest

The Future Office Studio demonstrates the latest technology in applications for such scenarios as traveling, working in the office and at home.

"The solution that we developed for the Vara project was based on prototypes that have been used at the Future Office Studio. It allows users to access the Internet, their e-mail and electronic calendars just as they would do in the office."

Several municipalities have expressed interest in the technology.

"We are going to evaluate the trials in Vara to find out what users thought and to improve the system. The market potential may be very significant," concludes Lars Jansson.

Nils Sundström

www.ericsson.se/businessconsulting/

Mobile telephony in Cambodia expands with tourism

After the terror regime of the Khmer Rouge, tourists are returning to Cambodia. Ericsson is contributing to building up mobile telephony in a country that has been severely ravaged by civil war and dictatorship over the past decades.

The familiar ring signal from an Ericsson mobile phone can be heard at one of the entrances to the thousand-year old Angkor Wat temple complex. A steady stream of tourists make the trip each day to this temple in northwest Cambodia, bringing with them economic improvements to a country that in just a few short years has succeeded in charming travelers with all varieties of currency.

Cambodia, which has a population of ten million, is now gradually rebuilding its economy after many years of terror and uncertainty. Today, there are some 100,000 subscribers in the country's six cellular networks, which together have twice as many subscribers as the fixed network.

Many people consider that call charges are too high and quality too poor in the fixed network and therefore choose a cellular phone instead.

"Mobile telephone systems provide better national coverage, and the networks are also attracting tourists and diplomats," says Sudkhet Sujipitham, account manager at Ericsson for Cambodian mobile operator Casacom.

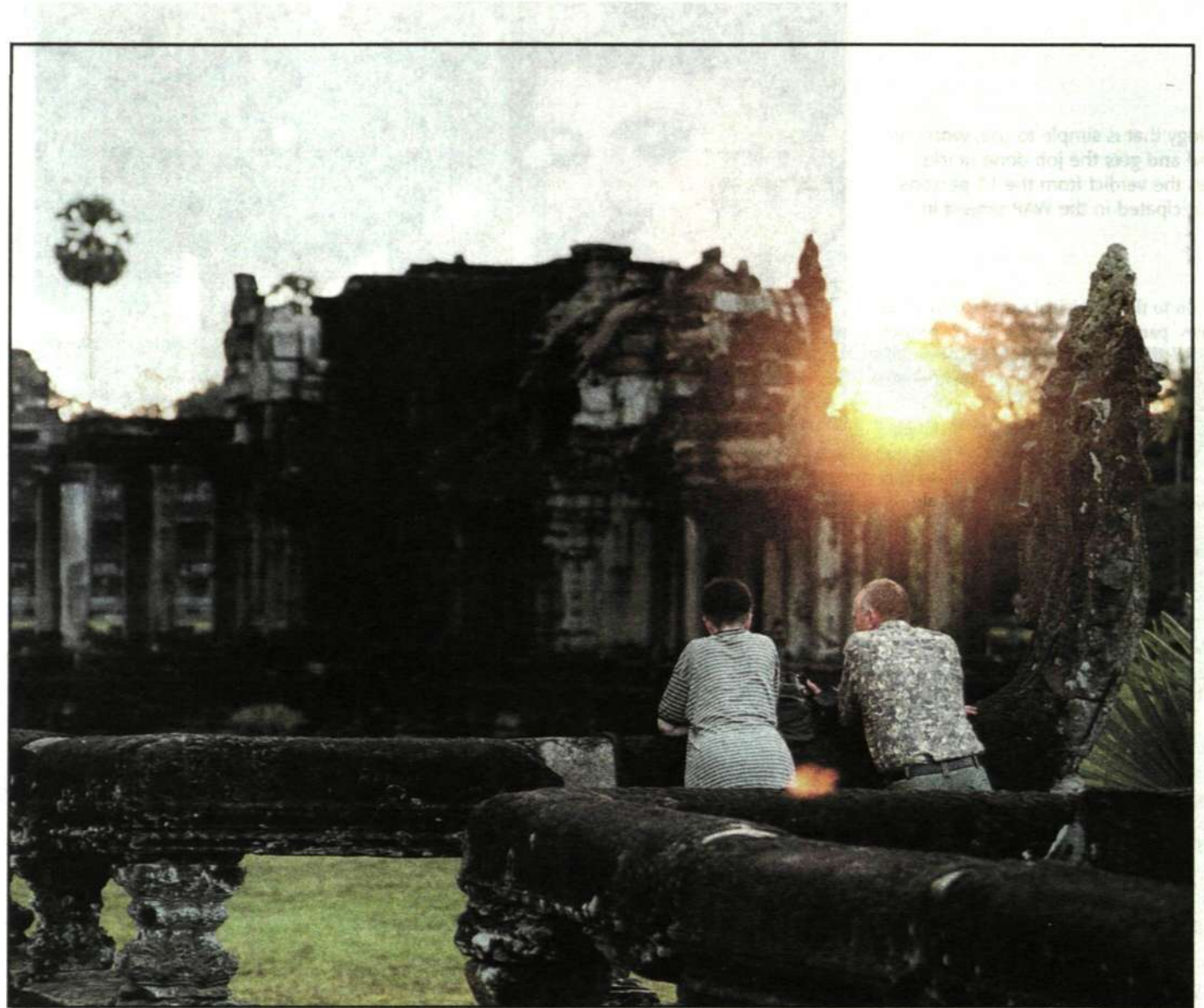
GSM network for 7,000 subscribers

There are several mobile systems in Cambodia: GSM 900 and 1800, NMT, ETAC and AMPS. Investors include Australian operator Telstra, which provides mobile telephone and international calling services.

Casacom, which is 51-percent owned by Telecom Malaysia International, is the largest mobile operator in Cambodia. The company has a large NMT network, as well as a new GSM network. Its contract with Ericsson, which includes an expansion order, is valued at USD 7.5 million.

In four months, Ericsson installed a GSM 900 network for 7,000 subscribers in the capital city Phnom Penh and six other areas, including the port city of Sihanoukville and Siem Riep, where the Angkor Wat temple is located.

"Casacom expects that its GSM network will



The Angkor Wat temple outside Siem Reap in northwestern Cambodia attracts a steady stream of tourists. The temple complex, which dates back more than 1,000 years, is the largest in the world.

Photo: Lars Åström

have 14,000 subscribers later this year. To meet the competition, the operator is focusing on low prices, prepaid subscriptions and the country's broadest coverage," relates Sudkhet Sujipitham.

Standing on its own feet

Ericsson does not have offices in Cambodia. Instead, business is handled from Thailand. In addition to mobile telephony, there are many Ericsson MD110 PBXs installed in Cambodia.

"The situation in Cambodia is not as turbulent as we expected when we entered into negotiations some two years ago," says Sudkhet Sujipitham. "There are currently three political parties of equal size, and the democratic process that began in 1993 is slowly lifting the country's economy so that it can stand on its own."

Nils Sundström

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After decades of civil war and terror, the Cambodian economy is slowly recovering. There are twice as many mobile telephone subscribers as in the fixed network. Base station antennas can be seen everywhere from the Killing Fields to the vast temple complex at Angkor Wat.



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Expertise not available externally

No sooner had Ericsson divested large portions of its production did it become apparent that leading-edge hardware expertise was in a great demand. Hardware is thus the specialty of a new unit with some 100 roaming internal consultants who provide expertise on demand.

"Outsourcing of hardware expertise was probably done a little too quickly," comments Jörgen Hedenström, who manages the unit, which provides technical support for development projects.

"Divestment was particularly rapid in the unit for fixed networks," continues Jörgen. "Mechanical characteristics and design, however, are a very important part of the overall design, and if there is an uproar in the media, hardware faults are almost always to blame. Software faults are rare."

In-depth knowledge of mechanical engineering, materials, heat dispersion and electromagnetic constraints are always essential for getting the design right. Not everything can be purchased externally, however, particularly not general know-how and experience. The ability to correctly evaluate test results and figure out how to correct possible faults is also not readily available externally.

"That's why we have been working over the past year to build up an internal consulting service," says Björn Andersson, who manages the unit.

"What we are selling is core technical expertise stored in the heads of our experts," continues Björn. "At present, we are participating in such major projects as the 160 Gigabit ATM switch and third-generation WCDMA, but we also provide more targeted support for smaller projects and work closely with all of Ericsson's design centers around the world."

Gunnel Andersson is the project manager for hardware development for the AXD 301 ATM switch and a purchaser of the new internal consulting services. According to her, cages and cables are not regarded as particularly cool among designers who are more interested in programming.

"It's sometimes difficult to get project members to take an interest in issues relating to building practice, but things have changed over the past year," she notes.

Lab work essential

Gunnel Andersson has commissioned the internal consulting service to obtain a team that will take overall responsibility for building practice and the specifications provided to suppliers and testers.

One of the team's assignments, for example, is a new equipment rack. Gunnel has established a time plan for the group and given them responsibility for writing the specification, obtaining the necessary resources, contacting designers and conducting all purchasing for the design, as well as producing a prototype for testing and booking test times.

"We provide one-stop shopping," explains Yngve Pettersson, who is the team leader for the internal consultants. "This includes everything from keeping track of legal requirements, to producing new designs and verifying the entire system against legal and market requirements."

"It is extremely important to be able to work

in the lab, where we can try things out ourselves," continues Yngve. "This allows us provide support for designers at the circuit-board level where we can help them address such issues as electromagnetic compatibility and heat dispersion. That way we can eliminate many problems in verification of the complete system that might mean having to start over with a new design. The added value that we provide for the customer is getting right from the start. While it's certainly appreciated when we can come in as troubleshooters when serious faults arise, it is always much better if such faults never occur."

Another major project for which the internal consultants were contracted was the industrialization of radio base stations for WCDMA.

The internal consultants, who began their work in May, worked quickly. First, they reduced the large number of tools and methods being used by the different design teams in order to enable more effective collaboration.

"At one point, there were as many as seven consultants, and we held six one-day seminars on topics ranging from systems, software, component and circuit design to mechanical engineering and verification," relates Tom Stadler, who in addition to his role as project manager is responsible for the methods and tools used within Ericsson. "We brought people together, discussed problems and methods, and suggested improvements. We also developed a long-term plan for methods and tools for future projects."

Distinctions fading

There are many tools on the market, making it difficult to choose the right ones and to know which ones will work together. The trend is that tools are becoming more high-level and that designs no longer focus on individual transistors, but rather on larger design elements that can be purchased externally. The distinction between hardware and software is fading.

"I would like to be able to conduct a methods and tools analysis as early as during the pre-study phase, so that we don't have to introduce new tools over the course of the project. Otherwise, there is a great risk that you have to go back and start over," says Tom Stadler.



"Hardware and equipment building practices are not regarded as particularly cool among designers who are more interested in programming," says Gunnel Andersson, project manager for hardware development for the AXD 301 ATM switch and Yngve Pettersson, who works as an internal consultant specializing in building practices and mechanical characteristics.

Photo: Anders Anjou

Why have you created an independent unit? Shouldn't this expertise be available at all design centers and product units?

Björn Andersson, who is the manager of the internal consulting unit, explains that it is a question of specialist knowledge in such areas as cooling and heating, signal integrity, environmental demands and electromagnetic radiation. These skills are required only occasionally over the course of a project.

"There is no reason for every unit to maintain full competence. Besides, the benefits of working in this way are that there are synergies and that we can transfer knowledge from one project to another," says Björn.

"We work with the same kinds of things and with many customers simultaneously. The

most fruitful exchanges occur during coffee breaks," adds Yngve Pettersson.

The internal consulting unit is self-financed. "Profits should not be realized in our unit, but rather in our customers' products. That's why we have to maintain a high level of expertise," says Björn Andersson.

Another challenge is finding the right employees, who should be experts, with extensive experience and social competence. The average age is therefore relatively high, but the new unit is now recruiting personnel directly from universities and encouraging them to do thesis work with Ericsson.

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Look on the Net and you shall Find

Now it's easier to find the right person you're looking for at Ericsson when you search on the intranet. The Find People function on Ericsson's intranet is one of the most used parts of the navigation system located at the top of every intranet page.

The find service, which can be obtained from Ericsson IT Services, is now more secure, more accessible and always contains up-to-date information. Intense work has been conducted during the past year to develop a new structure and transition to the new Find People function.

The service will be introduced at the beginning of April.

Information in Find People comes from the Directory database.

"In the past, all information in Directory came from the e-mail system. We've now decided that only e-mail addresses will be sourced from there. Names, addresses, signatures, company name, and so forth will instead be taken from Signum – the company identity registry."

"And since nobody knows better than our switchboard operators where people sit, the local telephony systems will be responsible for telephone and room numbers," says Lars-Olof Magnusson who is product manager at Ericsson IT Services for Directory and Signum.

Automatic updating

A major difference compared with how the system works today, is that when an Ericsson employee changes position, title or workplace, they will no longer need to do anything at all. All information in Directory will be updated automatically.

"Even information in Exchange, the system for Outlook, will be updated automatically," adds Lars-Olof Magnusson.

"This will replace the current practice of having to go into a webpage and changing certain information. If something is incorrect, it will change in Signum, which will be the primary source."

When Ericsson's new Human Resources Management System (a module in SAP R/3) is put into operation, HRMS will be responsible for some of the information.

Last, but not least, is the issue of security. The new system will ensure that it is top notch.

"Currently, the database only exists in Stockholm," says Lars-Olof Magnusson.

Encryption

The new one will be in three locations – Stockholm, Dalias, and Kuala Lumpur. In addition

to added security, this will also ensure a high degree of accessibility.

A contributing reason for organizing the Directory database is that it is becoming increasingly common to use secure means of transmitting information.

The use of certificates and PKI (Personal Key Infrastructure), with or without encryption, means that the need to actually determine

whether or not it really is the person who is sending and/or receiving information, will increase.

"The old catalog was unable to handle certificates," says Lars-Olof Magnusson. "The new one can handle them, with a high level of information quality."

Christian Wigardt
freelance journalist



With more than 100,000 employees at Ericsson, it is not always so easy to find the right person. Now the find function has been improved.

Photo: Great Shots

The art of setting goals Getting the bonuses right

More and more employees in the Ericsson Group are being offered bonuses which are indirectly linked to economic performance. Ericsson company GSM Systems has been using Short Term Incentives (STI), a wide-ranging bonus program, for some months now.

"Setting goals is a critical element in achieving results," comments Carl-Gustaf Leinar, head of Human Resources at GSM Systems. He continues: "In the autumn, senior management sets the goals for our business unit. These are then reworked into goals for the units. Goals

for the individual are formulated at the first quarter, personal development review each employee has with his or her manager. Clearly enough, employee bonuses can be linked to how well these goals are achieved."



Carl-Gustaf Leinar.

Demands understanding and training

Formulating clear, measurable goals demands understanding and training. To help them with this, GSM Systems selected Ericsson Business Consulting as their partner. Bo Palm Dahl, senior consultant, was put in charge of the project.

"Through seminars and the suchlike, Bo, myself and the senior management team have developed our goal process. Bo is also helping individual managers with the art of setting goals," explains Carl-Gustaf.

For GSM Systems, the work done with Bo has resulted in the company focusing on a fewer number of goals than before. Goals and results are both continuously monitored via balanced scorecards. Carl-Gustaf considers that

the work is already showing results:

"Our regular surveys show that around 65% of all our employees have personal, work-related goals."

No hocus-pocus

"There's no hocus-pocus about the Short Term Incentives program. It's a part of our Business Management process and we've been collecting feedback on and developing that ever since 1995. The process promotes entrepreneurship, leadership and control," states Bo. "The terminology used by the process makes it easy to unite segments, units and every individual around the reality of what the company is and where it's going. The process helps managers and management teams to support the right things at the right time, all year round."

Bo believes that clearly formulated goals simplify delegation. They also make it easier to judge how well goals have been achieved. This, in turn, facili-



Bo Palm Dahl

tates the calculation of bonuses.

A satisfied Carl-Gustaf Leinar concludes: "Our goals can now be easily applied in practice and they are client-focused. They are clear, business-related and relevant throughout the Group. The goal process runs continuously and we will thus be providing constant support for our managers as they engage in the art of setting goals!"

Gunbild Sälvein, freelance writer

Ericsson Business Consulting:

Ericsson Business Consulting's operations focus on mobile communication. The services and solutions we supply are the product of unrivalled expertise and experience in communications technology.

The Business Management process and the Short Term Incentives program are just two examples of the ways in which we help enterprises profit from the new economy, improve customer relations and optimize working methods.

Ericsson Business Consulting has a worldwide staff of 4,000 operating from local companies in 30 countries. From this base, our consultants service a total of 140 countries.

For more information about Business Management:

Bo Palm Dahl Senior Management Consultant
Tfn: +46 8 4042222
E-mail: +bo.palmdahl@edt.ericsson.se

Ericsson Business Consultings arrange a halfday seminar regarding Business Management and Balanced Scorecard the 15 May in Stockholm/Kista.

For more information: bcs.ericsson.se/bm

New guidelines for coordinated sponsorship

New guidelines have been developed to help Ericsson coordinate the company's sponsorship activities. "Our goal is to have uniform and focused sponsorship," says Nicklas Larsson, who was recently put in charge of all sponsorship activities at Ericsson.

Sponsorship as a marketing activity is growing rapidly, tripling in North America during the 1990s, for example.

In order to respond to this development and ensure uniform communication about the brand, new directives have been drawn up to clarify what the policy is for Ericsson as a whole. The goal is to maximize the effect.

These new guidelines are the first step toward a global sponsorship strategy.

"The point of departure for this work is that sponsorship activities should have clear goals that correspond to Ericsson's strategic planning, brand values and other marketing activities," explains Nicklas Larsson.

Alternatives prioritized

Currently, Ericsson is involved in many different sponsorship activities.

The best known of these are the traditional Americas Cup sailing race, the Ericsson Open tennis tournament and the MTV Europe Music Awards.

Part of the work involves mapping out and setting priorities for sponsorship initiatives.

In order to do this, sponsorship has been divided into two categories, depending on how much money is involved.

Smaller activities are registered via the Web (see end of this article),

while bigger activities are evaluated and granted approval centrally.

"While these might be considered stringent rules, it's important that Ericsson's sponsorship activities clearly strengthen the brand. That's why we're in the process of developing global platforms that correspond to our future sponsorship strategy," continues Nicklas Larsson.

Identity

A global platform could be an international sport such as tennis or golf, but also a musical or other cultural event.

"One example is Ericsson's sponsorship of popular music. Numerous marketing activities can be tied into that platform, such as the MTV Europe Music Awards and the Make Yourself Heard Award talent search. By directing activities such as music at young people, Ericsson is strengthening its identity among that target audience."

Measurement tool

In order to measure the return on different sponsorship activities, a Web-based measurement tool will be developed. Nicklas Larsson hopes that such a tool will make it easier for Ericsson to evaluate and compare activities in various parts of the world and benefit from the experiences of others.

"The goals and platforms that are decided upon should both deliver a strong global brand image and form the basis for local activities."



The MTV Europe Music Awards are an example of one of Ericsson's successful sponsorship programs. Lene Marlin won in 1999 in the category "Best Nordic Act."

Photo:Ronnie Norton

Mats Lundström

mats.lundstrom@lme.ericsson.se

inside.ericsson.se/brandexperience

Brand experience management and sponsorship groups should serve as resources for everyone within Ericsson in this regard.

Mobile systems aid flood victims

One and a half million people were affected by recent flooding in Hungary. Ericsson contributed telephones and the GSM Pro mobile phone system in order to facilitate relief work.

No Ericsson employees were injured during the disaster, which was the first to strike since Ericsson unveiled its Ericsson Response support program.

"Ericsson's equipment has been very helpful during the relief work," says Gabriella Liptay, at Ericsson in Hungary. "Today the situation is considerably better and people are starting to return to their everyday lives."

The Ericsson Response initiative is based on the experiences of earlier catastrophes where Ericsson contributed telephones or mobile systems.

"Since we only recently unveiled this campaign, there was an increased level of mental awareness surrounding disaster preparedness, although we hadn't had time to develop established routines yet," says Lars A. Stålberg, who oversees the Public Affairs corporate function.

www.ericssonresponse.com



Flooding of the Tisza River in Hungary was the worst in the nation's history, affecting roughly one and a half million people.

Ericsson wins tech award

In the IT world, change is the only constant. Recently, Ericsson received an award for managing to remain a leader for over 100 years in the continually changing telecommunications industry.

Cahners In-Stat Group, a research company, is the sponsor of the award. This year marks the first time that a telecom company has been awarded the prestigious Kachina Prize. Cahners In-Stat Group, wanted to make a greater effort and investigated which companies are doing well today and have successfully managed to change over the years.

A jury consisting of experts within the electronics industry designated Ericsson this year's winner. In their evaluation, consideration was given to new technical innovations such as WAP and Bluetooth, the company's position in the market and its stability and strategy.

ERIC & SON



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

ERICSSON AUSTRALIA PTY, LTD.

Experienced Engineer – DNIP

● RS/EGS are seeking an Experienced Engineer to work in the DNIP area. Expressions of Interest are therefore being sought from staff who may wish to join EGS/DNIP group in an area of very exciting growth and challenge. The successful applicant will be working with an established group of very dynamic, enthusiastic and highly competent Engineers in the area of Internet and Datacom.

Please contact us if you have knowledge in some or all of the following: Literate in Telecommunications principles and protocols (ISDN/SS7). Literate in PC based technologies. Literate in Internet and Datacom networking. UNIX/NT knowledge. MS SQL, SYBASE, ORACLE experience.

Preferred Personal Qualities: Excellent analytical and problem solving ability. Excellent communication skills. Flexibility with international travel for regular and extended periods. Must be able to work in a team environment. Ability to work independently. Ability to prioritise work load.

Contact: Michael Miltiadou +61 3 9301 1569 or 0416221699 or Chris Irving +61 3 03 9301 2034 or 0416131763. Application latest 000606: Hadjer Kerber.

GUANGDONG ERICSSON TECHNOLOGY LTD. CHINA

TAKE THE CHALLENGES IN CHINA. That is what we can promise you. "We" are Guangdong Ericsson Technology Ltd. (GUC) in China, and we are very busy. We are responsible for Network Support for the southern part of China, such as the tropical island of Hainan, "the Hawaii of China" Guangdong and Guangxi. Not to forget the big province of Sichuan, where you get the most wonderful food you can imagine.

China is for the time being the most expanding market in the world of telecommunication. Right now we are looking for more employees with experience in the following area.

Senior BSC/BTS Support Engineer

● Responsible for customer support in China Southern region within BSC/BTS area. Have minimum of 5 years experience with Ericsson AXE and 3 years with BSC/BTS support. Able to handle CSR/TR handling and on emergency call. Fluent English and good interpersonal skills

Senior GSM System Integration Engineer (6 – 12 Month)

● We are looking for 4 skilled technical person with solid competence in the field of AXE based GSM switching systems, you will work for GD expansion AM6 project which cover 300 switch nodes, and R8 software upgrade and APZ conversion project are turnkey project.

The successful candidates shall be the main technical expert for resolving complex problems, shall be willing to train and transfer knowledge to local engineers. Five years GSM 900 AXE mobile switching testing experience, trouble-shooting experience are highly appreciated. Have excellent software upgrade and APZ conversion experience in live sites. Additional AST experience is an advantage. Experience with OSS applications and remote loading techniques are appreciated. Good communication, planning and team working skill and drive the team to success.

Application: GUC/H Jasmin Xu, jasmin.xu@guc.ericsson.se, +86 20 8557 9796, Fax: +86 20 8553 6193.

ERICSSON ESPAÑA, R & D UNIT

R & D Project Manager

(Ref 005)

● His/her main responsibilities will be to manage the viability studies and assess the most suitable technical options, in permanent contact with the client, as well as the specification of the product until its final achievement. They will assume the coordination of the different development professionals (R & D) involved in the project, managing the completion deadlines.

For the achievement of these functions we are thinking about a specially dynamic professional, who has experience in equipment management and in global management of R & D projects within the Datacom area and GSM Telecommunications.

VERIFICATION AREA

Test Engineer

(Ref 006)

● His/her main functions will be the specification and the implementation of environmental, radio, acoustic, and functional tests in the process of development and maintenance of new products or radio terminals.

For the performance of this function we are thinking of professionals with knowledge in radio systems and instrumentation of the area, as well as knowledge in programming C++ or HPVEE. We think this post requires studies in

Contact No. 9 2000

Updated May 19

ERICSSON AUSTRIA AG, ENTERPRISE SYSTEMS, VIENNA

The Regional Office CEMEA in Vienna will drive the regional indirect sales and marketing activities, as well as introduction of Enterprise Systems' products and services to sales partners in the region Central Europe, Middle East and Africa.

The key activities will be sales, marketing, service, supply and order, product introduction and validation as well as managing of products during the life cycle.

MARKET INTRODUCTION AND VALIDATION. To co-ordinate the activities between the HQ and the different countries for securing that the products will be validated, approved and introduced in each market, we are looking for:

Project Manager-Market Introduction

● Activities: Drive and support the market introduction process. Responsible for TTM (time to market) for the project. Product introduction interface between Regional Office - Market (Partners) and Regional Office - Headquarters. Building up a (communication) network within the region CEMEA for product introduction activities. Planning of product introduction together with Ericsson partners. Co-ordinate product introduction within the markets. Support and help the partners in terms of all introduction activities, localisation and validation. Responsible for Business Approval compliance. Support new partners during the product introduction process. Product presentation towards the partners.

The work will be performed as part of projects with close co-operation with the Validation & Introduction unit at the HQ, the market introduction team, external partners, authorities and distributors.

Appropriate background is: Overall Enterprise product and portfolio knowledge. Experience in project management. Good management, presentation, planning and communication skills. Ericsson knowledge. Readiness to travel and flexibility. Good English skills. Team (global) and customer oriented.

Product Approval Manager

● Activities: Handle and gather all national approval requirements. Co-ordinate, run, plan and follow-up Approval activities within projects for the CEMEA markets. Negotiate and co-ordinate planning/testing with test houses. Drive and co-ordinate the validation of the products in the CEMEA markets in respect of Product Approval requirements. Negotiate with Local approval authorities and apply for approval. Issue product Approval documents towards customers. Feed back product. Approval information to the HQ. Secure access within the National standardization forum. Understand customer needs and their relations to internal processes and procedures.

The work will be performed as part of projects with close co-operation with the Product Approval units at the HQ, the market introduction team, external test laboratories, authorities and distributors.

Appropriate background is: Product Approval knowledge. Knowledge of regulatory requirements. Experience from validation and testing. Enterprise products and portfolio knowledge. Good management and communication/negotiation skills.

Engineer for Introduction and 3rd Level Support

● Activities: Secure the product readiness from a technical prospective per market within the Region. Participate in field-trial projects. Provide 3-rd level support. Develop customer adaptations co-ordinated from EBC. Provide Partners with on-line and on-site support. Support the product approval manager in terms of technical issues.

The work will be performed as part of projects with close co-operation with the PU-s at the HQ, the market introduction team and external partners.

Appropriate background is: Technical background in the PBX (MD110 and Business Phone), SW Application or IT / data. High level trouble shooting. SW corrections. Technical support knowledge and experience. Readiness to travel and flexibility. Good communication skills in English. Project skills. Customer oriented thinking.

It is important that you can work by your own and take initiatives. Knowledge of other CEMEA - languages are preferable.

Contact: RO CEMEA, Product I & V, Silvana Caushi, silvana-caushi@sea.ericsson.se, +43 1 81100 6535, HR, Karin Huber, karin.huber@sea.ericsson.se, +43 1 81100 4318.

PRODUCT MANAGEMENT. To establish a regional portfolio roadmap based on HQ portfolio roadmap and managing all products of Enterprise System during the life cycle that the products will be successfully introduced in the different markets within the region we are looking for:

Product Marketing Managers Enterprise Office

(2 positions)

● Activities: Promote Product Portfolio in regional organisation. Portfolio requirement and market information to Headquarters Portfolio Management. Establish regional portfolio roadmap based on Headquarter portfolio management. Product portfolio localised to suite the regional needs (packaging, non-standard languages, sales tools, ordering info, etc.) Product and solution presentations. Monitor Profit & Loss within region. Interface between Regional Office - Market (Partners) and Headquarters. Handle transfer prices distribution and update. Defining REUP Pricing with Headquarter Portfolio Management. Competitor analysis on a global level.

Appropriate background is: Enterprise product and portfolio knowledge. General knowledge of telecommunication voice/data networking. Experience in small/medium/large PABX System Technology preferred. Good management, presentation and communication skills. Team- and customer oriented. Marketing knowledge. Good English skills. Readiness to work within an international organisation. Readiness to travel.

Product Marketing Managers Call Centre / CTI

(2 positions)

● Activities: Promote Product Portfolio in regional organisation. Portfolio requirement and market information to Headquarters Portfolio Management. Establish regional portfolio roadmap based on Headquarter portfolio management. Product portfolio localised to suite the regional needs (packaging, non-standard languages, sales tools, ordering info, etc.) Product and solution presentations. Monitor Profit & Loss within region. Interface between Regional Office - Market (Partners) and Headquarters. Handle transfer prices distribution and update. Defining REUP Pricing with Headquarter Portfolio Management. Competitor analysis on a global level.

Requirements: Enterprise product and portfolio knowledge. General knowledge of telecommunication voice/data. Experience in Call Centre / CTI Technology preferred. Good management, presentation and communication skills. Team- and customer oriented. Marketing knowledge. Good English skills. Readiness to work within an international organisation. Readiness to travel. Ability to work under pressure.

Product Marketing Manager Mobility

● Activities: Promote Product Portfolio in regional organisation. Portfolio requirement and market information to Headquarters Portfolio Management. Establish regional portfolio roadmap based on Headquarter portfolio management. Product portfolio localised to suite the regional needs (packaging, non-standard languages, sales tools, ordering info, etc.) Product and solution presentations. Monitor Profit & Loss within region. Interface between Regional Office - Market (Partners) and Headquarters. Handle transfer prices distribution and update. Defining REUP Pricing with Headquarter Portfolio Management. Competitor analysis on a global level.

Requirements: Enterprise product and portfolio knowledge. General knowledge of telecommunication voice/data. Experience in Wireless LAN and/or Enterprise Mobility Technology preferred. Good management, presentation and communication skills. Team- and customer oriented. Marketing knowledge. Good English skills. Readiness to work within an international organisation. Readiness to travel. Ability to work under pressure.

Product Marketing Manager Enterprise Applications

● Activities: Promote Product Portfolio in regional organisation. Portfolio requirement and market information to Headquarters Portfolio Management. Establish regional

portfolio roadmap based on Headquarter portfolio management. Product portfolio localised to suite the regional needs (packaging, non-standard languages, sales tools, ordering info, etc.) Product and solution presentations. Monitor Profit & Loss within region. Interface between Regional Office - Market (Partners) and Headquarters. Handle transfer prices distribution and update. Defining REUP Pricing with Headquarter Portfolio Management. Competitor analysis on a global level.

The work will be performed with close co-operation with the Portfolio Management at the HQ, the market introduction team, external partners, authorities and distributors.

Requirements: Enterprise product and portfolio knowledge. General knowledge of telecommunication voice/data. Experience in Unified Messaging and/or Network Management and Call. Accounting technology preferred. Good management, presentation and communication skills. Team- and customer oriented. Marketing knowledge. Good English skills. Readiness to work within an international organisation. Readiness to travel. Ability to work under pressure.

Contact: RO CEMEA, Mgr Product Marketing Management, Hans-Peter Pillwax, hans-peter.pillwax@sea.ericsson.se, +43 1 81100 5455, HR Karin Huber, karin.huber@sea.ericsson.se, +43 1 81100 4318.

ERICSSON SYSTEMS EXPERTISE LTD, IRELAND

The CME 20 department in Dublin's Radio Network Solution Center (EEI/R) have exciting opportunities for engineers who would like to work in leading edge BSC development and who can survive Dublin's active social life.

With our responsibility for GPRS in the BSC, along with our RTS subsystem responsibility, the BSS R9 project is our next big challenge. A major part of our deliverable for R9 is EDGE. Within our transmission test center, we also participate in BSS product FOAs and using Europe's only live test network - Aernet, we perform a range of customer demonstrations. The following positions are currently available:

Project Manager

● As a project manager you will be responsible for R9 development subproject in EEI.

You are familiar with AXE development model and PROPS project methodology, you have managed at least one successful software development project so far and you are firm believer in strong project management as a road to success.

AXE 10 Designers

● As a designer you will work as part of a team that will deliver a feature to the BSC R9 Project.

You have 2-3 years experience in PLEX design and you are familiar with AXE 10 design methodology. Previous experience with mobile systems is an advantage.

AXE Verification Engineers

● As a verification engineer you will be part of a team that will deliver a feature to the BSC R9 Project. Your main responsibility will be test analysis, test documentation and execution in both simulated and target environment.

You have 2-3 years experience in AXE verification activities. Previous experience with protocol simulators is an advantage.

Datacomms/IT Engineer

● As an AerNet datacomms engineer you will be part of the AerNet total solutions team. You will be responsible for bridging the gap between traditional IT and radio networks of the future.

Your responsibilities will include all aspects of ISP network, system and application design/configuration. You'll be responsible for a heterogeneous ISP environment running NT, Unix and the latest ISP applications.

You have 5+ years experience in an IT environment. Previous experience with mobile systems and protocols is an advantage.

Contact: Noeleen Waters, HR Administrator, Noeleen.Waters@eei.ericsson.se or Billy Warrillow, Systems Manager, William.Warrillow@eei.ericsson.se, fax number +353 1 2072887

Technical or Senior Engineering of Telecommunication, or Industrial studies, Physics or any of their equivalents.

SYSTEM AREA

Specification and System Engineer

(Ref 007)

● His/her main functions will be the complete technical specification of the GSM terminals already developed, as well as the definition of the functions and interfaces man-machine. The research of new technologies of applications to Ericsson products will also be part of his/her responsibilities.

For the performing of this function we are thinking about professionals with knowledge of air-interface of cellular radio systems, telephony, communication nets and terminals. We will mainly value knowledge of GPS, GSM, Pro or WAP. Suitable studies for the post are either Senior Engineering of Telecommunication or Electronic Industrial studies or equivalent.

Patent Engineer

(Ref 008)

● His/her functions will be the research of possibilities of generation of new patents in Ericsson, promoting the development culture of new patents, as well as supporting the usual activities of Specifications and Systems Engineering.

For the execution of this function we are thinking about professionals with knowledge of Telecommunications, Electronic and Internet area, as well as a wide experience (2 or 3 years) in processes of patent request.

We consider as proper studies for this post either Senior Engineering of Telecommunication or Electronic Industrial, or equivalent.

MECHANIC AREA

Senior Mechanic Engineer, Expert in Injection Moulds

(Ref 009)

● His/her functions will be the design of pieces of plastic, metal and assemblies for GSM terminals, as well as the approval and supervision of the manufacturing process of their moulds with the Ericsson co-worker suppliers.

Junior Mechanic Engineer

(Ref 010)

● His/her functions will be the participation in the design of plastic and metal pieces for GSM terminals. We are thinking about professionals with minimum experience (1 or 2 years) in the designing of plastic and metal pieces. They will run the UG program for CAD 3D.

In order to meet our needs, a proper degree for this post is Mechanical Technical Education II (FP II) or Technical / Mechanical Senior Engineering.

SOFTWARE AREA

Software Engineer

(Ref 011)

● His/her functions will be the design and approval of the software developed for GSM terminals.

For the fulfilment of these functions we are thinking about a professional with a wide experience (4 or 5 years) in programming at low-level, C++, CM tools, and Microsoft Developer Studio. Programming oriented towards objects and Windows design will be an advantage.

We require a person with a degree in Telecommunications, Computer Studies, Physics, or any of their equivalents.

HARDWARE AREA

Hardware Designing Engineer, Printed Circuit Backplane (PCB)

(Ref 012)

● His/her functions will be the design of new PCBs and their ulterior documentation safeguarding the quality process of the development project of GSM terminals.

For the implementation of these functions we are thinking about a professional with wide experience (3 or 4 years) in the designing of Printed Circuit Backplanes (PCB) as well as in the design of charts, and cellular systems and electronic components. Knowledge of Mentor Graphics tools CAD and IPL CAD will be an advantage.

Suitable studies for the post are Electronic Technical Education II (FP II) or Technical Electronic Engineering.

Component Development Engineer

(Ref 013)

● His/her functions will focus on the specification of new components, and will be working as the contact person for the components' suppliers regarding technical subjects related to them.

For the fulfilment of these functions we are thinking about a professional with wide knowledge and experience in electronic components and documentation systems. Suitable studies for this post are Electronic or Telecommunications Engineering.

Hardware Accessories Engineer

(Ref 014)

● His/her functions are directed to the coordination of those aspects related to the accessories of Ericsson products (aerials, batteries, AC/DC and DC/DC) during their development projects.

For the implementation of these tasks we are thinking about a professional with knowledge of technical regulations, electronic components and own instrumentation of the area, as well as a minimum experience of about two years in AC/DC and DC/DC, batteries and chargers. Suitable studies for this post are Electronic or Telecommunications Engineering.

Radio Frequency Designing Engineer

(Ref 015)

● His/her functions will be the hardware design of Radio frequency and its later documentation safeguarding the quality process of the development project of GSM terminals.

For the execution of these functions we are thinking about a professional with knowledge of cellular systems, area instrumentation, electronic components and documentation systems, as well as a minimum experience of 4 years in Radio frequency. Suitable studies for this post are Electronic or Telecommunications Engineering.

PRODUCTION UNIT, QUALITY AREA

Quality Engineer of Industrialization

(Ref 016)

● His/Her main responsibilities will focus on the assuring of the quality in the process of pre-series launching and mass manufacturing of new products.

For the implementation of these functions we are thinking about a professional with at least 1 or 2 years of experience in the assuring of quality, audits, and improvement tools in enterprises regarding environments of mass manufacturing or mass production. Suitable studies for this post are a Senior Engineering Degree in Industry or in Telecommunications.

MANUFACTURING AREA

Maintenance and Carrier Engineer

(Ref 017)

● His/her main activity areas will be related to the maintenance and improvement of the manufacturing process of the terminals.

For the fulfilment of these functions we are thinking about a professional with knowledge or experience in robotics, automation and all those activities related to the improvement of processes and productivity. Knowledge of area instrumentation, GPIB and C++ language will be highly valued. Suitable studies for the post are Industrial Technical Engineering, either Electronic or Telecommunications.

ENGINEERING AREA

Technician of Artificial Vision Test

(Ref 018)

● His/her main functions will be to collaborate in the development of test stations of GSM equipment, and develop applications of automatic test by using Artificial Vision tools.

For the realization of these functions we are thinking about a professional with 2-4 years of experience in the development of applications of Automatic Inspection, used to the usage of Artificial Vision tools. Knowledge of COGNEX system, radio, hardware, C++ programming for Windows will be an advantage. Suitable studies for the post are Industrial Senior Engineering, either Electronic or Telecommunications.

Carrier Engineer to the Test Area

(Ref 019)

● His/her main activity area will focus on the verification, maintenance and improvement of the test systems during the productive process.

For the fulfilment of these functions we are thinking about a professional with knowledge of GPIB, area instrumentation, Visual C++, Pascal, GSM system, and IDEAFIX or CATS test environments. Suitable studies for the post are Electronic or Telecommunications Engineering.

Carrier Engineer of Processes

(Ref 020)

● His/her main functions will be the verification, maintenance and improvement of the productive processes, as well as the support and supervision of the transfer in the manufacturing process of terminals to other centres if this transfer occurs. For the fulfilment of these functions we are thinking about a professional with knowledge of produc-

tive means, machinery assembly, and knowledge of capacity studies. For this post we require a person with degree in Industrial Engineering, with an specialisation in either Electrical or Organisational Engineering.

Mechanic Carrier Engineer

(Ref 021)

● His/her main functions will be the verification of the product during the industrialization stage, as well as the maintenance, machinery improvement and mechanical devices during the productive process.

For the implementation of these functions we are thinking about a professional with knowledge of the different materials used, as well as knowledge of CAD and mould designing. For this post we require a person with a degree in Technical Mechanic Engineering.

Hardware Designer

(Ref 022)

● His/her main responsibilities will focus on the hardware design of the test stations used in the process of production and on the equipments of cellular telephony.

For the implementation of these functions we are thinking about a professional with good knowledge of low-frequency hardware design. Would be suitable for people with Technical Engineering qualification or Industrial Electronic Engineering degree, with a specialisation in either Telecommunications or in Physics.

WIRELESS COMMUNICATION MODULES UNIT, PRODUCT MANAGEMENT AREA

Technical Product Manager Telemetry

(Ref 023)

● His/her main functions will be to represent Product Management actively within the development projects of the product related to the activity of Telemetry. His/her main responsibilities will be to develop and define the technical specifications of the Telemetry product from a technical point of view. Thus, s/he will act as an interface between the area of development of the product and the client while the product development project lasts.

For the implementation of these functions we are thinking about a professional with experience in Product Management within the Telecommunications or Datacom Technology, with good technical knowledge within these areas (3 or 4 years of experience). We have in mind a person with an Engineering Degree in Telecommunications.

Automotion Technical Product Manager

(Ref 024)

● His/her functions will be to represent to Product Management actively within the projects of product development related to the Automotive industry. His/her main responsibilities will be to develop and define the technical specifications of this product from a technical point of view. Thus, he/she will act as an interface between the area of product development and the client while the project of product development lasts.

Global Product Manager GSM

(Ref 025)

● His/her main responsibilities will be the efficient management of the product portfolio "Wireless Communication Modules GSM", analysing the behaviour of the competitors, and the market and modules' business tendencies. Moreover, s/he will be responsible for the definition of a strategic a positioning of the GSM modules, as well as his/her direct involvement in the process of technical specification, development, launching and monitoring of new products in the market.

For the implementation of these functions we are thinking of a professional with wide experience in Product Management in the area of Telecommunications or Datacom Technology, with good GSM technical knowledge. Would be suitable for a person with Engineering degree in Telecommunications.

DIRECT SALES AREA

International Key Account Manager, Telemetry

(Ref 026)

● The sales activity is vital to contribute to a leading position in the market of "wireless communication modules" for Telemetry.

His/her functions will be to collaborate in the identification, development and execution of new opportunities of sales, being responsible for the direct selling of one or more objective segments (alarms, counters, vending machines, lifts...) S/he will coordinate the clients' accounts, their position and evolution in the market, adapting Ericsson's offers and performance strategy to each of them. S/he will also participate in the provision, planning and preparation of sales budgets.

The current post requires outstanding communication skills, a dynamic professional and highly trained towards the opening and development of new accounts and markets. We require a wide experience in sales within the objective segments pointed out previously. Knowledge of cellular systems will be an advantage.

AREA AUTOMOTIVE SALES

International Key Account Manager, Automotive

(Ref 027)

● S/he will work on the identification, development and execution of the new sales opportunities of the product in the Automotive sector. S/he will coordinate the accounts of the different clients, their position and development in the market, adapting Ericsson's offers and performance strategy to each of them. S/he will also take part in the provision, planning and preparation of sales budgets within this area of Automotion.

In order to carry out these functions we are thinking about a professional from the Industry in the Automotive area with a wide experience in Sales, as well as technical knowledge in the area. We will highly value a wide view and analysis capacity over the tendencies or the industry development.

AREA MARKETING & SUPPORT

Technical Writer

(Ref 028)

● S/he will work as Product Management And Marketing Support in internal and external Communication and Publicity strategies and campaigns.

S/he will be responsible for preparing and ensuring technical product information: user manuals, training material, product leaflets, etc. in internal and external media, giving Web support and maintaining standards in order to carry out these functions we are thinking about a journalist, 2-3 years experience in this or similar area fond of Telecom.

Application: ERICSSON ESPAÑA, Bilbao Technology Centre, Parque Tecnológico de Zamudio Edif. 108, 48170 Zamudio (Vizcaya), Ainhoa Ros, Human.Resources@ine.ericsson.se.

ERICSSON DIAx, DENMARK

Sales- and Marketing Managers

In Ericsson Diax 250 employees are working with the development, marketing and supporting of advanced communications systems within the field of tele and data networks. We have an advantageous position due to our unique products and highly qualified employees who are working in a creative environment where the key words are co-operation and flexibility. We are currently experiencing rapid growth with an increase in the demand for our products. To handle this development we are looking for sales employees for Product Marketing.

● If you join our team, you will be working with dedicated colleagues all eager to work with the communication solutions of tomorrow. We believe that the individual person's opportunities to develop form the basis of success. We value initiative and results highly and we expect a very professional attitude towards all projects. In return, you'll have lots of challenges and opportunities to develop both professionally and personally.

We expect that you have a degree in engineering or a similar educational background, and that you are able to communicate effectively in English. The successful applicant is a dynamic initiator with a determined and self-motivating approach who is able to concentrate on the essential points and who is able to see things in the broader perspective.

Moreover, we expect that you have sales experience from a similar job or from a technical job of a comparable nature, have technical knowledge and that you are good at finding solutions, like to work as a sparring partner for clients and colleagues alike, are familiar with and understand other cultures and environments, understand the importance of long-term customer relations, are of the opinion that business trips are essential to have an international sales job.

Generally speaking, you will be responsible for a geographical area or work with ad hoc projects for specific tenders. The work is characterised by much contact to Ericsson colleagues abroad, and there are quite a lot of business trips.

You will be working with: technical and commercial replies to international tenders, preparation of sales material in general and project proposals to clients, planning, preparation and completion of presentations and seminars for clients, the follow-up of sales and marketing activities-planning and project management in connection with turn-key sales.

Contact: General Manager Peter Nartoft, +45 9786 9179, peter.nartoft@dxd.ericsson.se.

ERICSSON RESEARCH CANADA, MONTREAL

Service Development Engineers

The Service Development Center at LMC is responsible for service development, service delivery training, and service delivery on assignments from BU Ericsson Services in the following areas: Network Performance Improvements, Network Rollout & Network Integration, Competence Development, Network Support.

● We are now looking for service development engineers in the Network Performance Improvement and Network Rollout & Network Integration areas.

Your tasks will be: Develop and maintain services (methodology and guidelines) and tools on assignments from Strategic Product Management. Service delivery at customer site. Develop Sales Object Descriptions, Service Supply Instructions, and Competence Profiles for service delivery personnel. Develop and deliver service delivery training. Perform service impact studies on new products. Review Requirement Descriptions for product management. Provide technical support of services and tools. You will interact with various Ericsson units around the world and with network operators.

You have a university degree in Electrical Engineering, Computer Engineering, Computer Science or equivalent. You are a driver, with good interpersonal skills, knowledge of Ericsson products and services. You are fluent in English, both spoken and written. Experience in software development is an asset.

If you are applying for a position in Network Performance Improvements you have knowledge of dimensioning, planning, and optimization of transmission networks. In the Network Rollout & Network Integration area you need knowledge in one of the following product areas: OSS, Jambala, CDDP, or RNM.

Contact: Stefan Hasselgren, +1 514 345 2719, stefan.hasselgren@lmc.ericsson.se, Liane Corless (HR), +1 514 345 7900 ext. 2975, liane.coreles@lmc.ericsson.se.

FOA Team Members and Troubleshooters for CMS8800 Radio Network Products

● Looking for the challenge to meet the customer and deliver the latest Mobile Radio software to the field? Are you an experienced tester or troubleshooter and hold a background in mobile radio network products?

Then come join the front line of individuals who deliver and support the CMS8800 Radio Network Products in First Office Applications (FOA) to both the North and South American customers.

Essential skills that makes you a suitable candidate for the general support team include: technical knowledge of the various elements and equipment of Radio Basestation configurations. Capacity to troubleshoot with strength in radio functions, spanning both the switch and basestation sides.

As a valuable contributor that delivers RBS software you must have skilled knowledge of RCSU and EMRP software. All candidates need to be adaptable to change, self motivated, customer oriented and a team player. In this position you will increase your field experience and gain the base knowledge necessary to support third generation products in the future.

Contact: HR, Liane Corless, +1 514 345 7900 # 2975, liane.corless@lmc.ericsson.se, FOA Management & Support Manager - Audrey Simpson, +1 514 345 7900 # 2186 audrey.simpson@lmc.ericsson.se.

ERICSSON SERVICES REGIONAL OFFICE, KUALA LUMPUR, MALAYSIA

Within ESRO-KL, we have a vacancy for the following functions:

Business Manager

● The Business Manager (BM) has the overall responsibility for all, combined Service business in respective Market Units (Region). The BM will together with the Market Units set strategies, objectives, tactical plans and Order/ Sales/ Margin budgets for the Service business and is responsible for implementing the Strategic Plans from a commercial standpoint in the Market Units.

The BM will also follow up progress towards plans in the Market Unit through monthly and quarterly Business Reviews.

The BM is responsible for defining, growing and maintaining a best in class Sales & Marketing organisation throughout his/her geographical area(s) of responsibility. The function works together with Shared Service Product Unit's (SPU) in the ESRO to ensure that the SPU's directives regarding product profitability are carried out.

The BM works closely with Market Unit Heads, Customer Service Heads Global Account Managers, Key Account Managers and New Account Managers in the Market Units as well as SPU Heads in the ESRO.

The position has a high degree of initiative and decision making ability with regard to establishing and implementing strategy and tactics for the development and evolution of the Service Sales organisation within the assigned Market Units.

It also has authority to decide and communicate commercial decisions regarding pricing and other commercial policy.

KEY TASKS: The Business Manager has the overall, consolidated profit/loss responsibility for Services Sales in the assigned Market Units for the complete Services portfolio. The function works in strategy setting, supporting and following up/controlling capacities towards the Market Units.

Specific job functions of this position include, but are not limited to, the following:

Grow the Services business in the assigned Market Units significantly and profitably in agreement with SPU strategies. Develop Business Plans, Account Plans and Forecasts.

Analyse, follow-up and take corrective actions on the MU service Forecasts, Actuals and Unadjusted Margins. Implement the long range Services Strategic Plan in assigned Market Units. Ensure that there is a unified service portfolio and pricing architecture in the assigned Market Units and that it is consistent with the global SPU strategies. Balance direct customer involvement, as required by Market Units, with empowering local teams to do their jobs. Ensure that each customer's and Market Unit's expectations are met and ideally anticipated.

Build a best in class Services Sales team throughout the assigned Market Units with focus on co-operation and coordination throughout the Regions. Work with an appropriate amount of push/pull towards the Market Units to set expectations on a challenging but suitable level while supporting the regional Market Units to achieve desired results.

Provide leadership and management to ensure a positive contribution to Customer Satisfaction, Shareholder Satisfaction and Employee Satisfaction. Follow-up on customer satisfaction measurements and initiate corrective actions when needed. Determine and measure Business Performance Indicators analysing the Market Units' Services performance across the Region to facilitate best in class comparisons.

Ensure that these Business Performance Indicators are consistent with the other Regions. For new markets/customers, be the link to the New Account Managers (NAM) account team. For markets with no Service Account Manager (SAM), drive sales of Services from offer to order.

JOB REQUIREMENT/SKILL SETS: B. Sc. in Business, Engineering or equivalent with concrete work experience.

BUSINESS SKILLS: Good Business Knowledge in Operators' business situation. Overall good knowledge and understanding of Business, Financing, Accounting and -Marketing and Sales. Understand Business management. Strong ability to analyse and reflect. Strong planning and organisational skills. Account Planning, experience and skills. Ability to identify business opportunities on new Services.

HUMAN SKILLS: Able to influence and to build trust and confidence. Strong and effective leadership skills. Be able to work in a team and lead a team towards the set goals. Effective interpersonal, presentation and communication skills. Strong ability to build relationship on senior executive level with customers and within. Ability to work in a cross-cultural environment. Negotiation skills. Establish and maintain close working relationship with KAM/NAM/GAM, Customer Service Heads and MU Heads.

PROFESSIONAL/TECHNICAL SKILLS: Extensive Services business understanding. Good understanding of technology (telecom/data/IP).

Contact: Jan Hagne, General Manager ESRO-KL +603 708 7350, jan.hagne@esm.ericsson.se.

Regional Manager - Network Integration Services

● Responsible for: Ericsson Services Integration services and strategy in Asia Pacific.

Products: Networks, Nodes, all products lines incl other vendors (TMS excluded). Integration Competence Centres (hosted by MU) - establish and "manage". Support ESRO business managers and MUs (SAMs) to develop Integration service business opportunities. Resource Management, Planning and Competence development. Performance management, quality and cost. Processes and tools. Reporting.

You are required to have: Degree in Telecommunications, IT or similar. Business qualifications (post graduate) preferred. 10 years experience in Telco or IT industry covering technical, business and management. Strong technical product background and interest in new technologies (IP, WAP, GPRS, 3G). Network of regional contacts in AP preferred. excellent interpersonal and communication skills.

Manager - Network Solutions and MU Support (NR&NI)

● Responsible for: Interface from SPU to Service Account managers -SAMs(in MU). Interface with ESRO Business managers. Network Solutions (services) for NR&NI. MU support in preparing and packaging service solutions for Rollout and Integration services. (service solution covers design, engineering, implementation, integration, costing.)

Products: Networks, Nodes, all product lines including other vendors (TMS excluded). Regional network of specialist NR&NI tender support competence including hosted units. Performance management, quality and cost for respective functions. Customer satisfaction. Processes and tools. Reporting.

You are required to have: Degree in Telecommunications, IT or similar. Business qualifications (post graduate) preferred. 7 to 10 years experience in Telco or IT industry covering technical, business and tender/bid management. Strong technical and business background and interest in new technologies (IP,WAP,GPRS,3G). Ability to conceptualize new NR&NI service strategies and translate into opportunities. Network of regional contacts in AP preferred.

Team leader, driver, administrator. Excellent interpersonal and communication skills. Positions to be filled immediately.

Contact: Ron Brymer, General Manager, SPU Network Rollout & Network Integration +603 708 7459, ron.brymer@esm.ericsson.se.

CUSTOMER SUPPORT SERVICES, ES-RO ASIA PACIFIC, KUALA LUMPUR

Marketing and Sales Support Manager

● Marketing and Sales Support is a group within the Customer Support Services (CSS) Business Unit at Ericsson Services Regional Office based in Kuala Lumpur. The group is responsible for providing marketing and sales support to the MU's within the Asia Pacific region.

Preparing tender documentation, pricing and developing liaisons with our counter parts in the Market Units are some of the tasks. Our aim is to increase the sales of Ericsson Services within the region.

We are now looking for Marketing and Sales Support Managers to join the group.

As a Marketing and Sales Support Manager you will be expected to travel within the Asia Pacific region to support the MU's. You will be required to assist MU's with tender and pricing issues.

A proactive approach is needed to ensure that the CSS and Ericsson Services product portfolios are known in the MU's. You will be responsible for a number of MU's in the region, however you must be flexible enough to change when the workload requires.

We are looking for people with a degree in marketing or business. You should have a minimum of five years international marketing/sales or marketing/sales support experience. A Customer Services or Services related background would be a great advantage in this position.

You must be flexible in attitude and comfortable in dealing with different nationalities. It is expected that you can handle negotiations with customers. You will be expected to travel within the region.

Contact: Gary Puryer +603 708 7282 gary.puryer@esm.ericsson.se.

Application: Charles Retnam +603 708 7115, charles.retnam@esm.ericsson.se.

WISMA ERICSSON, MALAYSIA

Senior Project Manager

● We are looking for an experienced GSM Project Manager to manage the total implementation of a GSM and GPRS network in Sri Lanka. The successful candidate will be responsible for the project achievements and customer satisfaction for all aspects including implementation of RBS, BSC, MSC, IN (Prepaid Lite), WAP, GPRS. As the project is an Ericsson break-in to an Alcatel network, full control and management of the network integration is crucial.

We expect that you have minimum 5 years relevant experience, and a good knowledge of GSM and Ericsson products in general. Experience with Prepaid and multi-vendor integration would be an advantage. Important personal skills are to have open-minded, good communication skills and ability and interest to transfer knowledge.

Application: Johan Adler, johan.adler@esl.ericsson.se, +94 1 828 431

ERICSSON AUSTRALIA PTY. LTD

GSM Senior Support Engineers/Trouble Shooters

The business towards Telstra in Australian Services/Local Support (EPA/AS/LS) is growing and new service opportunities are emerging. This is providing new exciting openings for support engineers in Mobile network support and associated specialisations such as GPRS, based at Broadmeadows.

● Key roles are: Technical support on Mobile network elements/ MSC, BSC, BTS and GPRS. First Software and Application installation into Telstra model and Network. Trouble report investigation. Software fault finding. Help desk support. Assistance with the preparation of patches and software packages for delivery. Package testing. Preparation of technical reports to a high standard. Analysing fault trends and recommending improvements. 24hr Support.

Desired Attributes: GSM Support engineer experience of at least 3 years in required disciplines for e. g. CSS or BSS. Overall understanding of technology issues and trends. Excellent written and verbal communication skills. Flexibility and ability to work in a team. Service culture. Customer Focus. Excellent interpersonal skill. PC Literacy. AXE software skills eg. Plex and ASA.

The successful applicants can expect a challenging position working as part of a team towards a demanding and growing customer.

Contact: Domenic Di Grande, +61 3 9301 1617.

Application: P/ES Hadjer Kerber latest 000531.

ERICSSON RADIO SYSTEMS AB, KISTA, SWEDEN

CAN YOU MEET THE CONFIGURATION MANAGEMENT AND PRODUCT HANDLING CHALLENGES FOR THE NEXT GENERATION OF MOBILE SYSTEMS (3G)?

Product Unit Wideband Radio Networks (PU-WRN) is the Product Unit that is responsible for the Radio Access Network (RAN) in Wideband Code Division Multiple Access (WCDMA) Systems. WCDMA is foreseen as the next lead-

ing standard for mobile communications.

PU-WRN has developed a much-acclaimed Experimental System to evaluate the WCDMA technology. We are currently developing the commercial system. Our goal is to be the first to deploy a commercial WCDMA system.

We are looking for a few good people in Configuration Management and Product Handling. The work environment is challenging and the opportunities are great.

Senior Configuration Managers

Ref no: R/H1496

● A Senior Configuration Manager will develop and implement Configuration Management policies, processes and Directives for the PU. A senior configuration manager should possess good knowledge of the many phases of Ericsson Development - Development, Industrialization and Maintenance.

He/she should be flexible enough to apply previous experiences to a new technology and new working environment. Good interpersonal, communication, influence and leadership skills are important. It is foreseen that many activities will involve coordination and leadership of multidisciplinary or cross-sector teams.

Key competence areas or skill sets that we are looking for in order to complement our staff are :CM.Use of ClearCase for CM. Knowledge of Object Oriented Design Models.

Industrialization; Consolidation; or Application Line or System. Handling. Release Planning (within Development and to customers).

Product Handling Specialists

Ref no: R/H1497

● A product handling specialist investigates, analyzes and recommends system requirements and principles in terms of specification and handling of product structures; product packages; application products (AS or AL or PL); Customer Product Information and data. Good analytical, communication and influence skills are required.

Key competence areas or skill sets that we are looking for in order to complement our staff are :

Product Packaging. Knowledge of Object Oriented Design Models and methods.

Industrialization; Consolidation or Application Line or System Handling Maintenance. Parameter Handling. Ericsson tools and systems such as PRIM, GASK, PCAT, Ordering Systems, ClearCase, etc.

Trouble Report (TR) Handler/Administrator

Ref no: R/H1498

● The TR Handler/Administrator will administer and act as Secretary to a Decision Making Board which prioritizes Trouble Reports; manage and administer the System Design Trouble Report Office (including monthly reporting); and, distribute TRs for analysis.

Tasks can vary with the experience level of the candidate. There are and will be opportunities to work on Process Development and Improvement.

Key competence areas and skill sets are: General Ericsson knowledge. Modification Handling System (MHS) and Modification Handling Office (MHO) administration. Clear DDTs. Process development.

Energy, dynamism, cooperation skills and organizational skills are important. If you want to help bridge the traditional gaps between development and industrialization, call or write to us now.

Contact: Cindy Mac Donald, +46 8 757 16 89, +46 70 267 0075, cindy.macdonald@era.ericsson.se.

Application: Ericsson Radio Systems AB, KI/ERA/R/HS, Inger Holmgren, 164 80 STOCKHOLM, ansokan.PU-WRN@era.ericsson.se.

ERICSSON (CHINA) COMPANY LTD, BEIJING, CHINA

Ericsson has together with China Academy of Telecommunications Technology started a joint Research and Development Center in Beijing. With this we've established local R&D in China within the 3G standard of wireless communication.

R&D Project Manager

● We look for an experience project manager that combines high technical skills with excellent leadership. You will lead research and development projects within a brand new organization.

The job will also require a lot of coordination with other Ericsson R&D Centers around the globe. A higher degree of technical work compared with the average project management position is a necessary part of the job.

You probably have a master degree in engineering and you have to be fluent in spoken and written English. Earlier experience in work with WCDMA radio development is a plus and earlier experience within the Ericsson organization is a requirement.

Contact: Hans Mahler +86 10 6561 5566 or +86 137 0121 6982, hans.mahler@etc.ericsson.se or Sunny Li Xiaolei +86 10 6561 5566, xiaolei.li@etc.ericsson.se.

Application: HR, Sunny Li Xiaolei, Ericsson (China) Ltd, 9/F, Hanwei Plaza, No. 7 Guanghua Lu, Beijing, China.

Ericsson Communications Limited, Software R&D Centre in Bangalore, INDIA

Open Positions at Ericsson Software R&D Center in Bangalore:

Senior Designers and Senior Testers for OSS

Bangalore is one of the most IT developed cities in the world and also referred to as the Silicon Wally of India. The main reason for this development is the cosmopolitan culture and excellent universities in and around this city.

One of the premier academic and research centre in the world Indian Institute of Science is located in Bangalore. The Software industry in Bangalore has also gained very high degree of maturity and more than half of the SEI CMM level 5 companies in the world are in Bangalore. Obviously this city has been the best choice to house several multinational IT and telecom software development companies.

Today more than 160 fortune four hundred companies have their presence in Bangalore. English is one of the most common languages spoken in Bangalore and this has also attracted people from various parts of the world to take up assignments in Bangalore.

Also the pleasant weather in Bangalore through out the year is a boon to this city.

We are working with applications for planning, forecasting, tuning and trouble shooting mobile networks across various technologies like GSM, PDC, TDMA, Wideband Radio Networks, Datacom, Packet Switch, Circuit Switch networks and also the interoperability.

With the significant experience gained from the above areas, we have already started to work with the 3G systems.

This R&D Centre has the responsibility in defining Open standards, interfaces towards multi-vendor NMS. This R&D Centre is part of Ericsson's Worldwide R&D Group.

Ericsson is right positioned in India to handle the Convergence Challenge emerging out of the 3G systems with the establishment of the telecom R&D in Bangalore and the Datacom R&D Centre in Hyderabad. We have the following groups at the R&D Centre in Bangalore:

Network Management. Working with defining and implementing standards towards multi-vendor O&M applications and national level NMS. We are working with management applications that help the mobile operators to make intelligent decisions.

Network Statistics. Working with the development of end-to-end solutions for mobile network performance management. These applications are generic and hence it is used across various technologies. This is used by mobile network operators for planning, tuning, forecasting and trouble shooting their networks based on the various intelligent reports generated from these applications.

Element Management. Working with the development of generic tools for network operators and field engineers to perform traffic recordings, load measurements, and alarm handling for several types of network elements in a uniform way.

Open Positions at Ericsson Software R&D Center in Bangalore: Senior Designers and Senior Testers for OSS

Application's both long term contracts or local employment.

General Experience: A total of 5+ years of Ericsson experience, out of which at least 3 years in OSS Software development or testing. **Skill sets:**

Senior Designer

The successful candidate should have at least 3 years experience in telecom network management application development and performance management domain for Mobile networks, packet switch data systems and an understanding of 3G systems. Should have good experience in 3-tier application development using OOAD, C++, Java thin clients and middle ware technologies. Good knowledge of development tools. Good PM domain knowledge is a must.

Shall act as a technical leads across several projects to perform feasibility studies, proof of concept prototyping, defining development process using efficient tools and evaluate the best of breed off-the-shelf products in addition to their design/test activity. Will also act as a mentor within the technology focus teams.

Senior Tester

The successful candidate should have at least 3 years Test experience for OSS or NMS applications. Should be willing to take lead positions in building strong test teams. Experience with automated test and daily build is desirable.

Contact:

Hans Bromander, Senior Project Manager, hans.bromander@eci.ericsson.se, +91 80 5595 707, Mobile: +91 98450 81124, Fax: +91 80 5095 193.

Application:

Devi Rajamani, Officer - HR, devi.rajamani@eci.ericsson.se, +91 80 5595 707, Fax: +91 80 5095 193.

Take advantage of our challenge and don't miss this opportunity!



Ericsson Modules, based in Bilbao (Spain), is currently involved in international growth and strong new challenges in Telemetry and Automotive-Telematics environments, along with machine-to-machine communications. We will market more than 10 million units within the next couple of years. This is a real challenge for our organization, where technology, products/solutions and people are leading-edge. For this reason, we are looking for:

R&D MANAGER - EUROPEAN STANDARDS

Mission: Develop products in accordance to ESP plans and roadmaps, meeting TK-targets and quality, for the European market based on GSM, EDGE and UMTS.

As R&D Manager, reporting directly to the Ericsson Modules Manager, you will be leading a group of 60-70 people involved in a global product development process: Hardware, Software, Mechanics, Verification and Test, Design Support and Maintenance. Your main responsibilities will consist on project and resource planning, defining specifications and technology roadmaps for GSM products, as well as securing the

technical competence development required to support the TTM process. Among other activities, you will also have to participate in the industrialization process of modules securing produceability

For this position you must have a proven leadership track record in a multifunctional development team as defined above, with strong knowledge in hardware matters and technology standards applicable to GSM terminals. You must be highly motivated, entrepreneurial, dynamic and with a strong drive on results. A very good network in the Ericsson development environments will be a plus. Excellent command of English, Spanish is not a must. The position is located in the Ericsson Modules headquarters in Bilbao, Spain and requires frequent travelling.

Candidates interested in this position should contact by e-mail to Daniel Micolta, HR Manager, as soon as possible, sending their CV to daniel.micolta@ine.ericsson.se

Make yourself heard

ERICSSON 

ERICSSON INC, U. S. A

Fourth quadrant in the USA! Our group is located in Richardson, Texas and we are responsible for providing products to the customers in the Americas in the areas of Prepaid and SCSA.

We are today working with customization, verification, supply and support of the GSM PPS system but are preparing to move in to the area of 3G open application platforms, where we will have responsibility for integrating the applications with the access types that dominate the US marketplace.

● Seeking engineers with expertise in PPS, Intelligent Networks and IP applications. Tasks include customization, integration, supply and support. Strong competence in Unix and IP is required. Experience with Jambala platform or PPS-SDP is a plus.

Contact: Thomas J Nilsson, +1 972 583 3069, j.thomas.nilsson@ericsson.com, Peter Hjelm +1 972 583 2977, peter.hjelm@ericsson.com, Inger Karker +1 972 583 2721 inger.karker@ericsson.com.

ERICSSON INC, USA

San Diego Cello development. The Ericsson office in San Diego, California is responsible for the development of the radio access network for cdma2000, which is the evolution into 3G from IS-95. The Cello development group is responsible for coordinating, modifying, and delivering a CDMA2000 ready platform. We have vacancies for the following positions:

Software Driver Developers and Integrators

● We are looking for engineers familiar with OSE. Experience with Cello software development, integration, methods, and tools is preferred. We will be modifying, integrating, and verifying existing Cello designs to support North American CDMA standards (CDG IOS).

Cello Product Manager

● Background in UTRAN/Cello product management and/or development. Our CDMA 2000 development will need close coordination with the Cello roadmap and main requirements to leverage synergy and cooperation between San Diego, Boulder, and Stockholm.

Hardware Developer and Integrator

● We are looking for electrical engineers familiar with hardware development, methods, and tools. Experience with Cellosubrack and boards is preferred.

But there is also a need for people with a solid documented Ericsson background within other design organisations in both San Diego and Boulder.

Contact: EWUKAGR@am1.ericsson.se.
Application: d.chun@ericsson.com.

ERICSSON LTD, UK**Section Manager x 3**

● Business 43 Dept (NDO). Location: TC Burgess Hill. Key responsibilities: The software solutions sector is transferring away from the traditional wireline software (17-line TSS-IUP) towards wireless software and beyond.

With this in mind the section managers will need to; ensure that current commitments are met, whilst leading the section into the new areas of work, be responsible for the day to day running of the section, oversee and communicate project progress against targets, take an active role in the competence development of the section, be able to identify and implement solutions to issues that arise in order to meet the targets and objectives of the sector, be a member of sector management team, contributing to the future direction of the sector.

As the move into the CMS30 mobile work for the Japanese market approaches, the section managers will need to ensure that the transfer is as smooth as possible, and that any risks are identified as early as possible.

Competencies, qualifications and experience: Good knowledge and understanding of Ericsson ways of working. Previous experience of management, (e.g. project management, technical leadership etc). Proven ability to accurately plan work to time, cost and quality. Able to lead and motivate the team to achieve results; proactive in finding solutions to ensure success. Committed to own personal development and that of others. Strong interpersonal and communication skills. Flexible and positive approach to work, backed by self-motivation and an ability to multi-task. Knowledge of new technologies would be an advantage; interest in new technologies is a must.

Contact: Recruiting Manager Anna Tester, anna.teste@et.ericsson.se or HR, Jane Lawes, jane.lawes@et.ericsson.se.

ERICSSON JORDAN

Ericsson Jordan is looking for engineers with experience in the mobile GSM Support.

Mobile Pre - Paid (PPS 3. 0) Support Engineer

● The candidate for IN service Pre-Paid 3. 0 (PPS 3. 0) will join our IN Customer Support team within the Customer Services Division, based in Amman. We offer you a long term assignment in a warm and nice country.

The candidates shall preferably be familiar with the Ericsson support processes, CSR/IR handling, software update/upgrades. The candidate shall also have good English and communication skills. Competence transfer to the local staff is an important part of the role. Candidates with good experience in previous release of PPS may also apply to 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.

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

Application: Fouad Jassar, Technical Support Manager, +962 6 5663543, mobile: +962 79 509386, fax: +962 6 5666204, fouad.jassar@era.ericsson.se.

RADIO NETWORK SOLUTIONS CENTRE, ERICSSON DUBLIN, IRELAND.

Within the RNSC the Radio Network Server (RNS) department is developing the RNS for the CMS 88 system using the Rational Unified Process with Object Oriented Design & Java coding with Ronja as target platform. Positions are available for the following roles:

I&V Manager**Line/Technical Manager****Object Orientated Design & Java Programmers**

● Experience profile: Telecoms. Object Oriented Design methodologies, UML. Java development (1yrs+). Open Systems Development (3yrs+). Team Lead.

Contact: Lorna Mulvihill, +353 1 207 7986, Lorna.Mulvihill@eei.ericsson.se.

ERICSSON AUSTRALIA PTY. LTD.**Hardware / Software designers and Testers**

● Ericsson Australia Communications Platforms Development Sector (D/U) is active in a number of international development and support projects. These relate to the AXE Processor (APZ), Group Switch (GSS), Regional Processor (RP) and Media gateway (Router products, cello) areas.

To cope with expanding work demands, D/U has a number of vacancies for hardware and software designers/testers.

D/U is in the unique position of managing development projects involving both hardware and software design. This dual capability has, and will continue to open new business opportunities well into the future.

D/U is an integral part of the CNCP (Communications Network, Core Products, based in Sweden) network. Our main customers have recognised D/U's contributions by increasing its involvement in forthcoming global projects. D/U has a strong policy for multiskilling its engineers and the successful applicants will have the opportunity to work in areas (locally and overseas) such as:

ASIC design (hardware). Fault tolerant computer SW and HW design. Real time operating systems. High speed digital HW design. Printed Circuit Board Design. Printed Board Assembly Design. Interconnection between different types of computers. RISC processors. Voice and data switching products. System Design (prestudies, maintenance, prototypes)

Competencies/knowledge sought: Good working knowledge of the AXE core systems. Plex programming experience / C and C++ Programming knowledge. ASIC or PBA design knowledge/experience. Familiarity with H/W and/or S/W tools & processes. Ability to adapt to and work with all cultures. The ability to work effectively in a team.

It is desirable that candidates have some experience in the above-mentioned competencies/knowledge. A degree in electronics or computer science, or equivalent experience would be well regarded.

Contact: Peter Moore, +61 3 9301 2096, peter.moore@ericsson.com.au.

Application: P/ES Sue Holman, ref.no. ES-00-0404, Ericsson Australia Pty. Ltd., 61 Riggall Street, Broadmeadows, Victoria 3047 Australia, sue.holman@ericsson.com.au, +61 3 9301 1999.

THE RADIO NETWORK SOLUTIONS CENTRE, RADIO HOUSE, IRELAND**Project Manager**

● Location: Radio House, Beech Hill in Clonskeagh Dublin 4. Title: Project Manager. Department: Mobile Radio Sub-system.

Requirements: Degree level and/or will have acquired sufficient technical and business expertise to function independently at a professional level on all activities.

Key Responsibilities: To deliver functionality within the specified parameters of quality, time, cost and productivity as specified by Ericsson Customers requirements. Actively manage all planning, monitoring, reporting and day to day activities of the specified project. Be responsible for project cost (Manhours, Utilisation, Travel, etc.) Responsible with Line Manager to ensure that each individual's development/competence is maximised in line with project needs. Work to achieve the CMM software quality goals through the promotion and application of the most appropriate processes and mechanisms. Previous Project Management in AXE environment.

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

Contact: Lorna.Mulvihill@eei.ericsson.se, +353 1 207 7986.

ERICSSON LTD, UK**NMS SOLUTIONS ENGINEER**

● Product Unit Optical Networks (PMON). Reports to: Manager, Network Management Systems. The NMS Solutions Engineer has expertise in particular product areas. He/she is responsible for providing technical expertise to Marketing, Product Management and customer solutions on management solutions, management systems and associated data communication networks.

The engineer has responsibility for ensuring that the customers' needs are met by providing profitable, high quality solutions to meet time and cost objectives. The job also carries responsibility for keeping him/herself and colleagues within the Solutions and Marketing teams up to date on the relevant Ericsson portfolio of products.

Key responsibilities: Understand fully the customers' business requirements in order to provide cost effective, high quality management solutions. Explain to the customer Ericsson's portfolio of products/systems, e.g. ETNA NEM and ETNA IMA. Provide technical input to current and future bids and tender preparation, with the aim of securing future business and meet customer requirements. Give demonstrations and presentations to customers on management solutions and answer any technical queries arising out of these meetings. Explain to the customer how different products interact with each other and recommend the best solution that meets their needs. Help identify improved working practices in terms of competence and expedient delivery of solutions in response to tenders; e.g. development of templates. Maintain awareness of industry standards and regulatory issues. Understand the contractual implications of interactions with the customer. Help drive business development by providing strategic technical input at solutions level. Work with marketing, product management and the customer to evaluate and plan for prospective projects. Keep people informed at all levels.

Qualifications: Essential Educated to degree level in computer studies/electronics or other relevant subject. At least 1 years' experience within the telecoms industry. Able to perform, support and review system investigations. Knowledge of Transmission systems (SDH/PDH/DWDM), associated management systems and datacommunications networks.

Desirable: Basic knowledge of other telecommunications systems. (IP, ATM, PSTN, Data). Able to travel both within the UK and Overseas.

Skills and Competences: Adapts to meet new challenges to meet present and future customer requirements. Ability to analyse complex issues and identify the most appropriate solutions. Generates and develops innovative ideas or improvements to achieve objectives. Communicates in a clear, concise and open manner. Ability to listens to others and adapt in a team environment.

Contact: Chris Vaughan, HR, +44 1403 277 571, chris.vaughan@et.ericsson.se

ERICSSON EUROLAB DEUTSCHLAND GMBH, HERZOGENRATH/AACHEN, GERMANY

EED in Herzogenrath/Germany, close to the university city of Aachen, is a young and growing company with an open working atmosphere and high motivated colleagues.

As part of the Core Network Mobile System operations, EED has the overall responsibility for the MSC/VLR product and the Integration, Verification, Supply & Support of UMTS Core network Mobile Systems. With that responsibility, EED will play a key role in introducing and supporting the 3rd generation mobile systems, UMTS, on the world market.

EED/X/R department at EED has the overall project responsibilities for the complete node deliveries. We are about to embark on one of the most exciting and challenging projects within Ericsson. GSM R9 project, and our first UMTS delivery, have been combined together in order to maintain our strong market presence and ensure that we are FIRST-TO-MARKET with the UMTS package. We now need strong and experienced individuals to support our project and department team. The following positions are now open:

Process, Methods & Quality Manager

Proj.No 29/M00

● The general responsibility of this position is to set up and maintain the processes, methods and quality measurement tools for the projects. The main authorities and tasks are: supply the projects with suitable methods and processes to enhance the system and software design process, initiate the use of improved and/or new methods and processes, take process and quality measurements, plan and perform project / process audits, monitor and evaluate methods and processes used in other organizations in order to identify potential process improvements, support the project office in all methods, process and quality related activities.

We see that you have a solid background in management and/or project management in Ericsson operations. Also flexibility and willingness to change is a must. Background in managing improvement programs in development environments would be advantageous. Any previous experiences with methods, tools, processes, audits and project work is appreciated. Last but not least you should have a high interest in methods work and see this job as a challenge for you and the company. You will be able to set clear goals, define messages and strategies and see through the implementation of the strategic improvements. Experiences with improvement work and deployment of new technologies would be a clear advantage.

Group Manager MSC Project Office

Proj.No 30/M00

● The general responsibility of the group manager is to plan and lead the operations of the MSC Project Office in EED/X/R. Main authorities and tasks are: implement personnel policies and general rules, assure that all communication is executed with highest integrity and quality, perform appraisals and frequent personal development talks, plan and ensure competence development of the staff, participate in recruitment and introduce new personnel, provide the department with resource plans and forecasts, support the project teams, ensure that planned quality assurance activities are implemented, participate in the EED/X/R Management Team.

As a suitable candidate, you have a sound Ericsson network knowledge. You should be familiar in working in projects. Managerial experience (e.g. as group manager, team leader or project) is a clear advantage. The position requires initiative, good communication skills a good ability to work under pressure.

Project Quality Manager

Proj.No 31/M00

● The main responsibility of this position is to establish and maintain the quality system for R9/UMTS projects. The main authorities and responsibilities are: quality coordination of R9/UMTS projects, pro-actively drive quality assurance activities within the R9/UMTS projects, establish a quality management network within the R9/UMTS projects, provision and implementation of project quality plans and quality reports, plan and perform project / process audits, measure and evaluate the quality of the R9/UMTS projects, support project management in all quality related activities. The quality coordinator reports to his/her line manager and to the respective manager.

Potential candidates shall have a sound background in wireless and/or wireline AXE SW development projects. Any previous experiences with quality systems and

Do you want to take part in the development of future network solutions?

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 towards Ericsson's 3G core network solutions and is heavily involved in system innovation initiatives like UMTS and Engine. CAPC is headed from EED at Herzogenrath/Aachen in the heart of western Europe and consists of CAPC Management, CAPC International Operations, Transit (TRAM) Design and CAPC Verification. For further support of our teams we are looking for a

Main Technical Coordinator

Project No 61/E00

CAPC Systems Management has the responsibility to technically drive the common products in the new Ericsson 3G Core Network Systems for all the world markets. These systems will provide necessary functionality and characteristics for all the new end user applications provided by the service and content providers.

As the Main Technical Coordinator in the CAPC project you have the opportunity to participate in the development of these Systems and influence the technical solutions. You will be working in an international environment cooperating with colleagues in other Ericsson design centers around the world. We are looking for an experienced System Designer with good general technical knowledge combined with necessary leadership and communication skills who is able to keep many balls in the air simultaneously. Some years of experience in AXE development and methodology are required.

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 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 Test Group

Project No 47/M00

The Transit Development Department in EED is looking for a group manager of the Test group taking care of System Integration and Function Test activities in CAPC and Transit development projects. The responsibility of the group manager is to plan, lead and supervise the operations of his group in EED/U/T. He/she has to guarantee that the required goals are fulfilled, the needs of the company are satisfied, the group is efficient and competitive.

The main authorities and tasks are to supervise test leaders of CAPC and Transit subprojects, to participate in improvement of test methodology, to assure that all communication is executed with highest integrity and quality, to implement personnel policies and general rules, to perform appraisals and frequent personal development talks and to participate in recruitment and introduce new personnel.

As a suitable candidate, you are an Ericsson employee and should have a minimum of 4 years AXE-10 development experience and good background in AXE function test. Any managerial experience (e.g. as group manager, team leader or project manager) or experience in the transit and/or traffic control area is a clear advantage.

System Designer, Circuit Switched Data

Project-No 40/E00

At CAPC Systems Management we perform system studies in early phases of product development of the next generation of mobile (3G, UMTS) and fixed network solutions (Engine). An important aspect is to find synergies and to identify core application solutions between wireless and wireline systems. The type of work requires the ability to work in teams as well as individually. The industry is currently undergoing an extremely interesting phase, in which more and more datacom applications are becoming available in wireless networks. Wireless Internet with WAP is of course the prime example. Wireless access packet technologies are not yet mature enough to compete with Circuit Switched Data. CSD will grow in importance, and will proliferate in 3G/UMTS based networks for a number of years.

We are looking to strengthen our competence in the area of datacom in general and CSD in particular. A few years of relevant experience is required. Experience in AXE design is an advantage, but not a requirement. Some travelling is expected and English is the language used.

System Design for In-Service Performance in 3G Core Networks

Project-No 41/E00

In-Service Performance deals with Availability, Reliability and Usability of a system or service. There is an ever growing demand from customers on improved ISP. This demand has resulted in an increased focus on ISP internally in Ericsson and CAPC has identified ISP improvements as one of the most important goals for the coming years. Therefore, we need to strengthen our position in this field, and we are looking for ambitious candidates to take on the challenge of fulfilling the CAPC ISP goals. The work is performed both in teams (traveling is expected) together with colleagues from other Product Units, and individually. The applicant preferably has experience in one or several of the following areas: Characteristics, Test, Maintenance and PLEX design.

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 about the 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.

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 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 system design in an AM based system. Since the work requires co-ordinations within the projects, travel can sometimes be necessary.

Product Manager / Release Responsible

Project No 25/M00

Your task will be the coordination of the scope, timing and costs of the Prestudy, Feasibility Study and Execution Project with the Strategic Product Management Network in CAPC. Furthermore you are issuing Core Requirement Specifications.

You are responsible to ensure that the products ordered by our customers are delivered with the defined quality and content in the agreed time. You act as the main interface between the Project Management and the Product Management of CAPC. That also includes the responsibility to handle change requests together with the project and follow-up of the progress.

You need to have at least 2 years of experience in System Design and/or Project Management and an interest in Product Management issues. The job requires a high level of perseverance and self initiative as well as the willingness to communicate with several different speaking partners.

The job offers you good opportunities to utilise and develop your managerial and leadership skills. The Release Responsible's perspective is to develop towards Strategic Product Management.

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 mobile telephony systems, you are flexible, show initiative and have good communication & cooperation skills. Experiences from System Verification and/or STE test-tools are required.

Project Manager for Improvement Projects (AHEAD)

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 organisation. 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.

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 prestudy 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:

Human Resources

Simon Seebass

Phone: +49 (0)2407 575 163

eMail: Simon.Seebass@eed.ericsson.se



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processes are appreciated. Last but not least you should have a high interest in quality work and see this position as an opportunity for improving our products and our ways of working.

Configuration Manager for GSM R9/UMTS Project

Proj.No 54/399

● The main tasks and objectives will be: Development of necessary CM process updates, support for implementation of Clearcase, chair CCB meetings. In this position you will gain a lot of insight on how the organization plans, organizes and runs projects. You will learn which organizations are involved in decision making and how their roles and interfaces are defined.

Thus acquiring valuable competence and knowledge for future career opportunities. As a configuration manager you will need strong initiative, good planning, co-ordination and communication skills and the nature to never give up. We hope that we can attract your attention and look forward to receive your application.

The MSC Project Office group within MSC Node Product Unit is looking for an

Overall GMSC/MSVLR Test Leader, UMTS CN 1.0 and 2.0

Proj.No 50/E00

● The MSC Node Product Unit has the overall responsibility of MSC level projects from TGO till GA. This covers all classical GSM implementations for the different frequency bands: GSM 900, GSM 1800 and GSM 1900. In addition MSC Node PU is playing a key role in introducing the 3rd generation mobile systems, UMTS, on the world market and is one of the key nodes under Core Network Mobile Systems (CNM).

As Overall Test Leader your main tasks are to coordinate the test planning of subprojects as well as the supervision of the test execution phase and to report the progress to the GMSC/MSVLR project manager. You will be part of the MSC node project team and work together with the test leaders of the subprojects and associated projects. Your main responsibility is to make sure that all new features are successfully tested until MSB (end of Function Test).

You should have at least 4 years experience in Function Test. You need to establish a good contact network, and be very self-driven and cooperative and have excellent communication skills. If we are catching your interest to join a dynamic organization that tries out new ways of working with newly developed products, facing a tremendous resonance from the competition and thus a real challenge ahead, please get in touch with us now.

Contact: C. Schneidawind, +49 2407 575 7814, eedsch@eed.ericsson.se, CSS/GSM Project Office, Jan-Owe Johnson, +49 2407 575 7872, eedjoj@eed.ericsson.se.

The International Project Office for SW Support (EED/X/Y) at EED are looking for a candidate to take the role as

Project Manager

Proj.No 32/M00

"Prepare UMTS MSC Server/GSM PLM & Support" for the combined R9, GSM & UMTS project

● The R9 project is divided in two major parts, the 1st having main focus on UMTS and the 2nd having focus on both UMTS and GSM, planned end date for both parts is Q4 2001. Within R9, new products are developed (MGW, CNOS) and existing products are updated (MSC/VLR, GDB, SOG/BGW).

The function reports to the Main Product Introduction Manager as are the Product Introduction managers per FOA market and Project managers Prepare SW Supply and HW Supply. Responsibilities includes: Study how following activities shall be handled from an individual Product and Core Network view (TR- Handling, SW- Updates, HW- Updates, Help Desk), consider 3rd line, 2nd line and 1st line support, consider and Execute the FOA customers support (RFA to GA), identify needed changes to above processes, identify needed methods, tools and competencies, alignment of support on Product, Core network, UMTS and GSM level, coordinate with other Product Units, part of the total UMTS system offering and find best practices between the PUs' how to support the UMTS products as a system to the FOA customers and possibly a number of "first wave" customers.

Expected Results are: Study, plan and execute the FOA Support (RFA to GA), prior to R9, GA, the organization shall have an agreed and approved PLM and Support proposal for all products and processes for GSM and UMTS.

We are looking for a candidate with experience from AXE Support (preferably GSM), Supply projects and who has worked with customers in 2nd line or first line support. The candidate shall have project management or line Management experience at a medium to high level and must be familiar with the SW Support processes.

The work involves frequent contacts with a number of internal Ericsson functions, both technical and commercial. He/She will work extensively with PLM functions for the different products, ASO and SAFSC organizations, other product units support responsibilities and Network Support.

He/She must be fluent in English, have good presentation skills, have a drive to deliver results with many organizations involved, be able and like to have many simultaneous activities, work excessive hours if required and handle extensive travelling within and outside Europe.

Contact: HR Christina Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, EED/X/YOC, Anders Briandt, +49 2407 575 473, eedabri@eed.ericsson.se.

One part of our responsibilities within the Project Office EED/X/R is the Function Test of UMTS CN 1.0 (GMSC/MSVLR/HLR node).

AXE Troubleshooter for UMTS CN 1.0

Proj.No 33/E00

● UMTS CN 1.0, the UMTS Core Network project, is based on AXE GSM R8.0 (MSC Server, HLR) and will be the base for coming UMTS projects. We are looking for an experienced Tester or Troubleshooter with the following competences: GSM testing experience more than 3 years (MSC/VLR, HLR nodes). About 3-4 different projects in Function Test or System Test. Troubleshooting experience highly appreciated. Experience on target channel environment required and experience on simulated environment (STE, especially MGTS PASM) highly appreciated. GSM DT knowledge, like C7 signalling DT, B-No. analysis, etc. DT knowledge for IN and data calls appreciated. AXE system knowledge (APZ, 1/APT, C/APT, SSFAM, RMP, HLR, AUC, DTI, IOG).

You will be responsible to support Function Testers testing the Mobile Application (1/APT) functionality. You will take care about problems in target channel environment and coordinate with UMTS System Testers performing IN-DUS Test activities.

You will have the opportunity to learn about the new UMTS functionality by having the main UMTS development competence locally. You will work in an international organization with a highly motivated team.

Contact: HR, Christina Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se

We are looking for someone to drive the SW development methods in Ericsson GSM R9/UMTS Core Network Project.

Methods Responsible - Total R9/UMTS Project

Proj.No 21/E00

● The project is based on incremental "work packages" which are constructed to form an integration driven approach to developing the new system. So far, a team has developed the initial methodology in the form of a "Work Package Method Binder". We have a network of methods people to provide support, and are looking for someone to lead this network to ensure successful project execution with the new methodology.

An outline of the position is as follows: Lead the R9/UMTS methods work encompassing the international design organisations, actively drive the new Work Package methodology, position reports directly to the Total R9/UMTS Project Manager.

Contact: HR Christina Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, Project Manager, Keith Dyne, Keith.Dyne@eed.ericsson.se, EED/X/LC, Leter Lopez, peter.lopez@era.ericsson.se

For more information on work packages, please refer to: <http://capc.ericsson.se/perfmgmt/processmgmt/activities/workpackages>

The Test and Support Department (EED/X/S) is responsible for system test, industrialization and support of the CME20 SS Product Line at EED. It includes CME20 SS product line configuration management, system test and industrialization of the CME20 Switching System releases, as well as product line maintenance and customer support for the CME20 SS product line.

We have also the responsibility to verify the UMTS Network solutions and the GPRS product line, which currently is in a very exiting stage of development.

We can therefore offer positions at the very edge of technology in all current movements in the Tele Communications field. EED/X/ST is looking for two candidates to fill the positions of:

GSM SS/UMTS System and Network Testers

Proj. No. 55/399

● The GSM Tester is mainly responsible for Test Design and Test execution needed to industrialize new functionality in the SS node. The UMTS Network Tester is mainly responsible for verification activities in a UMTS network which involves node testing on the AXE10, ATM, IP and UNIX platforms, as well as trouble shoot, configure and tune a whole UMTS network.

Main activities are the definition of the prerequisites to perform the system verification, the performance of the Test Execution mainly in target environment, issue and follow up requirements for test configuration and simulation tools and to build up core competence for GSM and UMTS Industrialization.

A suitable GSM candidate should have experience in CME20 design or testing. Knowledge of either of Intelligent Network Services, the Charging and the Signalling sub-system is a significant plus.

A suitable UMTS Network tester will need a solid background in datacom with more than a basic understanding of telecommunication. A person with knowledge in ATM and IP networking along with knowledge of AXE software

will be favoured. You will also need good interpersonal and organizational skills to work as an effective member of a project team.

Contact: Christina Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, EED/X/STEC, Andreas Demmig, +49 2407 575 366, eedade@eed.ericsson.se

The section EED/X/SL is responsible for the Product Line Maintenance (PLM) and takes central maintenance responsibility for the Worldwide CME20/GSM Switching System, is considered as the primary competence center for CME20/GSM Switching System and will take central maintenance responsibility for the new UMTS MSC Server in April 2001. We are looking for a

Project Leader

Proj.No 04/M00

Product Line Maintenance for UMTS R1.0 / CME20 SS R9.

● The project leader will be responsible for the Feasibility Study and Execution of the product line maintenance set-up for UMTS R1.0 (MSC Server) /CME20 SS R9. He/she will report to the PLM section manager and to the Support Project Office and work closely together with the R9 Indus and R9 Product Introduction Projects. The main target is to define and implement a maintenance strategy using existing PLM infrastructure and identifying new needs to give the UMTS MSC Server maintenance a successful and future proof start.

For this position we expect a leader personality with a strong background in maintenance, preferably in the GSM area. Additional background in Datacom is an advantage. He/she should be flexible, team integrating and be able to work under high pressure and customer expectations.

PLM Group Manager of the Maintenance, Test and Supply Group

Proj.No 22/M00

● we are looking for a motivated team leader with the qualification to steer the tasks mentioned below: AC testing (SPAC) for GSM SS system releases and for UMTS MSC Server releases (Q1/2001 onwards). AC-A loadfiles assembly, verification and release.

From Q2/2000 onwards we will double the delivery frequency to biweekly loadfiles which will be accompanied by substantial process and tools improvements (MSS introduction, automated regression test). ACD - Automated Correction Deployment which currently is in its pilot phase with Telefonica Moviles/ Spain. The method, using remote OSS scripts for automising correction deployment into customer networks, is planned to be generally available Q3/00.

ATP Automated Testing Program: In 1999 the MTS group succeeded in automising the existing AC-A regression test by 80%. The ambition in 2000 is to enhance the regression test by a large quantity of automatized testcases and to build in the negative test used by the CME20 SS Indus organization.

The Maintenance, Test and Supply group currently consists of 14 members. The experience level is between 1 and 4 years.

For this position we expect: Previous experience and sound knowledge of the processes and responsibilities in an AXE-based maintenance organization. A good understanding of customer expectations and PLMs responsibility. Understanding of the PLM network including SS design organization, SS supply and support organization, ASO/SA-FS organization, other product lines within the organization and within other product units.

We are looking for an open minded person with the ability to drive change in order to manage a dramatically increasing GSM market and to prepare for the challenges of the "new telecom world" coming up with 3G systems.

The management activities require assignment of tasks, active career development, people management and development of the group's scope of responsibility.

3rd Line Helpdesk Group Manager

Proj.No 27/E00

● Within PLM, we are looking for a highly customer focussed candidate who can successfully manage the following helpdesk activities: Initiate, participate in or steer global ISP related projects, involving different levels of the SS organization from design, Indus, Systems group, CNCP, maintenance to ASOs/2nd line organization. Organize and improve a helpdesk front office towards second line organization. Organize and continuously improve a helpdesk BackOffice to work on support requests. HOT TR handling and ASO conference calls responsibility. Manage a trouble shooter team working on escalated problems in the GSM/UMTS MSC area. Promote ISP related measures and improvements across the organization and to customer (CME UG). Support GSM/UMTS MSC Product Introduction Projects with FOA and Rollout support. Support the PLM organization with improvements in the testing methodology and with route cause analysis investigations.

The helpdesk group currently consists of 6 experienced testers, 4 consultants and will grow in 2000 to 10 testers and 2 consultants.

In ideal candidate should have: the understanding of the PLM network including SS design organization, SS supply and support organization, ASO/SA-FS organization, other product lines within the organization and within oth-

er product units. Previous project or line management experience to manage an international group of very experienced testers in a demanding environment. Proactive approach to better handle hot problems and actively work on system improvements to constantly increase our products in service performance (ISP). Have a strong focus on continuous development of the group's competence.

Senior Product Line Maintenance Tester

Proj.No 25/399

● PLM packaging team is developing and verifying CME20 SS upgrade paths using IFC and RFC. For new tasks in the area of Remote Function Change we are looking for AXE test and support engineers with 3-5 years relevant experience in AXE O&M and support, SW test, a solid background in APZ and IOG and Application System Replacement.

Your contribution to the packaging team is key position with minimum 3 years testing experience in an AXE mobile switching systems in a maintenance or support organization. You need a sound background in AXE test environment handling and IOG/APZ operation and maintenance, ASR competence, ability to drive improvement and change, effective teamwork and coaching have less experienced colleagues and an interest to participate in studies for new releases.

Opportunities for travel, networking, personal and technical development are outstanding. Watch yourself make a global impact with your efforts.

Contact: EED/X/SLC, Elke Busch, +49 2407 575 357, Eedelb@eed.ericsson.se, HR, Christina Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se

Experienced Troubleshooters

Proj.No 46/399

● Support Engineers and Testers needed for GSM SS node HelpDesk. We are key players in the GSM support structure. We are looking for experienced personnel (4+ years) who can participate in:

Technical support for FSC/ASO/PLM/TCM/INDUS/DE-SIGN. FOA Support, Hot TR Troubleshooting. Emergency correction production. Correction testing. Technical consultancy. Global support co-ordination. Negative testing, Function testing. Taskgroup activities, Root Cause Analysis, Technical prestudies and feedback into UMTS development.

You should demonstrate a solid AXE background and a determination to tackle problems and meet new challenges. An open minded and flexible attitude and the ability to work well in a team environment are important personal qualities. You should also show good written and verbal communications skills. Some experience in the IN area could also give you the edge.

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Experienced AC-tester

Proj.No 47/399

● for global support of the NO. 1 AXE Application. The product line maintenance section takes central responsibility for the world wide CME20 switching system. It is considered as the primary competence centre for CME20 SS.

REQUIREMENTS: testing/verification, PLEX and ASA experience, test system knowledge, IN and tool experience is an advantage, to be flexible and able to work under pressure, to be self-motivated, to work easily on your own and within a team and to achieve goals and customer requirements.

You have at least 3 years of testing experience in AXE mobile switching. Your main task is to test the correction in all the releases R7,R8,R8s, PRA, HWM, use test system to trace the problem in test channel and transfer your knowledge to less experience people in the group. Travelling at short notice as an integral part of the job,

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Senior STE Methods and Tools Engineer

Proj.No 04/339

● The STE Methods & Tools group is responsible for all STE activities within SS OPERATIONS in the area of Function Test, Design Maintenance, PLM, System Test, support organizations (ASO/SAFSC) and longer term Methods & Tools issues affecting testing. This central group will not only cover EED needs, but also all the other LDC's. The focus is on STE (Simulated Test Environment) tools and protocol and traffic simulated tools that can be used in both STE and target environment (ex. MGTS, TSS 2000, TTCN, etc.).

As a suitable candidate, you are an Ericsson employee and should have experience in AXE 10 testing. You should be able to work well on a highly motivated team and under strict time pressure. You also have to be service minded, be willing to travel and be prepared to quickly take new assignments. You have to be critical and always want to have the urge to improve the simulated testing environment.

You have to be open minded and willing to change in order to drive the simulated environment into the third generation mobile application systems.

Your responsibilities will include coordinating STE testing activities, gathering requirements from the customer, being involved in writing and coordinating new requirements, investigating impacts from new functionality in GSM/UMTS applications, defining methods for how to test new features, acceptance testing of new tools and troubleshooting in the simulated environment.

More info: <http://www.eed.ericsson.se/services/eed-x-s/o/saz/Welcome.html>.

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In the CME20 SS "Product Line Configuration Management Section (EED/X/SO)" has the central Test Configuration Management Responsibility for development projects from TG1 to GA of CME20 SS releases. We are now looking for candidates to fill the position of:

TCM Project Manager – CME20 SS R8. 1

Proj.No 34/M00

● Your main tasks are planning and coordinating all TCM activities for the function test project. These activities include Data Transcript, Dump Assembly and Test Network Configuration, GAS Specification, Program Production, Parameter Administration, MHO Administration, and Library Specification and Production.

You will work closely with the SS and CAPC design, function test and verification project leaders as well as the overall CME20 SS project manager. You will be responsible to guide the TCM project from the start of FT through to GA of the release.

You should have AXE competence as designer, tester, or in TCM, previous line or project management experience (desirable), strong organization, planning, coordination, and communication skills. You can actively drive requirements and seek solutions to complex problems.

The Test Support Section (EED/X/SO) within the Core Network Integration Center at EED is responsible for test configuration management (TCM) and test support for Core Network Products provisioning and supply projects, as well as local TCM for GPRS and CAPC test activities. We are presently seeing candidates to fill the position of:

TCM Project Manager – GPRS R1

Proj.No 49/E00

● We are presently seeking a qualified candidate to take the TCM Project Management role for the GPRS R1 projects (I&V, NV, and PLM establishment).

Your main tasks will be the planning, alignment, execution, and control of local TCM activities in the GPRS projects. You will be responsible for the integration of the SS, BSS, and GPRS nodes in the EED test environment and planning and coordination of local TCM activities to support the GPRS verification. Your coordination skills are needed to ensure sound planning and follow-up of GPRS software configuration management, infrastructure and dump (GSN, SS, BSS) upgrades, GPRS test and traffic simulation tools support, and TCM actions required to meet project milestones.

You will need to closely monitor and report status of TCM activities. Innovative and proactive solution seeking skills are essential. Improvement of methods and quality relating to TCM and support processes used in the projects are also in your charter.

A good candidate is an Ericsson employee with AXE or packet competence in the area of design, testing, CM or TCM. A good understanding of TCM, verification, and support processes is desirable as are strong organization, planning, coordination and communication skills.

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The EED/X/SM Methods and Tools Section works on support as well as in test tools and methods. To support our further activities we are looking for

Software Designer

Proj.No 23/E00

● Your main task will include Software-development for a tool for end-to-end testing of mobile phones and switching systems. The tool controls mobile phones and an air interface simulator, and offers a uniform and generic interface for automatic execution of mobile phone / switching systems tests. Software development is currently done in Erlang, C++ and Assembler. Software is developed under UNIX, target systems are UNIX workstations and special purpose hardware.

Suitable candidates have a degree in computer science or electrical engineering and have good experience in C/C++ programming. You should also be familiar with UNIX, realtime/ embedded systems as well as with networking and protocol software. Former experience with Assembler and /or Erlang programming is beneficial.

Traffic Model Designer

Proj.No 26/E00

● Main tasks: Design of traffic models for load and conformance tests for GSM/GPRS/UMTS using our PETRI-NET based tool "NEXT". Support of NEXT customers worldwide

in traffic model design. Programming of NEXT modules to interfacedrivers for external tools (e. g. IOG, AIMS, Protocol analyser)

Competence: Knowledge of testing and telecom systems. Experience in programming and a sound background in mathematical / computer science.

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EED/X/P is responsible for the development of the applied mobile source system (1/APT) and the Mobile Switching Subsystem (MSS) within the 2nd and 3d generation Mobile Switching Centre (MSC). We work from pre-pre studies through execution until product phase out.

Next years the challenge will be to migrate to a new core network architecture satisfying both the GSM and UMTS customer requirements. We are a growing organisation and will expand from 85 to ca. 120 people in the next years. As a result of this we need to strengthen our core competence in all technical areas. We have job opportunities for:

Software Design Engineers – Give your career a twist!

Proj.No 35/E00

● As a result of this we would like to strengthen our core competence in traffic handling and network architecture with external expertise.

We are offering plenty of opportunities to learn and progress in a challenging and changing design development environment. You would part of a fast moving team developing a new system, which migrates towards a successful future proof development product. A key product for Ericsson for it's market positioning.

For this reason we are looking for a number of experienced software design engineers who want to play a leading role in the evolution of Ericsson's products in the fast moving mobile world market.

You should have a minimum of 2 years experience in a design development area be familiar with complete telecom systems, have programming experience in a number of different languages, SDL knowledge, a background in telecommunications is preferred with a working knowledge of structural design methods is required for this position. Relevant Ericsson experience is a plus but not essential.

To be successful you need to have very good communication skills, quality orientated, innovative and a strong team player.

Design Maintenance Engineers

Proj. Nr. 53/E00

● We would like to strengthen our competence in Design Maintenance area with external expertise.

We are offering the opportunity to work in a goal and customer oriented team with the following activities: Analyzing trouble reports and developing solutions in close cooperation with MSS design and Product committees, testing the solutions in simulated test environment, market design for the German market, rapid product change development.

You should have a minimum of two years experience in software design/maintenance, or testing, be familiar with complete telecom's systems, have programming experience, very good analytical abilities and a strong interest in

troubleshooting. Experience in software testing in a simulated or real environment, preferably on AXE10 with mobile application is a clear advantage.

To be successful you need to have very good communication skills, be quality orientated, innovative and a strong team player.

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EED/X/P has job opportunities for:

System, or Senior Designers

Proj.No 52/E00

● In various areas with plenty of opportunities for development such as: UMTS CN2 Pre-, feasibility studies, MSC Technical Areas: Pre pre studies, SoC, Standardization, GSM/ UMTS R10 Architecture, Platform and 1/APT evolution studies.

Depending upon your qualifications and experience we will find the right place for you in our teams to suit your wishes. For further career advancements and professional orientation a dedicated competence manager will be there in order to support your long-term development.

You would be part of fast moving development department, being involved in modelling a major part of a new system which will be the successful product of Ericsson in the very near future.

You should have a minimum of 2 years experience in system management area, such as working in pre-studies, feasibility studies, quick studies, having a strong telecommunications background, having built up expertise in one or several parts of the AXE10 mobile system, be familiar with GSM standards. Other relevant Ericsson experience is a plus but not essential.

To be successful you need to have very good communication skills, be quality orientated, innovative and a strong team player.

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Operations Manager UMTS CN2

Proj.No 43/M00

● We are looking for an enthusiastic, pragmatic, creative and goal oriented manager and colleague, who will be responsible for a ca. 140K project which is run mainly at EED, TEI and IXG.

You must have excellent leadership, communication and solid project management skills. You understand that people want to be part of a success story, therefore you will take care of running a key project for Ericssons within traditional PROPS parameters: time, quality and budget. Within X/P as default our projects are always on time, you also have a responsibility and authority regarding: quality and design base for next project, people satisfaction and competence building within the project.

Some main tasks and activities: receive assignment, break it down in goals and objectives and then into activities and teams, organize, plan and staff the project as needed, involve and inform people, make team contracts, track and report project status and progress, drive improvements and make opportunities become reality, participate in assignment board and X/P management team.

You are part of the X/P management team and together with your colleague OM's and FM you also drive the further development of our operations management. After the resource contract with the competence managers you

deal with: how, what, when, whom!

The ideal candidate has a SW Development and Telecommunications background, combined with solid project/operations management experience. You must be very goal oriented but also have a good feeling for leadership (communication, people satisfaction, team building).

You will gain strong experience in running an international, big and complex key project and you will be able to take responsibility in further developing X/P. Also you will get a good understanding (and influence) on our department operations and our way into 3G technology.

Competence Manager

Proj.No 44/M00

● We are looking for an enthusiastic, pragmatic, goal and people oriented manager and colleague, who will be responsible for 25 to 30 people. You must have excellent leadership, communication and (self-) management skills. You will take care of finding the optimal match between operations and business needs versus our people's competencies, wishes, ambitions and capabilities on the other side.

Some main tasks and activities: Resource planning, project resource contracts, participation in assignment board and X/P management team, performance and development talks, recruitment, salary review & setting, team coaching, career development and planning, keep a thorough overview and understanding of all operations within X/P, understand impacts from future technologies for strategic competence planning etc.

You are part of the X/P management team and together with your colleague CM's you also drive the further development of our organization, we use P-CMM to enhance our people management practices.

The ideal candidate has a SW Development and Telecommunications background, combined with previous management experience (line, project). You should have the combination of strong operational orientation and a strong interest in human beings.

You will gain strong experience in line and people management at an intense pace and you will be able to take responsibility in further developing X/P. Also you will get a good understanding (and influence) on our department operations and our way into 3G technology.

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EED/X/D is the overall responsible for system level activities. This includes overall System Management (SM) coordination in the international system management network. In addition EED/X/D has the system responsibility for the MSC node in the Core Network.

The system responsibility for the GDB nodes (HLR, AUC, EIR, FNR and ILR) is located at EEM, MGW at LMF, CNOS at EEI, and for the GW nodes (SOG, BGW) is located at EPK. General System Management is located in EED/X/DE and is responsible for the Core Network in GSM900/1800/1900 and UMTS mobile networks.

EED/X/DE works in partnership with the System Management International. For the GSM/UMTS Core Network evolution of the MSC we are looking for a

PC-MSM Chairman

Proj.No 09/E00

● Tasks for PC-MSM chairman is to organize the PC-MSM inspections of the System Level 1 documentation, assist the source system responsible in technical issues, prepare system documentation, etc. Normally, the job as PC-MSM

Looking for success in

Account Management?

Here at the One 2 One account in the UK, we are looking for a talented Senior Marketing /Account Executive to work within a team to develop and manage defined business segments with this fast growing mobile operator.

Responsibilities include the management of existing business areas as well as working with the team for the development of new business opportunities within mobile, radio and datacoms.

Reporting to the Marketing Manager, candidates need to have a good understanding of the mobile market and the ability to integrate her/himself into a fun and growing team.

Recruiting Manager Jonathan Harby, Marketing Manager, One 2 One Account, Mobile MultiMedia Communications, Guildford, UK.

E-mail: jonathan.harby@etl.ericsson.se

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chairman is combined with other system engineering tasks in the General System Management section, e. g. participate in technical investigations or pre-studies.

As a suitable candidate you are familiar with Ericsson product handling principles and you should have worked with AXE10 development in the mobile area on system level. Very good understanding of the GSM MSC is needed for this position.

To apply for the job you need to have at least 5 years of qualified experience from design and/or testing of the MSC. As you will be chairman of the PC-MSC inspection body you need to be well organized and be prepared to take decisions.

TC-Core Network/MSD Chairman

Proj.No 10/E00

● Technical inspections within the new Core Network Mobile Systems organisation will be carried on in a network fashion similar to the former TC-CSS. That is, TC-CN/MSD is part of the TC-CN with members from ERA, EED, EEM, EEI, LMF and ERV; chairman of the inspection is rotated pending on the area.

The suitable candidate for TC-CN/MSD chairman is familiar with Ericsson's mobile systems, has a solid background in systems design and is used to take technical decisions. The main tasks are to organise and review requirement specifications and technical reports. New transmission capabilities (ATM, IP), new web-based O&M and new HW are examples of what was reviewed last year. For year 2000 we will focus on requirements for UMTS Core Network based on 3GPP R'00 specifications.

For this position we require that you have a very good knowledge of the GSM/UMTS system. Formal education is university degree (Master's of Science or similar), minimum 5 years of qualified system work, and willingness to learn new areas.

MSD Source System Handling

Proj.No 36/E00

● Tasks include Source System Handling and System Level 1 documentation. You will also work with quality assurance as a member of PC-MSC. Pending on interest and background you may also work with other system management tasks related to the MSD.

Suitable candidate is familiar with Ericsson product handling principles and should have worked with AXE10 development during 1-3 years. This position is a good starting place in the system department as it gives an excellent overview of the complete CME20 system.

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We are looking for people that want to become system architect, technical coordinator or take a leading role in the forefront of mobile telecom evolution. You directly control the next version of Ericsson's products in the mobile world market.

System Engineers

Proj.No 37/E00

● Migrating Engineer - from GSM to the Future. Suitable candidates have proven experience in one or more of the following areas: telecom/real time operating systems, ATM and IP protocols, O&M, CORBA, network management systems and middleware. In addition you are team and result oriented, take initiative and have good self motivation.

You should enjoy to work on an entrepreneurial basis and have the ability to set priorities right within an ever changing environment. Opportunities for travel, networking, personal and technical development are outstanding. For these positions we require that you have 5-10 years of relevant industry experience.

Please refer to the department homepage in the www for further information about the department's activities "http://www.eed.ericsson.se/services/eed-x-d/welcome.html".

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The Platform Management & Dimensioning group, EED/X/DD, is looking for

System Designers, Hardware Platform Management

Proj.No 08/E00

● The task of HW Platform Management is to ensure that the portfolio of platform products meets the present and future needs of CSS (in terms of functionality, characteristics and cost) and to evaluate the system impacts of new or improved platform products.

This work involves a broad range of system level activities such as long-term platform strategy studies, HW (pre-) pre- and feasibility studies, HW technical coordination within CSS projects, requirement specifications and assignments to HW platform providers, continuous monitoring of one or several platform product areas, tollgate assessments of HW deliverable projects

Suitable candidates possess a relevant engineering degree (e. g. telecommunications, electrical, or software engineering) with a minimum of 2-4 years of experience in design, testing or system level technical development. Experience in platform related work (AXE-10, OTP, TelORB, AXD301,...) is an advantage, but not absolutely necessary. Good verbal and written communication skills, a high level of personal initiative and the ability to work autonomously are essential for this position.

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Product Managers, GSM and UMTS

Proj.No 38/E00

● Technical product management for GSM and UMTS is done in co-operation with local product managers and system experts. Working with product management includes contract and tender support, product presentations and active participation in formulation of the 3G contents.

We now have 2 positions open in the UMTS group and we look primarily for experienced system or product managers who has experience of GSM. A solid technical understanding of mobile solutions offered by Ericsson is a must.

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General Packet Radio Service (GPRS). The Application Design department in the GPRS House works with development of mobile datacom applications. The first work in the application design area was started in spring 98 and the first product release was done in February 99. The product was the WebOnAir Filter Proxy.

The WebOnAir Infoserver is perceived as one of the most important and promising product within the PU MI-Ap. The chances are quite high that the InfoServer will be part of the core infrastructure for Ericsson's world wide mobile portal called e-mode. With the first version - being released just now - we'll have a stable base to continue and to become "the" engine for the mobile portals.

Therefore the infrastructure has to be further developed and lots of new features have to be added, e. g. Mobile Positioning Interface, e-commerce Interface, SDK development, Technical Support of customer projects, O&M features, e-mode capabilities, Voice recognition. Because of this long list our team has to and wants to grow significantly.

Project Manager Info Server

Proj.No 42/M00

● As the team will grow significantly and at the same time external contacts will become more, a second Project Manager is required for managing the project. The main responsibility for the PM is the project management of the local development project. The team organisation is used to decide on lowest possible level. We find solutions together. Concerns from team members are seriously taken. We strive for one goal. Our activities are centered around the SW product. We minimize risks to ensure a good quality SW product.

You'll find a very motivated team, which is looking forward to welcome you to work with. The assignment of tasks their estimates etc. are discussed within the team. I'm sure everybody finds a space where he'll/she'll like to work. In the area of mobile Internet a lot of new things come up, so there will always be some challenges and opportunities for everybody. We have a working environment like Workstations, tools that matches our needs and makes efficient product development possible. For testing have the hottest stuff like the /// R320 WAP phone, MC218 etc.

And, the rule for our team says we do the complete thing. That means that you will be involved in the whole product life cycle starting with early phases like feasibility studies etc. until the late phases like final test, or supporting designers at other design centers how to develop on top of the InfoServer.

Project Manager the WebOnAir Streaming Proxy

Proj.No 24/M00

● The task of the project manager is to setup the development project for the WebOnAir Streaming Proxy, which is run in a co-operation between the Application Design and the Research department. The Feasibility Project will be launched in January 2000 and a TG2 decision is planned for February 2000. The first version of the proxy shall be released end of 2000.

The task of the project manager will be to define the project and to participate actively in the technical investigation during the feasibility study. Thereafter will have to manage the design project, which will be run in close co-operation with the Strategic Project Manager and the ordering PU.

During the whole project good technical understanding of the product is required and technical work will be a substantial part of the task.

An ideal candidate has some years of experience in software design on standard platforms (UNIBX, Windows) and very good knowledge of standard programming languages as C/C++. Any other competence in SW technologies and datacom is appreciated. Experience with project manage-

ment ala Gilb is of advantage (Evolutionary Design). Experience in guiding small teams is of advantage but not a requirement.

The position holder reports directly to the manager of the Application Design Department and to the Total Project Manager at the PU Mobile Internet Applications.

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For more information: http://gprs.eed.ericsson.se

Configuration Manager (technical)

Proj.No 06/E00

● 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). 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 scriptsthe tools 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.

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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.

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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 worldwide 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

Proj.No 03/E00

● 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 are 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.

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Core PU Application Core (CAPC), PA wireless TCS (Transit AM). The EED/U/T department is part of the Core Product Unit CAPCand is responsible for design and maintenance of the wirelessTCS subsystem. We are looking for a

Project Manager Transit/Traffic Control

Proj.No 02/M00

● The Transit Development Department (Transit AM) in EED is looking for a Project Manager taking care of subprojects for Transit and Traffic Control development in the Application Core (CAPC). The new Transit-AM (TRAM) and the included Wireless Traffic Control products are part of the mobile product lines UMTS, GSM, TDMA and PDC. The CAPC and Transit responsibility is located in EED/UJ at Aachen, Germany.

The general responsibility of the project manager is to manage Transit and Traffic Control development projects from TGO until MS8 as part of the EED/U/T project office team.

The main authorities and tasks are: act as project leader in Transit and Traffic Control subprojects, represent Transit/TCS projects towards CAPC main projects, coordinate Transit/TCS projects towards the mobile applications (UMTS, GSM, TDMA, CDMA, PDC), actively take part in the resource planning process, participate in improvement of project management methodology.

As a suitable candidate, you are an Ericsson employee and should have a minimum of 3 years AXE-10 development experience and good background in project management according to PROPS and Incremental Design. Any managerial experience (e. g. as group manager, team leader or project manager) or experience in the transit and/or traffic control area is a clear advantage.

The position requires initiative, good communication skills and a good ability to work under pressure. Fluency in written and spoken English is required.

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

System Designer, 3G Core Networks

Proj.No 39/E00

● At CAPC Systems Management we perform system studies in early phases of product development of the next generation of mobile (3G, UMTS) and fixed network solutions (Engine).

An important aspect is to find synergies and to identify core application solutions between mobile and fixed systems. The type of work requires the ability to work in teams as well as individually.

We are looking for an experienced System Designer to participate in the early phases of Next generation solutions. Next generation solutions are based on packet switching (IP and/or ATM), thus competence in those technologies is required.

The signaling area, with interworking between classical SS7 based signaling and IP based protocols such as H. 323 and SIP, as well as ATM signaling, is of particular importance. Experience in AXE design is a definite advantage, but not a requirement. Some travelling is expected and English is the language used.

System Designer, Circuit Switched Data

Proj.No 40/E00

● The industry is currently undergoing an extremely interesting phase, in which more and more datacom applications are becoming available in wireless networks. Wireless Internet with WAP is of course the prime example. Wireless access packet technologies are not yet mature enough to compete with Circuit Switched Data. CSD will grow in importance, and will proliferate in 3G/UMTS based networks for a number of years.

We are looking to strengthen our competence in the area of datacom in general and CSD in particular. A few years of relevant experience is required. Experience in AXE design is an advantage, but not a requirement. Some travelling is expected and English is the language used.

System Design for In-Service Performance in 3G Core Networks

Proj.No 41/E00

● In-Service Performance deals with Availability, Reliability and Usability of a system or service. There is an ever growing demand from customers on improved ISP. This demand has resulted in an increased focus on ISP internally in Ericsson and CAPC has identified ISP improvements as one of the most important goals for the coming years.

Therefore, we need to strengthen our position in this field, and we are looking for ambitious candidates to take on the challenge of fulfilling the CAPC ISP goals. The work is performed both in teams (travelling is expected) together with colleagues from other Product Units, and individually. The applicant preferably has experience in one or several of the following areas: Characteristics, Test, Maintenance and PLEX design.

Contact: HR, Simon Seebass, simon.seebass@eed.ericsson.se, +49 2407 575 163.

Strategic Product Manager, Lawful Intercept

Proj.No 16/E00

● Your task will be on 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 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 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.

Product Manager

Proj.No 25/M00

● Release Responsible CAPC7.1 (UMTS R2). Your task will be the coordination of the scope, timing and costs of the Prestudy, Feasibility Study and Execution Project with the Strategic Product Management Network in CAPC.

Furthermore you are issuing Core Requirement Specifications. You are responsible to ensure that the products ordered by our customers are delivered with the defined quality and content in the agreed time.

You act as the main interface between the Project Management and the Product Management of CAPC. That also includes the responsibility to handle change requests to-

gether with the project and follow-up of the progress. You need to have at least 2 years of experience in System Design and/or Project Management and an interest in Product Management issues.

The job requires a high level of perseverance and self initiative as well as the willingness to communicate with several different speaking partners.

The job offers you good opportunities to utilise and develop your managerial and leadership skills. The Release Responsible's perspective is to develop towards Strategic Product Management.

Contact: Carsten Bruns, Carsten.Bruns@eed.ericsson.se, +49 2407 575 106, HR, Simon Seebass, Simon.Seebass@eed.ericsson.se, +49 2407 575 163.

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 prestudy 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 prestudies 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)pro-

jects, coordinating technical issues involving several sub-projects, 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: Simon.Seebass@eed.ericsson.se, +49 2407 575 163, J. Wilke, eedjow@eed.ericsson.se, +49 2407 575 399.

Group Manager Wireless TCS Design

Proj.No 79/399

● The Transit Develop. Department 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, Norbert Floeren, +49 2407 575 228, Norbert.Floeren@eed.ericsson.se.

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

Do you want to work for a company where change is constant?

Expert in IP security Ref no.: 1510

We offer you: A position as system manager, with focus on IP security, in one of Ericsson's most important projects – the development of new systems and products for Ericsson's third-generation wideband mobile telephone systems, UMTS. The systems are based on wideband CDMA (WCDMA) radio technology and ATM transmission.

What you will do: Product Unit Wideband Radio Networks has its offices in Kista, and within a sector called WCDMA Radio Network Management we develop network management systems for controlling and supervising WCDMA base stations and radio network control nodes. We are also responsible for the IP network used for communication between the network management systems and the traffic-handling nodes (base stations, etc). – You will take part in the systemeering of this IP network, with focus on security aspects.

What you should know: You should have several years' experience in the construction of high-security IP networks. You should have sufficient competence in the areas involved, including Firewalls, IPsec, DNS, DHCP, etc. In addition, you must have a good knowledge of both Swedish and English.

For more information, please contact:

Ulf Larsson, phone: 08-764 14 29
e-mail: ulf.larsson@era.ericsson.se

System work – O&M Ref no.: R/H1345

If you are interested in studying the broad outlines of distributed systems based on Java and Corba, and if you think you can formulate principles and devise the architectural features for such systems, then this is the job you are looking for!

You should have experience in the use of operation & maintenance systems for telecom systems and be familiar with the applicable standard. You should preferably also have of operating centres and be familiar with graphical user interfaces and on-line documentation. Knowledge of radio networks, Java and Corba will be an additional qualification.

For more information, please contact:

Martin Rolf, phone: 08-585 31 418
e-mail: martin.rolf@era.ericsson.se

Tools and test environments expert – Java design with Rose, JBuilder, ClearCase Ref no.: R/H1349

This job involves ensuring that our design and test environments function properly and that the necessary communication with external parties is handled in the appropriate manner. We use UNIX and NT as both development and target environ-

ments. The job requires experience in design work, test work, UNIX and NT. Work at an IS/IT support organization would be a suitable background if you want to take one step closer to design work.

For more information, please contact:

Martin Rolf, phone: 08-585 31 418
e-mail: martin.rolf@era.ericsson.se

Send your application (marked with the refno.) to:

Ericsson Radio Systems AB
KI/ERA/R/HS Inger Holmgren
164 80 STOCKHOLM
ansokan.PU-WRN@era.ericsson.se



Make yourself heard.

ERICSSON



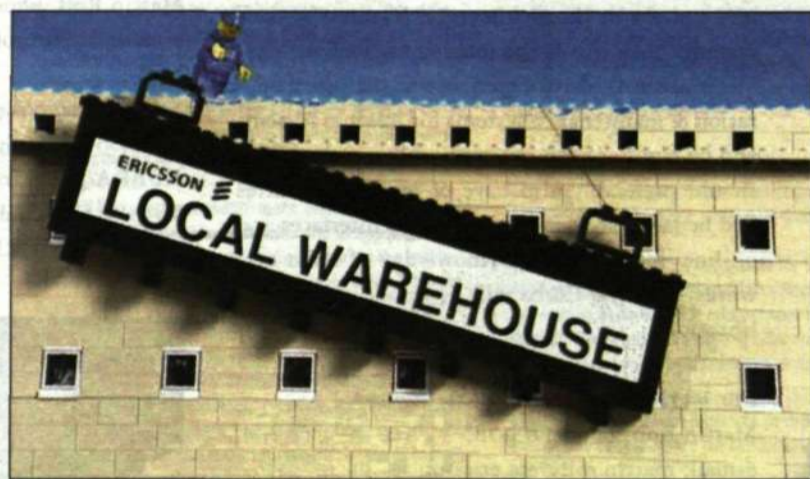
The Lego characters in the TTC film show how the supply chain from order to delivery works today and how it should work tomorrow.

In the past, customers produced requirement specifications, which were then adapted to Ericsson equipment before being sent out. Errors occurred, however, which sometimes did not become evident before installation. Days passed, and the customer was dissatisfied.

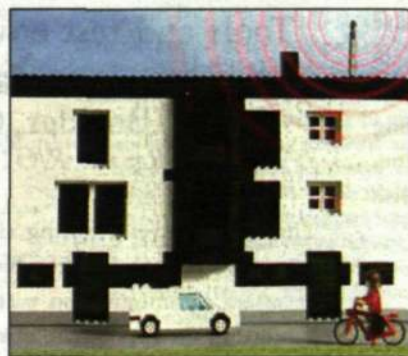


With the new work methods, customers now order the functionality that they require. Ericsson delivers standardized equipment directly to the site specified by the customer without relying on local inventories. Quality is improved, while saving time and money.

TTC, Time To Customer, is one of the most important issues for Ericsson right now. At issue is streamlining the supply chain and making sure that the time from order to delivery is as short as possible.



Didn't read the book?



See the movie instead! Much has been written and even more has been said about TTC. There's an easier way to find out what TTC is all about, however. On the intranet, you can watch a ten-minute video that provides an exemplary

hands-on description of TTC. Animated Lego characters take you through every step in the supply chain, showing you how it works today and how it should work tomorrow. Take ten minutes of your time and find out what everyone is talking about. The

film was produced by Ericsson corporate program TTC Global.
Patrik Lindén
patrik.linden@lme.ericsson.se
inside.ericsson.se/ttcglobal/communication/video.shtml

UPCOMING

June 18-23: ISSLS 2000 at Stockholm International Fairs. Ericsson and Telia are joint hosts of the International Symposium on Service and Local Access (ISSLS). Ericsson will have ten speakers at the symposium and both Kurt Hellström, Ericsson's President, and Jan-Åke Kark, Telia's President, will participate.

3-9 June 2000 CommunicAsia 2000 telecom exhibition in Singapore. Ericsson is participating in the annual tradeshow for the Asian region. Find out more on the Web:

www.communicasia-online.com

UPDATES

Ericsson has secured yet another 3G order. This time it is the UK Vodafone company, which has chosen Ericsson as its principal supplier in the UK.

None of Ericsson's employees in the Dutch town of Enschede received serious physical injuries as a result of the recent explosion at a fireworks warehouse. However, the homes of several employees were destroyed.

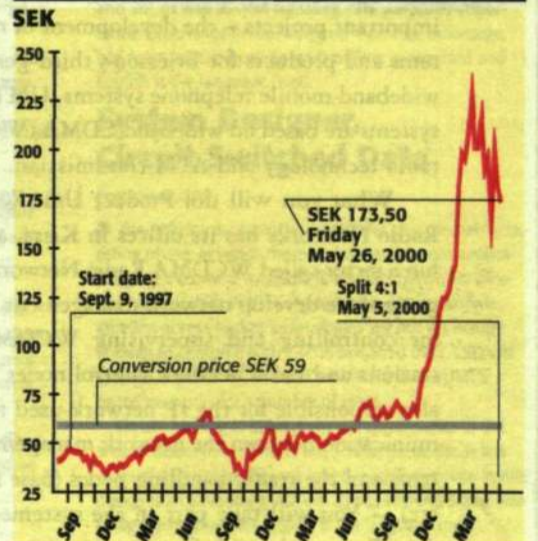
NEW ASSIGNMENTS

Reinar Ludwig, of Ericsson's Eurolab in Germany, has been appointed senior specialist in the area of Wireless Transport Protocols.

Håkan Johansson has become new head of Ericsson in Latvia. His most recent position was with Ericsson in Libya. In Latvia, he succeeds Bernth Söderström, who is retiring.

Lennart Adelstam becomes new head of Ericsson in Libya. He is transferring from the Wireline Systems business unit.

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>



SOCIETY

JUNE 2000

Social responsibility creates pride



Through Ericsson Response, which is a program within Ericsson's social marketing, Ericsson contributes to providing assistance more rapidly to disaster areas around the world.

Equally important as having excellent and technically advanced products for today's companies is to take social responsibility, according to customers, employees and society in general. A healthy and well-functioning society is also a prerequisite for business. Commitment on social issues is therefore of great importance for many companies, including Ericsson.

We are interested in being able to make Ericsson's experience and resources available for purposes that strengthen Ericsson's contribution to society," says Lars A Ståhlberg, director for Public Affairs at Ericsson. "Showing social responsibility is important, especially for our employees. Young people, in particular, want to work for a company that they can be proud of and that they know is a fair and responsible company."

Ericsson is not the only company to realize that something special is required – perhaps it could be called a heart – to attract and retain competent employees. Social efforts, however, do not only result in internal benefits.

"The government's resources continue to diminish, while social problems are becoming an increasing burden," says Jennifer Hilborn, who is responsible for social marketing at Ericsson. "Authorities, customers and consumers are therefore placing increasingly higher expectations on the private sector to contribute to development in the communities in which they are active, both locally, regionally and globally."

Consumers increasingly expect that the companies whose products they buy should distinguish themselves from other companies by acting responsibly. Studies show that in some countries as many as 94 percent of those interviewed would rather do business with 'good' companies than 'bad'.

Ericsson has elected to refer to its social commitments as social marketing.

"The word 'social' refers to Ericsson's goal of making the world a little better by applying the company's resources and assets to social problems. The word 'marketing' indicates that Ericsson is aware that social commitment will benefit the company by associating the brand with important issues. Positive effects include satisfied employees, better customer relations and greater profit," continues Jennifer Hilborn.

Last year, work was started to create a common platform for Ericsson's social commitment. The working group, which consisted of Jennifer Hilborn and Fredrik Jonsteg, identified two main areas for Ericsson's social responsibility, based on previous commitments. Firstly, Ericsson should work to improve con-

ditions in society using technology and the expertise that the company possesses. The ERICA Award, which was founded to help non-profit organizations take advantage of the Internet, is one example of this type of activity.

The second area is reconstruction when societies have been ravaged by natural disasters or catastrophes created by people themselves. With the support of local management, Ericsson employees in many parts of the world – Vietnam, Turkey and Venezuela are a few examples – have participated in social projects. This type of commitment was recently formalized in a special program called Ericsson Response for disaster relief in cooperation with the UN agencies UNDP (UN Development Program) and OCHA (Office for the Coordination of Human Affairs) and the International Red Cross and Red Crescent Federation.

"Our experience shows that assistance in the form of communications systems in disaster areas is one of the areas where we can do the most good," says Fredrik Jonsteg, strategic partner manager for Ericsson Response.

Henrika Lavonius-Norén
henrika.noren@lme.ericsson.se

www.ericssonresponse.com
www.ericsson.com/erica

Note: Read more about Ericsson response and the cooperation with the UN and the Red Cross in Contact 6/2000.

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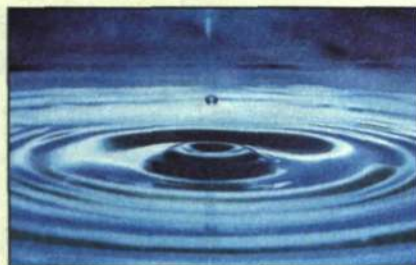


Photo: Bildhuset

Rings on the water

A large company like Ericsson naturally has an impact on society in many ways. The company, in turn, is dependent on society's laws, regulations and attitudes. Work is therefore in progress to clarify this interaction. How important is it for Sweden that Ericsson is successful? How much social responsibility should Ericsson be expected to assume?

Social responsibility is not a new concept at Ericsson. Over its 125-year history, the company has gone to great lengths to act ethically, promote environmental responsibility and to practice fair business methods. A recent report from a Scandinavian bank shows that Ericsson's importance to the Swedish economy has increased fivefold over the past ten years. Today Ericsson accounts for 15 percent of the Swedish exports and 2.6 percent of the country's GDP.

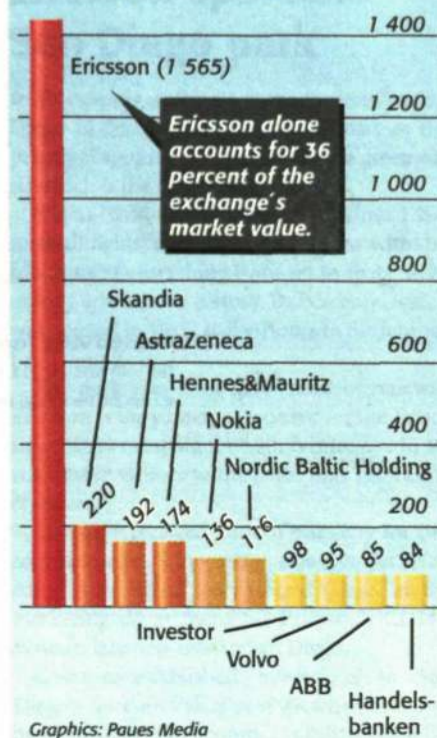
Since the ties are strong between Sweden and Ericsson we think that this supplement that is somewhat Sweden focused also will be of interest to a broader audience.


With this supplement, Contact will try to describe how Ericsson perceives its role in society. We have also interviewed politicians, public officials, shareholders and suppliers to get their views on Ericsson and how the company takes social responsibility.

www.ericsson.se/society

ERICSSON DOMINATES MARKET

The OM Stockholm Stock Exchange's ten largest companies in terms of market value on April 28, 2000 (SEK billions)





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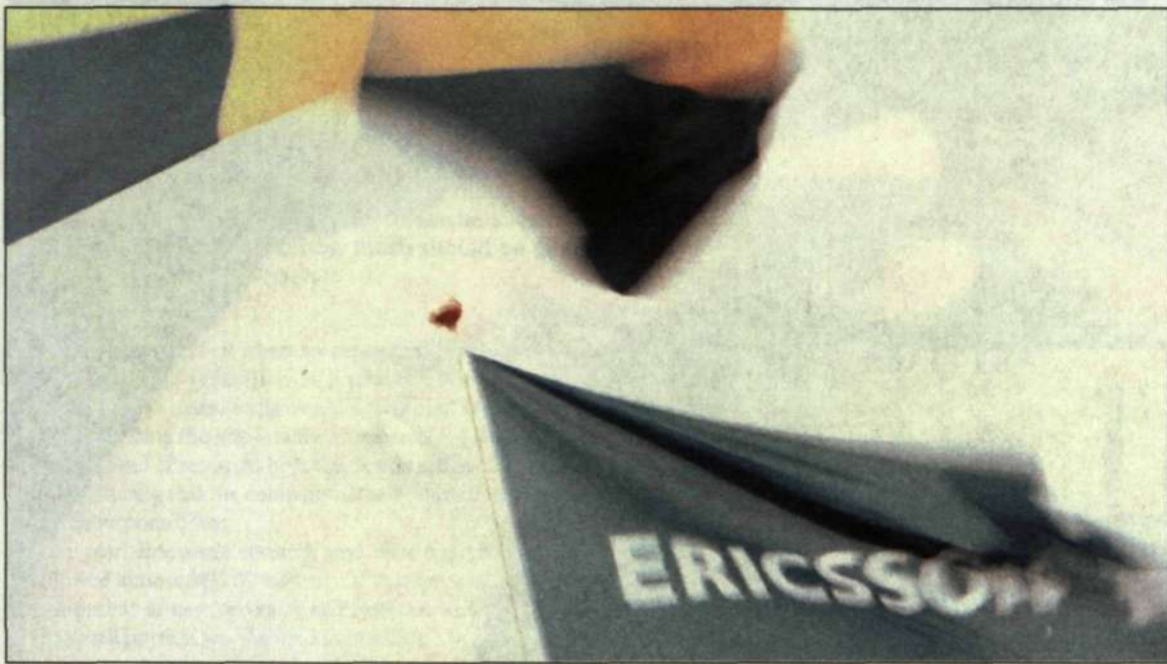
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Even though the Swedish market only accounts for a small share of sales, Ericsson has strong roots in Swedish society.

Photo: Mats Hallgren

Sweden and Ericsson – a mutual dependency

As an employer, a taxpayer, an export giant and the stock market mover, Ericsson is Sweden's most important company. This leads to questions about Ericsson's importance for society and its social responsibility. What social responsibility does Ericsson take and how is the company affected by society?

With about 16 percent of Sweden's total exports, Ericsson is the country's biggest exporter and larger than the Swedish forest industry.

Ericsson's Swedish companies are both large taxpayers and large tax generators for the country. With 46,000 employees in Sweden, Ericsson is also the largest private employer.

How many jobs are created at the sub-supplier level is almost impossible to calculate, but hundreds of thousands of jobs are involved.

Lars A Stålberg, who has been working with Ericsson's social contacts for some time, has initiated a project to gather material about how Ericsson and society interact. He is careful to point out that much work remains to be done and that he would prefer that independent researchers and economists took on the task of describing how companies and society affect each other.

What conclusions does Ericsson draw from the fact that the company is so important for the Swedish economy?

"It is a realization that makes us feel a broader responsibility for our operations. When we see that conditions for the company change in Sweden or that developments in society in some way weaken our ability to compete globally, we have to make this known at an early stage. Examples include when the educational system does not produce people with the qualifications we need or if tax regulations are unfavorable for Ericsson."

But isn't it more a question of working for the company's best, rather than taking responsibility for society as a whole?

"Yes, of course you can look at it that way. But there is also a mutual dependency. It is important for Sweden that Ericsson is successful."

Is being so large a disadvantage for Ericsson?

"No, not really. It gives us influence. We want to believe, anyway, that politicians and public officials take Ericsson into consideration when decisions are taken. We have many contacts with the government, the parliament and the authorities. We participate actively in official studies both under our own name and through various special-interest groups."

Can you give some examples?

"One example is the Swedish IT Companies Organization, which has participated in the debate leading up to the IT Bill, which was recently submitted to parliament."

Is there any disadvantage for Sweden in Ericsson being so dominant?

"Yes, I believe there is. Dependency on a single company leads to vulnerability. This applies nationally in the same manner as it did in the old mill towns that were dependent on a single employer. Big, strong companies are naturally good for the country, but it would be better if there were more of them."



Lars A Stålberg

Among the general public there is considerable trust in Ericsson as a secure Swedish company. How Swedish is Ericsson?

"Ericsson is a very Swedish company with strong roots in Swedish society. Even though the Swedish market only accounts for four or five percent of sales, we have our strongest resource base here, a large portion of production and more than half of our employees. The company's Swedish history also permeates the Ericsson culture, and that is something to be proud of."

Would Ericsson be able to achieve the same impact elsewhere?

"No, it would be difficult as a single company. On the other hand, I believe that communication between politicians and business generally functions more efficiently in many other countries, such as the US."

How does Ericsson view its global responsibility as regards the countries with which the company should do business, for example?

"We follow the ground rules of the international community. If a decision is taken to boycott a specific country, we follow it."

Shouldn't Ericsson make its own ethical judgments?

"Yes. At the most basic level, we are ourselves responsible for our operations. Our primary responsibility is to the shareholders, but in the long run, everyone wins if Ericsson is associated with sound values."

Would Ericsson invest in equality or environmental responsibility if it were not profitable?

"All investments can be defended as better business. We do not do anything that does not contribute to positive development of the company. This is not a question of portraying ourselves as more moral or more responsible. The point is that what we do affects society and that the two often go hand-in-hand. What is good for Ericsson is also good for society. From that perspective, this is a rewarding industry. The tobacco industry, for example, doesn't have it as easy."

Can't this be interpreted as meaning "Look at how large and important we are. Now do what we say"?

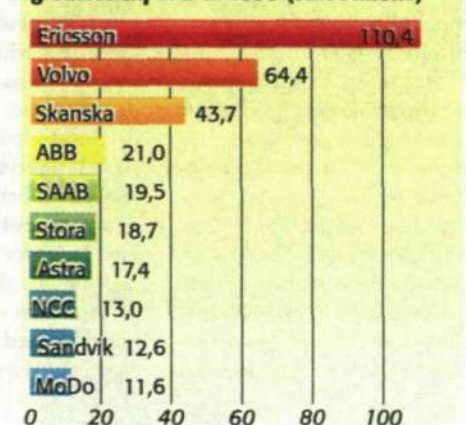
"We are open and try to be relatively modest, but if someone wants to look at it that way, that's up to them."

Maria Paues

contact@lme.ericsson.se

SWEDEN'S TEN LARGEST EXPORT COMPANIES

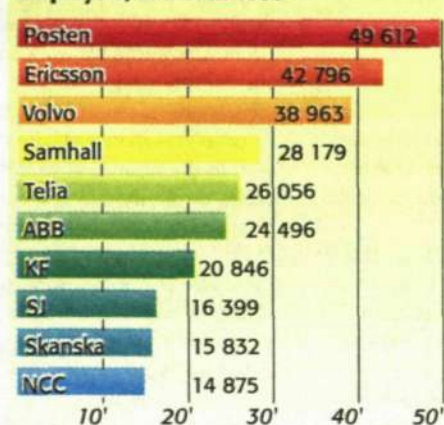
These were the companies with the greatest exports in 1998 (SEK billions)



(Source: Ekonomisk Litteratur AB) Graphics: Paues Media

SWEDEN'S TEN LARGEST EMPLOYERS

The largest employers, excluding public employers, in March 1999



(Source: SCB) Graphics: Paues Media



The undulating outer walls of the Guggenheim museum in Bilbao, Spain are covered in shiny titanium. The building's organic form is heightened through a combination of water reflections, glass and sand-colored stone. Photo: Erika Barahona

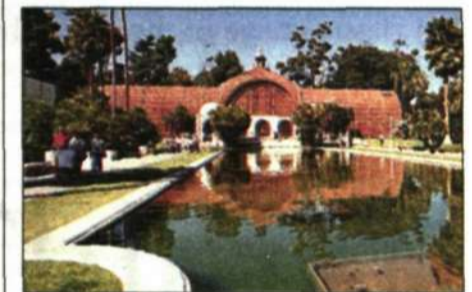
Creative design attracts young to art

► Going to an art museum should be just as commonplace as going to the movies or the theater. That, at least, is what the management for the renowned Guggenheim Museum in Bilbao, Spain believe. Exhibits are changed frequently and presented in an exciting way in order to attract a new generation of art goers.

Ericsson is one of 39 companies that sponsor the museum and is also involved in the museum's management to help determine which kind of modern art should be displayed. A total of 75 percent of the museum's operations are funded by private means – ticket revenues, shops and sponsorship.

The spectacular building, created by architect Frank O. Gehry, is an enormous tourist attraction in what used to be a heavily industrialized city. During the first year following its opening in autumn 1997, one and a half million people visited the museum – three times as many as anticipated.

"We still get over a million visitors a year, half of whom come from other countries," says communications subdirector Mikel Etxagibel at the Guggenheim Museum in Bilbao.



Ericsson is sponsoring Balboa Park, which is San Diego's cultural center. The park contains trees from all over the world, museums and the San Diego Zoo. Photo: Nils Sundström

Ericsson sponsors San Diego park

► Ericsson is making a name for itself in San Diego in Southern California, in part as the principal sponsor for Balboa Park, a green oasis which is the city's cultural center.

Balboa Park, which is the size of about 1,200 football fields, contains 18 museums with exhibitions of everything from art to space technology and natural history. Balboa Park, which was opened in 1915, is also home to the famous San Diego Zoo.

The park area is in great need of renewal. Ericsson is the principal sponsor for the Exposition 2000 campaign, which is intended to attract more visitors to the park, thus increasing revenues.

"We have received a lot of publicity for our commitment. Supporting this project feels completely right," says Cheryl Giese, at the marketing department for Ericsson's CDMA Systems business unit in San Diego.

Ericsson established operations in San Diego's Telecom Valley in 1999, when the company acquired Qualcomm's infrastructure division for CDMA technology. Today, about 1,300 persons work for the business unit, which has quickly become a well-known employer in the city.



Harald Jacobsson doesn't regret his move from academia to working at Ericsson Research.

Photo: Anna Rehnberg/Kamerareportage

The classic image of the researcher working alone in the lab has disappeared.

At least in industry.

Harald's smart move from academia to industry

Today, researchers are somewhat like spiders in a web, devoting most of their time to forming contacts with other scientists and institutions around the world.

Harald Jacobsson, a researcher at Ericsson Research, is part of a borderless research community that extends to other companies, institutions and universities throughout Europe.

When Harald Jacobsson chose to become a researcher after completing his civil engineering studies, it was because an ordinary nine-to-five job seemed boring. Being involved in the advancement of human knowledge seemed much more exciting. Knowledge for knowledge's sake was more attractive than working for industry.

Grew tired of academia...

However, after seven years of research and doctoral studies at Chalmers Institute of Technology in Gothenburg, Sweden and two years in the US, Jacobsson grew tired of the academic world. Industry and its opportunities beckoned, and he came to work for Ericsson Microwave Systems in Mölndal.

For the past three years, Harald Jacobsson has been involved with the EU's Beta project, which is evaluating the viability of silicon germanium technology in integrated circuits for microwave applications. The EU is funding half the cost, with the remainder coming from participating companies.

The technology's biggest advantage is price. Silicon germanium microwave circuits are expected to be several times cheaper than circuits made using existing technology.

"If we can reduce the cost of microwave circuits, we can lower the price of the products we manufacture today and, over time, develop completely new applications," says Harald Jacobsson. "The technology is especially well-suited for broadband applications. For example, over time we will be able to design radio terminals that are so inexpensive that anyone can buy them and have a wireless broadband connection directly into the home."

Harald Jacobsson's work on the Beta project has included numerous tasks. Long spells in front of the computer and demanding work of designing microwave circuits have been interspersed with months of lab testing of finished circuits.

Mostly, however, his work has involved establishing new contacts. As the head of one of the work units in Beta, Harald Jacobsson has devoted a large portion of his time to contacts with other researchers at companies and universities that are involved in the project. Over the three years, there have been numerous telephone calls and countless e-mails.

Despite the fact that it can be difficult to find time for his own research, Harald enjoys playing the role of spider in the web.

"It's incredibly educational to work closely with other companies and gain insights into how they do things. In this industry, not everything is based on logic or science. People go on instincts and beliefs, and it's therefore valuable to get ideas and suggestions from others."

Informal contacts have been created during the course of the work, and information and knowledge has started to flow across

company boundaries, which is precisely the EU's goal with Beta and other similar projects. When companies start working together and sharing experiences with each other, their competitiveness is strengthened. European industry must not be left behind by US and Asian competitors.

...but still misses it a little

Harald Jacobsson is satisfied with his role as industrial researcher. He doesn't regret leaving the academic world. Today, a large portion of his job involves teamwork and conducting projects together with other researchers. At the university, it was easy to become isolated. There were only a few people in the entire world, who were interested in the narrow area of research that Harald had chosen to specialize in.

"Of course, you can question whether it is meaningful to develop technology that makes radio links more inexpensive. Despite everything, there is something appealing about the motivation behind academic research, namely that of advancing human knowledge. Sure, more inexpensive radio links and broadband for everyone is a positive thing, but is that really better for humanity? There's a much greater distance to technology at the university, where you don't know what the results might be used for. It could be a product that truly saves lives," concludes Harald Jacobsson.

Niclas Henningson
freelance journalist

Research for profit and good

The question is the same as always: How much university research should be dictated by researchers' own curiosity and interests, and how much should be directed towards improving society?

"Research is key. This is where we create the knowledge we need to build the next generation of products. Without research, activity in the business units would slowly die," says Bernt Ericsson in describing the importance of research at Ericsson.

As the head of research, he is the person ultimately responsible for ensuring that the company actually shoulders that heavy research responsibility.

Last year, Ericsson's research and development operations swallowed almost SEK 30 billion. Of that amount, was for the development of new products and systems, while only a relatively small portion was devoted to research.

Important source of information

The figures do not, however, tell the whole story. Ericsson's research activities are an outwardly directed effort that cannot be kept hidden behind the company's closed doors. Much research is conducted in collaboration with universities around the world.

"For basic research, we rely primarily on universities," says Bernt Ericsson. "What is done within the company should be more applied research. An important element in our research is to harvest new research findings from universities and test applicability to what we're working on."

Collaboration with the academic world can occur in many different ways. Sometimes it involves Ericsson employees who are industrial graduate students devoting part of their time to research at universities.

Other times, collaboration involves sponsoring professors and graduate students employed by universities, or conducting independent research projects in collaboration with a particular institution.

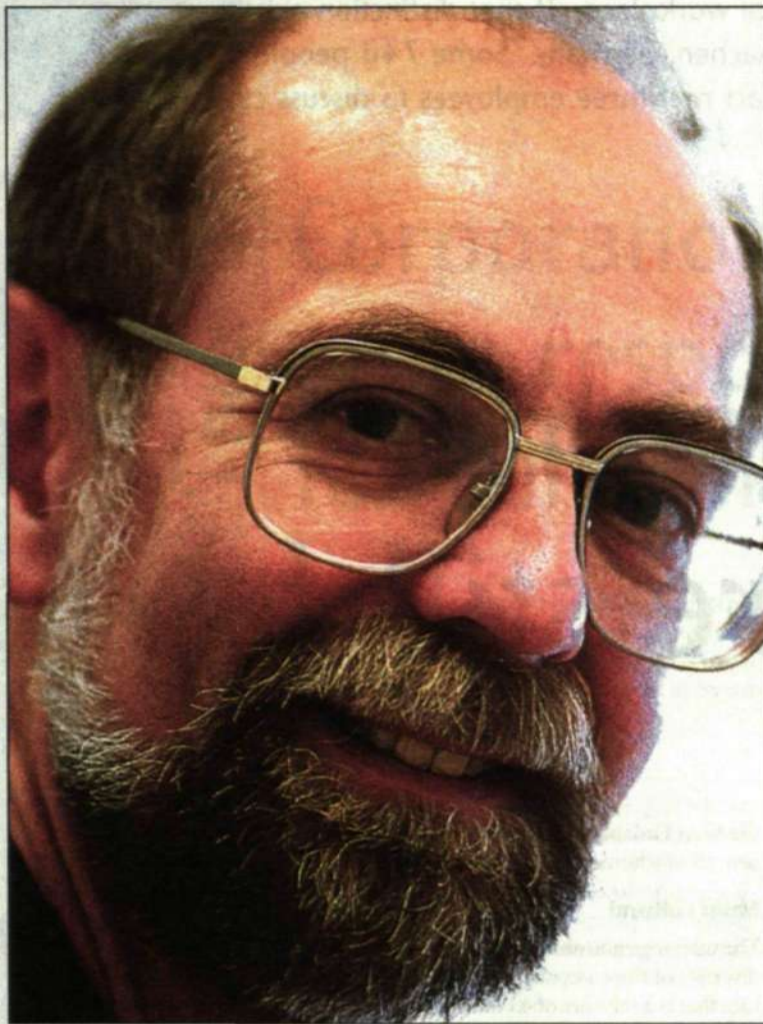
"It's important to note that this does not involve any direct control of research," says Bernt Ericsson. "As the financier we, of course, have many opportunities to exert influence, but it is our policy that the joint research we conduct with universities should be developing for both parties."

Whether or not it is able to exercise control, Ericsson's goal is absolutely clear. It is all about trying to stimulate research in areas that are relevant to Ericsson.

Self interest

Of course, it is a question of self-interest. By having access to new knowledge, Ericsson can make products more competitively and more profitably. There are two sides to the coin, however, according to Bernt Ericsson. Through joint research efforts, Ericsson also contributes to increasing the value of research for society.

"From society's perspective, our most important role is to



Bernt Ericsson, Head of research

Photo: Lars Åström

encourage new thinking in academic research. The emphasis should preferably be on obtaining useful results. Because research is financed by public funds, it's reasonable to ask that work produced at universities can be commercialized, resulting in new tax revenues."

Minister supports cooperation

Thomas Östros, Sweden's Minister for Education and Science, is responsible for the nation's universities and university colleges.

He speaks favorably about cooperation between industry and academic research.

"We're very fortunate here in Sweden. In relation to the number of inhabitants, we spend more than any other country on research and development. And that's largely thanks to industry. Two thirds of all research funding comes from companies," says Thomas Östros.

However, when it comes to the influence of industry on aca-

demical research, he is more cautious.

He sees a clear risk in letting industry become too involved in controlling research. Universities need to be free to seek new knowledge.

"Research must not become overly focused on matters of interest for today's industry, especially since we don't know what the needs of future companies will be. If we focus too much on existing industry, we run the risk of missing new ideas", says the Minister.

Bernt Ericsson agrees, even if he believes that there should be a much larger place for industry than there is today.

"I'm not worried that independent research will not get what it deserves. The problem is rather just the opposite. Applied research has been given a poor reputation and often has to argue very hard to justify its case."

Niclas Henningson

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The world record for a multicultural workplace. If that distinction existed, it would go to Ericsson's Eurolab in Aachen, Germany. Some 740 people from 43 different nations work there. Contact met three employees to discuss cultural interaction and culture clashes.

"Sure, diversity enriches, but we're still fairly similar"

Ericsson is one of the most multicultural companies in the world. Among the company's 100,000 employees, 3,400 people from 70 different nations work on foreign contracts. The majority work in the US, followed by Sweden, then Japan. Only Shell oil company sends more people on long-term contracts.

As the IT society becomes more prevalent and companies become increasingly globalized, expertise is of paramount concern, not nationality. In addition, many managers find that having staff with varied backgrounds adds to corporate creativity.

Ericsson's Eurolab in Aachen is a good example of a multicultural working environment. Contact wanted to find out what it is like working with colleagues from different parts of the world. What can be learned? When is it frustrating?

These were among the issues discussed by Karthik Krishnamurthy from India, Leena Mat-

tila from Finland and Andreas Westh from Sweden, all of whom work at Eurolab.

Multi cultural

The working environment at Aachen reflects the diversity of the company, with a workplace culture that is a mixture of 43 different cultures.

"Fundamentally, the organization incorporates the Swedish Ericsson culture, but adds an interesting mixture of various other cultures on top of that. This results in an environment that fosters socially open-minded individuals who are curious to learn more about each other," says Leena, a systems designer.

She adds, "From a work standpoint, we contribute with different ideas from all over the world. If I think a solution or method we used in Finland is better than one we're using here, I can always suggest a change. We view problems from different perspectives and most people contribute with their creative ideas."

But cultural interaction is not always a bed of roses. In some countries, for example, saying 'maybe' really means 'I don't have time' while in other cultures it means 'I'll do my best to get it done on time.'

Aren't there ever any misunderstandings or culture clashes?

"Well, of course you have to adapt somewhat to people with different cultural backgrounds and try to understand how they think," explains Karthik. He works as a software designer for GSM and third-generation mobile networks at Eurolab.

"But new employees blend into the environment fairly quickly. I work with a number of Italians who are used to a very hierarchical organization. For them, it took a while to get used to the new, more open and straightforward culture," he says.

Leena has had similar experiences. "Culture

clashes are to be expected. To avoid spending a lot of time discussing how we should get the work done, we usually follow given routines."

Overall, they see mostly advantages to working in a multicultural environment. "The openness that prevails at Ericsson makes you much more straightforward and direct, which initially feels strange. But you quickly learn, for example, not to take criticism personally," says Karthik. "It's actually much easier to work if everyone is up-front," he adds.

"I've gotten to know people from many different countries, which makes it easier to apply for jobs at other Ericsson companies worldwide. I've also made many new friends who I plan to visit when I have the chance," says Karthik.

Socialize more

Andreas, who currently works as a project manager, says, "Eurolab feels even more multicultural than many workplaces at Ericsson in Kista, which is where I used to work."

Does a multicultural company build bridges between various cultures? Is it true that people begin to socialize, even during their off hours, with people whom they would otherwise never get to know?

"Generally speaking, we socialize much more here than what I'm used to from previous workplaces," says Karthik. "The fact that the company organizes various activities helps a lot in taking the first step, to begin talking about things other than work. I've been invited to the homes of many of my colleagues, which means a great deal, especially when you're new."

He continues, "I think the fact that we all work in the same building helps people to get to know each other more rapidly."

Should you return home again, are there any lessons to be learned from your experience abroad?

Andreas is the first to comment, "For one thing, I'm very happy here, so I don't know if or when I'll move back. Aachen is ideally situated and almost every weekend I'm off to one of the neighboring countries on an outing. Working here has put my home country, Sweden, into a completely new perspective. I see things more clearly, such as the advantages and disadvantages of living in Sweden. Moreover, I understand other cultures much better now."

"Culture is important, but it isn't everything," concludes Karthik. "Deep down, we're all fairly similar."

Ulrika Nybäck

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At Ericsson's Eurolab in Aachen, Germany, there are 43 nationalities represented among the 740 employees.



The multicultural workplace attracts and fosters curiosity and openness among employees, while giving new perspective to one's home country. But deep down, people are all fairly similar. These are some of the conclusions and thoughts that Karthik Krishnamurthy, Leena Mattila and Andreas Westh expressed during a conversation at Ericsson's Eurolab in Aachen, Germany. Photo: Ulrika Nybäck

Corporations bear great responsibility for cultural interaction

Politicians and corporate leaders are notorious for their rhetoric on the advantages of the multicultural society, on how people with diverse backgrounds enrich both society and business. This diversity fosters creative ideas and solutions. Why then, are so many well-educated immigrants unemployed in Sweden?

Is it due to the fear of the unknown? And whose responsibility is it to provide solutions, business or the government?

Representatives from the National Integration Office, Multi Mind recruiting agency and Sesam magazine, which are primarily aimed at immigrants, provide somewhat different answers to these questions.

Johan Dann, head of recruiting at Multi Mind

"Having a job is a prerequisite for entering into society, but companies will always employ those who are best suited for the job. Our business concept is to help them do just that."

Multi Mind is a newly formed recruiting agency that specializes in assisting companies to hire employees with multicultural experience. Leo de Bruin, the company's founder, came up with the idea for the new company after working at Ericsson in Kista together with colleagues from 17 different nations.

What do you think about the future? Is the integration issue a problem that will solve itself?

"Yes, I think that this is largely a generational issue. Look at today's education programs - they almost always include overseas training. Companies are also becoming more global and there is a shortage of engineers, for example, so they have to recruit based on skills and not according to skin color."

Should politicians and government authorities take greater responsibility for these issues?

"I don't believe in quotas. Politicians need to create a favorable environment for a multicultural society. Actually, I think that demand in the marketplace will solve this problem."

Jolin Boldt, editor in chief for Sesam magazine, aimed primarily at immigrants

"This is an issue for society as a whole, not just for business. I believe that government authorities could take on more responsibility than they do today. The National Integration Office has recently done some good things, such as studies on the current situation."

What do you think about the future? Is the integration issue a problem that will solve itself?

"No, I don't think so. All of society needs restructuring, especially the prevailing scepticism against new thinking. We are clinging to out-

dated structures that no longer work. This type of thinking is what makes it difficult for immigrants to enter the workforce."

How important are cultural encounters in the workplace?

"Very important! Naturally, it's positive to get to know people from other cultures, but it is nonetheless surprising how many people are closet-racists. I'd like to kick all immigrants out of the country, except for Ali, Johan and my adopted daughter, of course..." But the longer that list gets, the better, of course.

"Ericsson and other large IT corporations are good examples of companies that don't seem to care about a person's ethnic or racial background when they hire people."

Ann-Marie Egerö, press spokesperson at the National Integration Office

How important are cultural gatherings in the workplace?

"Diversity enriches and creates a climate that allows new ideas and solutions to take root. You can't operate under the assumption that someone with a strange last name can't cooperate with Swedes, as many do today."

What do you think about the future? Is the integration issue a problem that will solve itself?

"I believe that prejudices will diminish, but it will take time. Remember, when Sweden was an agrarian society only one or two generations ago. For many Swedes, the key words of honor are order, control and homogeneity. Young people in big cities have a completely different attitude towards immigrants than many other groups in society."

What role do companies play in ensuring that immigrants get jobs in the Swedish workplace?

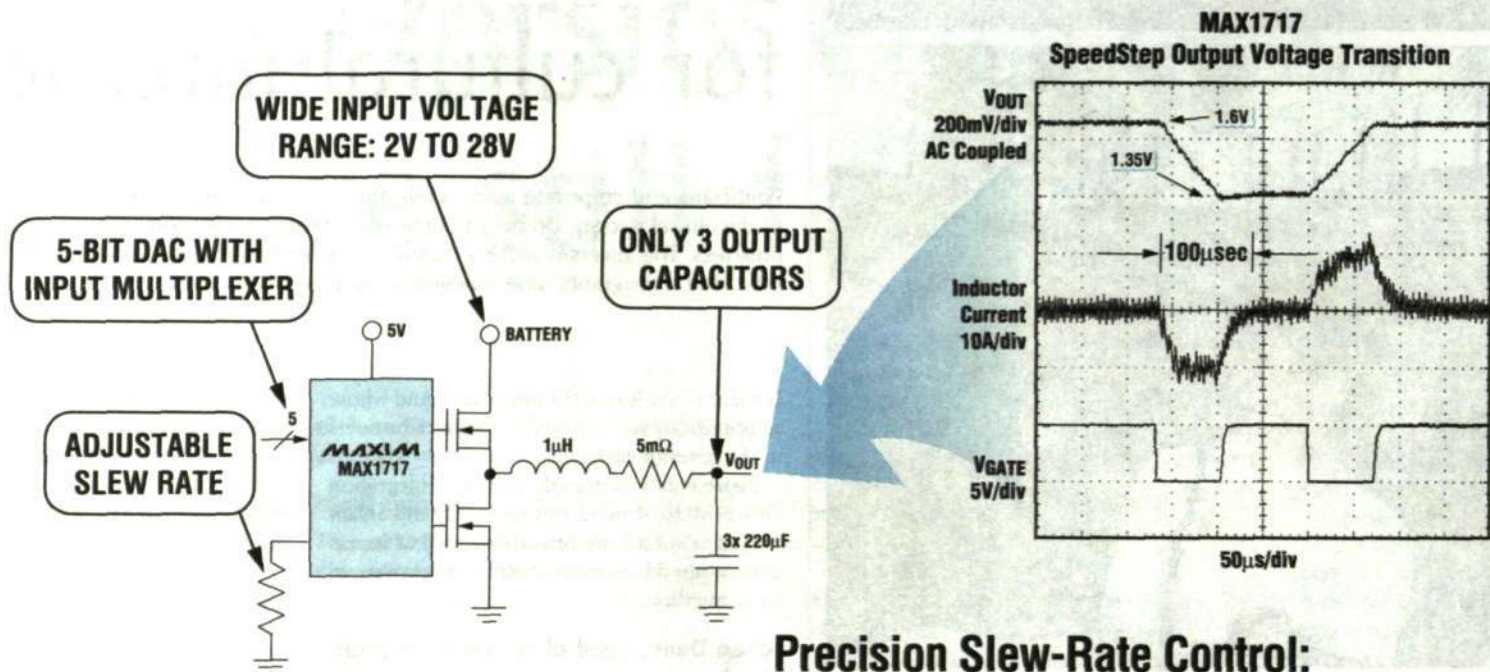
"Business is better than government authorities at enriching its operations with employees from other countries."

"There's already a law that says that companies in Sweden are not allowed to discriminate against people on the basis of their origin. Employers have to look at qualifications and not skin color. However, the new law has barely been tested yet and it's difficult to prove that one person is more competent than another should an individual case go to trial."



Jolin Boldt

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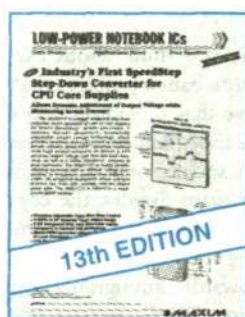
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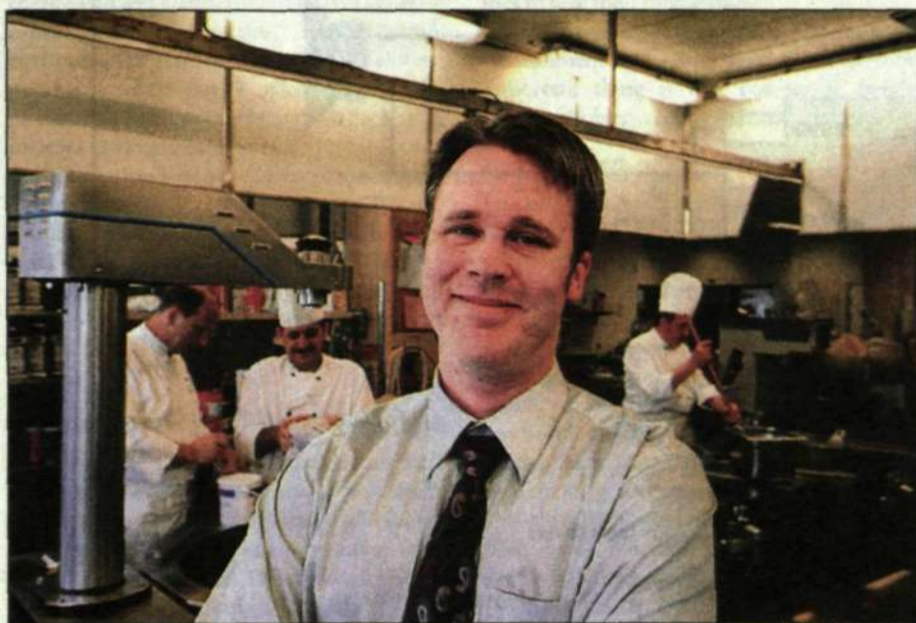
Kenny Wengelå and Kaj Brolin conduct quality control on a piece of flooring.

Photo: Matz Larsson



Lotta Jansson, of Bennett Travel, assists Ericsson employees with their business trips.

Photo: Lars Åström



"We serve 30,000 lunches each week to Ericsson employees," says Per Seldee of Amica.

Photo: Lars Åström



Ericsson has outsourced production to Emerson Energy Systems. Bengt Thyrsön explains that Emerson, in turn, relies on subcontractors.

Photo: Patrik Sköld

Ericsson helps create many jobs

Every Ericsson unit helps to create numerous jobs at other companies. These include subcontractors, suppliers to subcontractors and various companies within the service industry. Ericsson employees have children in daycare, shop in stores, eat lunch at restaurants and take taxis to the airport. Among direct subcontractors, for example, it has been calculated that Ericsson employs approximately 18,000 people in Sweden, and around 52,000 throughout the rest of the world. Moreover, it has been estimated that every Ericsson employee generates employment for another three people. That means that Ericsson indirectly creates about 300,000 employment opportunities worldwide.

Emerson Energy Systems

Emerson Energy Systems has 600 employees at its Kungens Kurva facility just south of Stockholm, another 1,000 in Söderhamn, and almost one thousand more in various markets around the world. The company develops, manufactures and supplies power supply equipment for both fixed and wireless telephony networks.

"Ericsson is, without a doubt, our biggest customer," says Lars Björkström, information manager at the company's worldwide headquarters in Kungens Kurva, which is also the site of its design and development unit. "Approximately two-thirds of our annual sales are Ericsson-related."

In Söderhamn, Emerson Energy Systems is one of the dominant employers, both directly and indirectly.

"In addition to our own employees, we also bring in employees from temporary agencies to fill in during peaks, plus we're also currently hiring a number of new part-time employees," says Bengt Thyrsön, information manager at the Söderhamn plant, which also regularly subcontracts out work.

The company, which previously belonged to Ericsson Components, was recently sold.

"As part of Emerson Electric, with power supplies as the core business, we now have new

and greater opportunities to develop and broaden our contact base with new customers," says Lars Björkström. "But within this field, the Ericsson contract is one of the most sought after, so our relationship with Ericsson will continue to be of great importance in the future."

Bennett travel agency

Bennett BTI is one of the world's largest business travel agencies. The company is the travel supplier for numerous Ericsson units in Sweden. Each year, the company books around 40,000 trips for about 5,000 Ericsson employees.

"We're supposed to find the lowest possible prices, within certain guidelines, depending on the time. New since last year in our contract with Ericsson is a clearer focus on service combined with cost-efficiency," says Lotta Jansson, head of Bennett's Ericsson office in Älvsjö, south of Stockholm.

A total of 28 people work here, handling all aspects of Ericsson travel via air, rail and boat, as well as visas.

Bennett's office in Älvsjö would not exist if it weren't for Ericsson, but in terms of Bennett as a whole, Ericsson is not the company's biggest customer, although it is significant.

"It's fun to work with Ericsson," says Lotta Jansson. "We have a good and stable relation-

ship where almost everything works smoothly."

"What affects us the most is when new travel patterns arise as a result of changes within Ericsson, such as when units are bought or sold, when operations are moved between companies, countries or parts of the world. Usually, this occurs with rather short notice, so we often have to quickly adapt in order to meet new requirements. For example, a sale can result in the immediate loss of an entire group of customers. The most recent example was the sale of Energy Systems to Emerson Electric."

Amica

Amica servers close to 30,000 lunches a week to hungry Ericsson employees. The company operates a number of lunch restaurants within various Ericsson environments, including the Midsommarkransen headquarters, where it also operates the executive dining room. Amica is the Nordic region's largest restaurant chain with over 1,000 restaurants. The five Ericsson restaurants employ around 100 employees.

"We're a family-owned company that bases its operations on long-term relationships. Ericsson is one of our biggest customers, and a challenging but fun partner," says Per Seldee, group manager for Amica's Ericsson restaurants.

"We're constantly being forced to perform at our absolute best. It's difficult and challenging to try and surpass customers' expectations day after day, but for the most part we think that we're succeeding."

The daily specials account for roughly 60 percent of sales at the employee restaurants, with the remainder consisting of things like afternoon coffee, official dinners, conference services and the like.

Amica also operates several conference centers, which are often used by Ericsson. More-

over, Ericsson employee lunch vouchers are valid at a number of Amica restaurants around Sweden.

Bergvik Flooring

Bergvik Flooring, headquartered in central Sweden, manufactures and supplies technical flooring and workbench tops. A total of 25 people are directly employed and just as many are employed as subcontractors.

Ericsson and Bergvik Flooring have been collaborative partners since 1992. Bergvik Flooring is responsible for a significant portion of all raised floors and earthquake supports supplied to Ericsson's radio base stations, telephone switches and control rooms.

"Currently, Ericsson accounts for 35 percent of our sales," says Kenny Wengelå, executive vice president of Bergvik Flooring. "Ericsson places exacting demands for short lead times and a high degree of delivery precision, and we believe that we have lived up to those expectations."

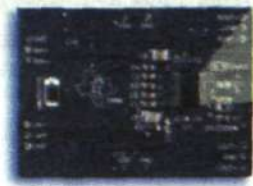
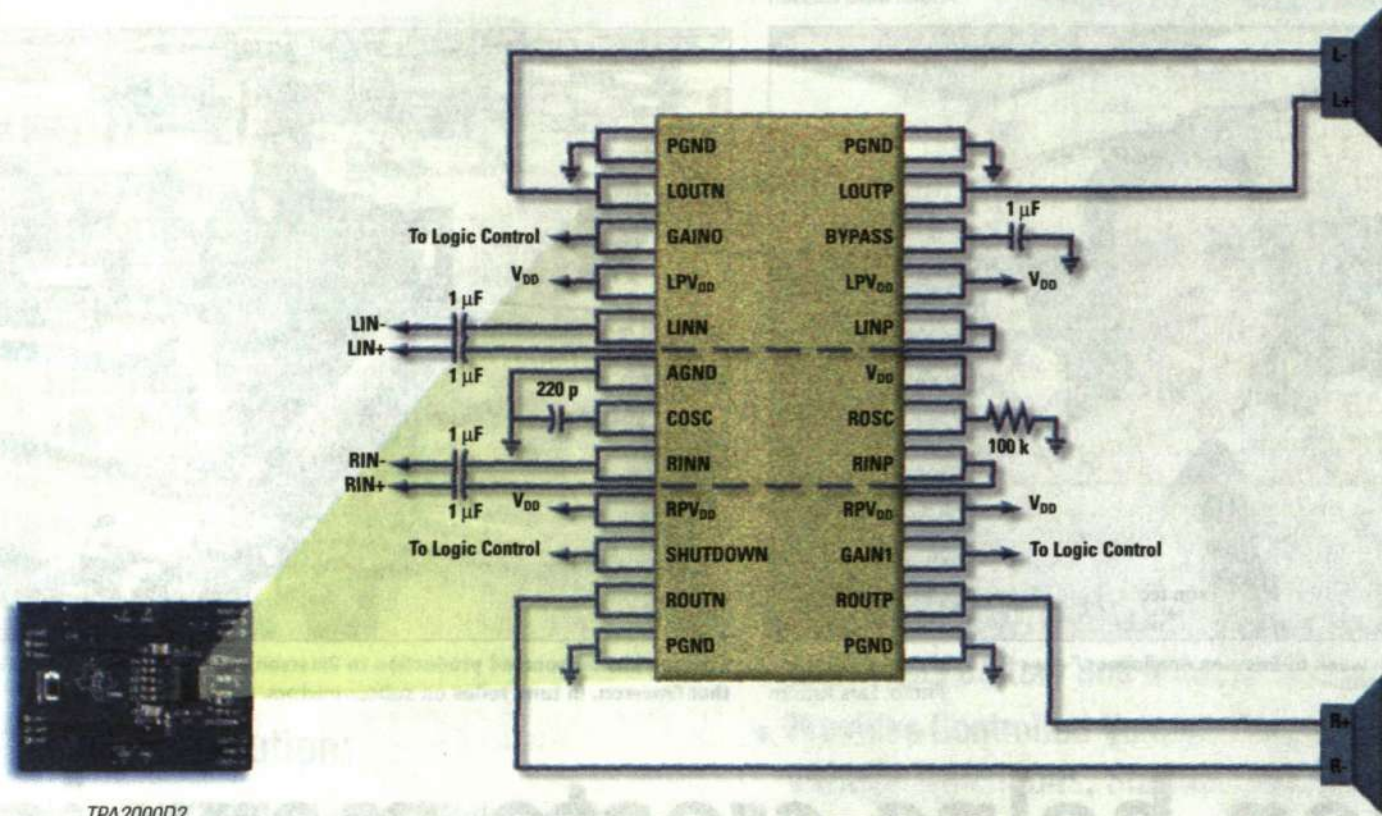
Bergvik Flooring is, to a greater degree than many of Ericsson's other subcontractors, in direct contact with Ericsson's overseas operations. A large number of deliveries are sent directly to various installation projects.

"Our relationship with Ericsson is important to our operations, and that relationship is growing stronger as we collaborate on product development. When it comes to equipment for earthquake protection, Ericsson is one of our leading customers. This product is also the result of joint development work," says Kenny Wengelå.

"We also expect that the telecom industry will further increase in importance to us."

Kari Malmström
freelance journalist

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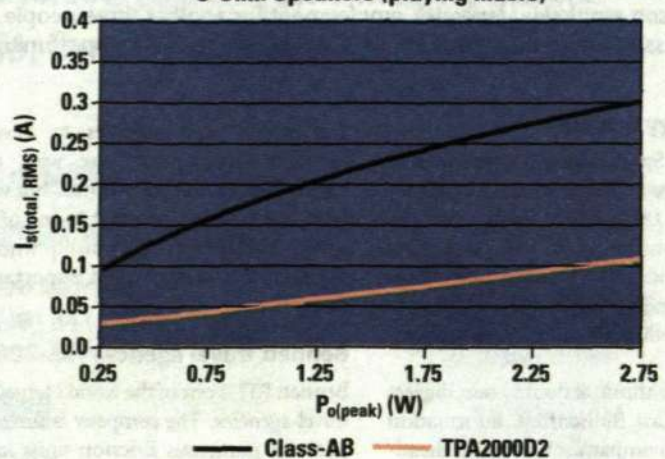
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The quiet revolution

When Ericsson describes its environmental work, it is not primarily a question of minimizing emissions from its plants. Substantial progress has already been made on that front. Now the company is setting its sights on creating energy-efficient IT solutions to address major global environmental problems.

The world's environmental problems can be briefly summarized: energy consumption. We use too much energy, mainly fossil fuels, whose primary effect is carbon dioxide emissions, with global warming as a result.

"The only way to reverse the trend is to find energy-efficient alternatives to today's wasteful consumption of resources," says Ericsson's environmental manager Mats-Olov Hedblom.

"This is where our IT solutions enter the picture. We have an important role to play in society's environmental work."

The question is how well known this work is outside Ericsson.

It is often said that society places increasingly stringent demands on companies to take responsibility for the environment, but according to shareholders with whom Contact has talked, this is not a concern when they buy shares.

Environmental responsibility important

"I believe that Ericsson and Sweden are very advanced in environmental work," says shareholder Margit Ahlgren. "If Ericsson was shown to be involved in a major environment scandal, I would sell my shares. Otherwise, I assume that the company is doing a good job."

Björn Magnusson is another Ericsson shareholder with similar views.

"I do not perceive Ericsson as being at the forefront with respect to environmental profiling, but I assume that the company is taking its environmental responsibility. I usually check the annual report to see if Ericsson has an environmental policy."

Victoria Häggström, 25, is one of the company's younger shareholders. She is studying economics and considers herself environmentally aware in her daily life. She relates that she also does not take environmental issues into consideration when buying stock, but that she nonetheless considers it important for companies to take their responsibility.

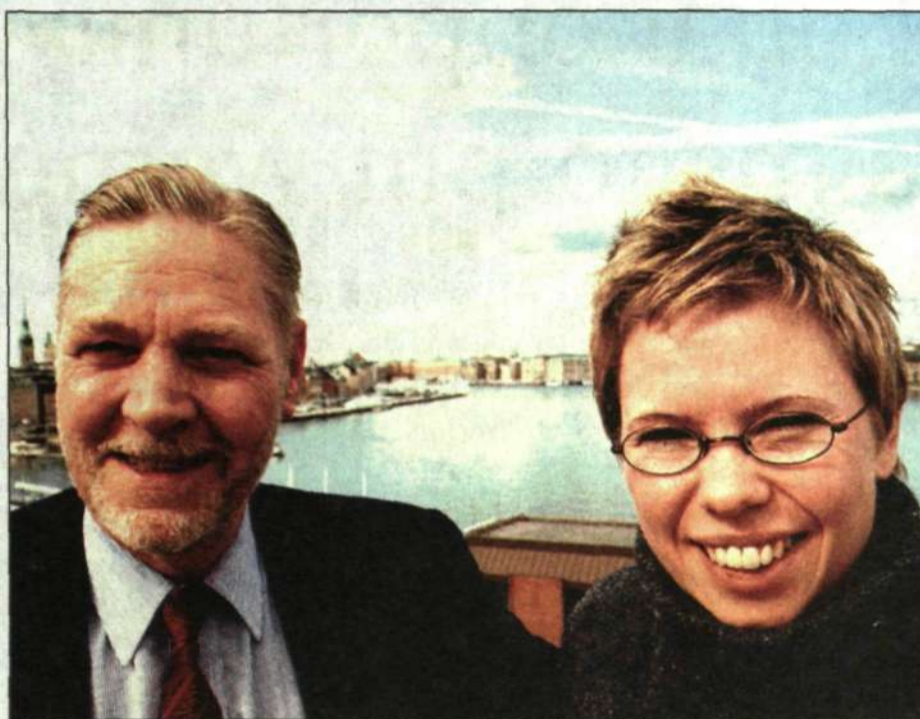
"Companies must show that they take the environment and ethics seriously. The most important thing is that companies handle existing problems correctly," says Victoria.

Just the start

Few people seem to be aware of the role that IT may play in the future. Yet Ericsson has solutions for many of today's environmental problems and is moving from words to action.

For the past year, Ericsson has been participating in a project in Nacka Strand outside Stockholm. A completely closed society consisting of companies and about 100 residents has begun to share resources using a car pool, rented bicycles, common transports, video conferencing equipment, a virtual taxi stand and other high-tech solutions, all of which are based on IT, Bluetooth, WAP and other Ericsson technologies.

This is just the start. Several municipalities



"Environmental issues are really not something that we think about when we buy shares, but we assume that Ericsson is taking environmental responsibility," say Björn Magnusson and Victoria Häggström, who both own Ericsson shares.

Photo: Jezzica Sunmo

are considering environmental communities. This is not only about green issues, but about saving money, increasing flexibility and generally increasing the quality of life with the support of IT. The more profitable green solutions become, the greater the probability that they will succeed.

That Ericsson should try to develop more

power-efficient switches, radio base stations and telephones is self-evident. These advances are closely linked to technical development and Ericsson's business plan. In the same manner, toxic substances are being eliminated from all products.

Lars Cederquist

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Knowledge thrives in Ericsson's melting pot

Ericsson is an attractive employer for anyone who wishes to develop his or her personal skills. The company is combing the globe for top talent and the sharpest minds. Knowledge, however, also flows from the company back to society and the educational system. This interaction benefits all and blurs the distinctions between the company and society.

"We all say, for example, that only the best should work for us, but this does not mean that everyone should be an Ericsson employee. Contacts with customers, suppliers, consultants and society as a whole are becoming more extensive and open," explains Per-Olof Nyquist, who is responsible for competence development at Ericsson.

What has happened is that the enormous melting pot that is the data, telecom and media industries is creating a new knowledge climate. The companies on the very leading edge, of which Ericsson is one, are contributing to creating tomorrow's technology. This is a technology for which no curriculum or courses exist.

Collaboration between cultures

Traditional knowledge based on university training or courses is now only one part of learning. People need to be where things are happening to keep their knowledge fresh.

"Most advances today occur in contacts between people and in new projects," notes Per-Olof Nyquist. "This applies to both technology and the increasingly important knowledge of markets and business. Ericsson is active in 140 countries, and the daily collaboration between different cultures promotes personal development. We also work informally in many projects. We look for the prime movers, those who

jump at the chance to take on new challenges and have great development potential.

"Developing your own skills is a necessity at Ericsson, and that often means daring to change jobs," continues Per-Olof Nyquist, who himself had a completely different background before changing to human resources a year and a half ago. This naturally places high demands on the individual's ability to take initiatives.

Hot spot

Stockholm has been singled out as one of the world's three hottest regions with respect to the new integrated information and communications technology. The others are Israel and Silicon Valley in the US.

Stockholm can in large part thank Ericsson for this position. Or perhaps Ericsson and Nokia, if the Stockholm/Helsinki axis and the competition between the two cities are seen as a driving force.

Lars Cederquist

"High competence is very important for Ericsson. Knowledge, however, does not stay with us, but also flows back to society and the educational system," says Per-Olof Nyquist, who is responsible for competence development at Ericsson.



Photo: Lena Widegren

Equal opportunity work aims to put women into top spots

Thirty percent of Ericsson's employees are female. Yet only 15 percent of managers are female and only four out of Ericsson's 120 company presidents are women. Moreover, not a single woman sits on the board of directors.

Ericsson is from time to time criticized for not having more women in key positions or, more simply put, of not being an equal opportunity employer. While it is impossible to deny the fact that Ericsson, like the rest of the IT and telecom industry, is male dominated, Ericsson has been actively working on equality issues, trying to change attitudes – even though that can take time.

"In an increasingly competitive world, we need to attract, retain and develop the very best employees. We can't afford to overlook one-third of the employees or half the population, simply because they are women," says Göran Whitlock, head of equal opportunity issues at the executive management level.

As the company expands, more young, well-educated women are being hired. The percentage is increasing by half a percentage point each year.

Consideration of peoples' needs

In order to attract the best women and men, Ericsson needs to be a good employer.

By offering flexible work times and telecommuting opportunities, consideration can be given to the various needs and requirements that different people have for quality of life. Good opportunities for skill development and career advancement are also attractive.

Collaboration with universities and mentoring programs are becoming increasingly commonplace. Ericsson in Mölndal won the Ericsson European Equality Award in 1999, which was instituted last year, for their collaboration with Chalmers Institute of Technology in Gothenburg, and their mentoring program for female managers.

"The network and community that has been created is the strength of the program. It meant a lot to be able to meet with other female managers in an unpretentious and open atmosphere," says Agneta Lundin, one of the unit heads of the male-dominated defense products business unit at Ericsson Microwave Systems.



Agneta Lundin

She was one of 14 participants in the mentoring program last year, and is now one of three female managers who are themselves mentors for this year's program.

"Despite the fact that a world dominated by men can generate a certain kind of jargon and a macho atmosphere, I think I've had a very good and fun working career. That's why I consider it my responsibility to help out other young, female managers," says Agneta Lundin.

More fathers take paid leave

Another effort to increase equality at Ericsson is a parental salary that was introduced last year throughout most of Ericsson in Sweden.

The program consists of Ericsson compensating parents for a certain portion of the loss in income they would otherwise experience while on parental leave.

With this new parental salary, the number of

fathers at Ericsson taking parental leave has increased significantly, and has confirmed Ericsson's belief that fathers and mothers should have the opportunity to take parental leave while children are small.

In general, as men and women earn more than women and the loss of income is therefore larger for them, mothers tend to take a greater proportion of the parental leave.

"We consider those units within Ericsson that have invested in parental salaries as models in the field of equality. Today, young men and women experience a high degree of equality up

until the point at which they have children. Then something happens," says Raija Louavaara, press secretary at Swedish Office of the Equal Opportunities Ombudsman (JämO).

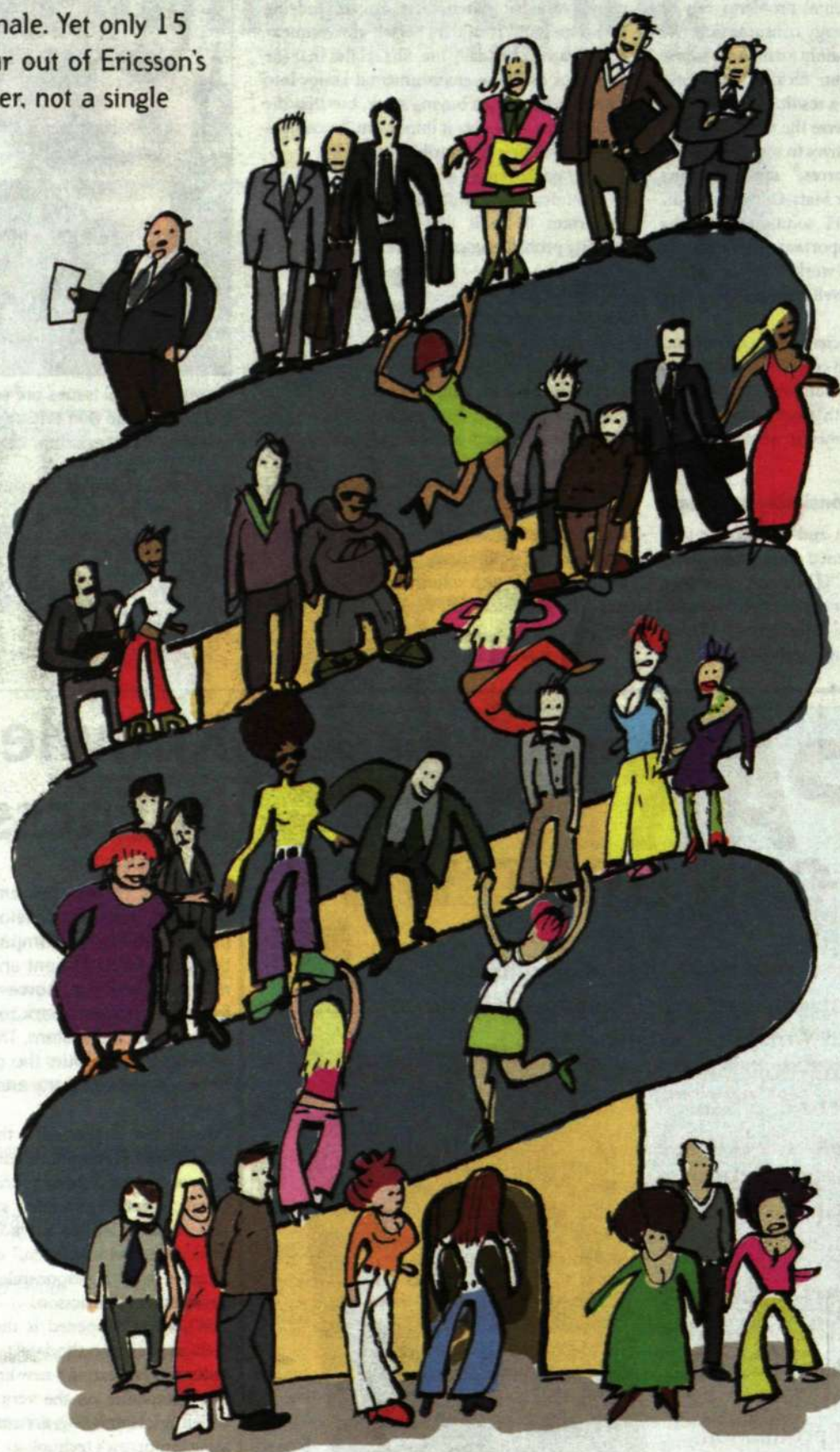
Recently, JämO has been studying what happens during the period when people have small children, and has concluded that this period of time sets the stage for numerous future problems in the workplace.

According to JämO, there has long been an attitude within the corporate world that equality issues will take care of themselves. But in order to achieve results, concrete measures need

to be taken, such as parental salary or mentoring programs.

"Equality will not come about on its own, simply by having a positive attitude. It requires planning and concrete action," says Raija Louavaara.

By law, all Swedish workplaces with more than ten employees are required to take equality inventories, set annual goals, establish action plans and perform subsequent reviews.



The higher up within the Ericsson organization you go, the fewer women there are. Of a total of 120 company presidents, only four are women. Illustration: Mattias Schläger