#### Final push for Mr. E

The database for the company's largest training program, Competence Shift, will be shut down at the end of the year. 20,000 employees have completed the test. Visit inside.ericsson.se/competence\_shift/



#### Lead and bromine banned

By the end of 2001, 80 percent of Ericsson's new products will be manufactured using lead-free processes and 80 percent of all new circuit boards will be bromine-free: a bold aim that will reap benefits over the long term.

Technology, 20

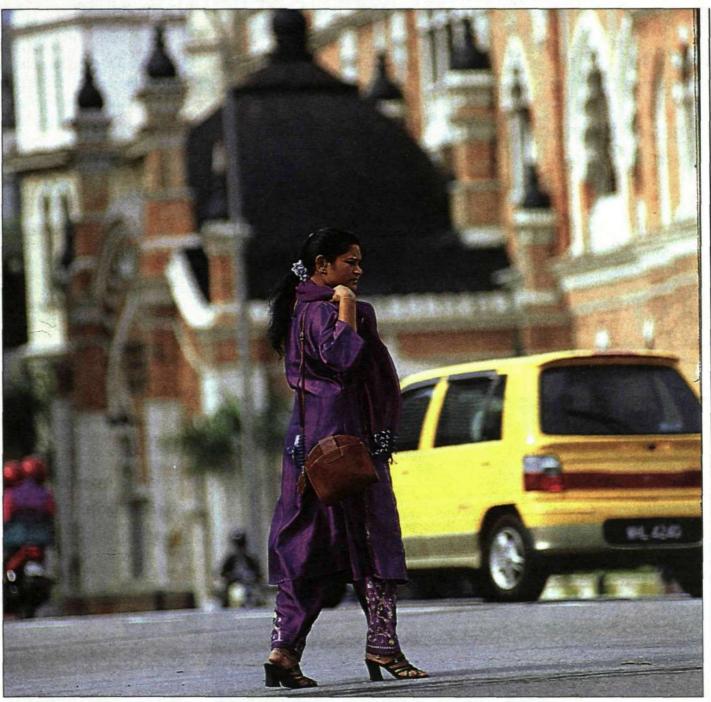


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■ NO. 13 · SEPTEMBER 7 2000



Economic development in Malaysia favors daring ideas. With the assistance of IT and Ericsson as a collaborative partner, the future lies wide open for today's Malaysians.

Photo: Lars Åström

## Colorful market in WAP forefront

After several lean years following the financial crisis in Southeast Asia, Malaysia's economy has rebounded with the help of IT. In a country that teems with new business ideas and optimism about the future, Ericsson is doing everything it can to support entrepreneurs.

Spotlight on 15–17

## Phones to be outsourced

If Ericsson is to become a major supplier of entry-level mobile phones, partnerships will be necessary. Seasonal variations in market demand make it risky for the company to invest in all the necessary capacity for large volume increases. A new unit within Ericsson is seeking out partners – the first to be chosen is the Taiwanese company Arima.



Photo: Lars Åström

## Forces unite around 3G

Ericsson is reorganizing its Mobile Systems Division, placing an emphasis on Ericsson's offerings for third-generation mobile phone systems. These changes, the biggest for Ericsson Radio Systems in Kista in ten years, should be completed by October 1. 3 and 5

#### WORLD WATCH

The German 3G license auction proved to be just as expensive as anticipated. State coffers will swell by more than SEK 420 billion.

#### M AT WORK

They met at work and instantly fell in love.
This past summer, Shannon and Lennart Schmidt were married.
They discuss their



views on romance in the workplace with Contact. 20-21

#### LAST PAGE

It's not really a very good idea to run a mobile phone through a washing machine. Still, some people do.

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## Mobilizing for the 3G war

Licenses for 3G systems are being awarded around the world, and the telecom market is hot, to say the least. Mats Dahlin, manager of Division Mobile Systems, talks about a war against the competition. To enable Ericsson to win this war and retain its leadership position, the

division is now being restructured with a more business-oriented organization that is aligned with 3G development.

➤ Where there were previously six business areas, there are now five, with the largest devoted to GSM, TDMA and EDGE. Other units are WCDMA, PDC, CDMA and Transmission Mobile Systems and Special Business Operations. (See overleaf for a description of the new organization.)

"The basic principles in our organization with business and product units is not being changed," says Mats Dahlin. "The business area dimension was introduced in 1992, while the product unit concept was introduced four years later. This has resulted in better work methods that we want to retain.

"The product units were very valuable when we established the CDMA business unit last year. They were able to provide the CDMA unit with access to all of our system designs so that they could quickly offer customers the right solutions," continues Mats Dahlin.

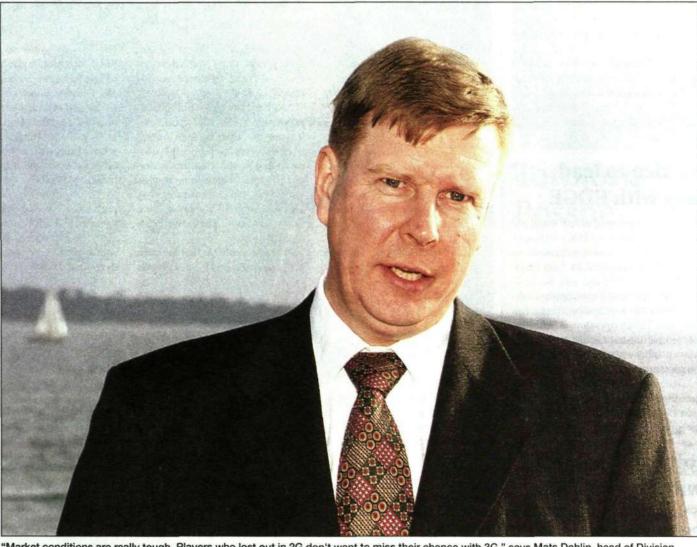
Although the new organization entails a greater focus on 3G, this does not mean that second-generation mobile systems have played out their role.

"Absolutely not. Second-generation systems still have a long life, perhaps much longer than many people expect today," emphasizes Mats Dahlin, citing as an example the NMT system that was introduced in 1980. The best year for NMT was actually 1987. 2G systems continue to evolve, and there are still many new markets to be won.

#### More competitors

Division Mobile Systems can look back on a very successful first half of the year, with major orders from several countries, including Mexico, Japan, Turkey, UK, China and Spain.

"Today we are living on the success of 2G systems, and that is what enables us to make such substantial investments in 3G. With the new organization, we will be able to stay ahead



Market conditions are really tough. Players who lost out in 2G don't want to miss their chance with 3G," says Mats Dahlin, head of Division Mobile Systems. Photo: Lars Aström

#### Today we are living on the success of 2G systems

of the competition. Market conditions are tougher than ever, however, and there are more competitors. Several players who lost out in 2G don't want to miss the chance to be part of the 3G battle. Retaining key customers is also important. We cannot take any customers for granted," notes Mats Dahlin.

#### The GPRS advantage

A very important step on the road to 3G is GPRS, a technology that enables packet data to be sent over today's GSM networks. In this segment, Ericsson has already captured half of the market.

"GPRS is one of our most important challenges this autumn. We do not just want to win more orders. We must also be able to deliver quality," emphasizes Mats Dahlin.

On July 1, Ericsson introduced a new organization in which three business segments became six divisions. For Mobile Systems, this meant that portions of what was previously the Network Operators segment became divisions in their own right. This has in no way affected cooperation between the various units, however, and Mats Dahlin is quick to point out that cooperation between business units is fundamental in being able to offer customers the best possible products and solu-

Customers and business are important words in any interview with Mats Dahlin.

"No matter how we change our organization, business always take top priority. We intend to be the leader in 3G and to live up to what customers expect of Ericsson," he says.

Asked how it feels to be responsible for the largest and most profitable division within Ericsson, Mats Dahlin does not hesitate in his

"Working in such a fast-growing industry as telecom and in a company that is leading the way is exciting. Our ambition is to remain the leader, but maintaining that position will take hard work on everyone's part."

> **Gunilla Tamm** gunilla.tamm@lme.ericsson.se

#### FACTS/MATS DAHLIN

Mats Dahlin joined at Ericsson in 1980. In 1984, he moved to the newly established division for mobile telephone systems at Ericsson Radio Systems and has worked with mobile telephony ever since. From 1987 to 1991 he

worked in Canada, moving thereafter to the US. Before becoming head of the Mobile Systems division, he headed the Network Operators and Service Providers business segment and the GSM Systems business unit.

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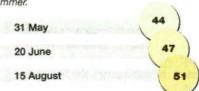
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#### DID YOU KNOW THAT...

Ericsson is the market leader in GPRS Since the end of May, an additional seven new contracts have been signed

The chart shows the development of Fricsson's share of commercial GPRS contracts over the



#### Several GSM orders to China

>> Five contracts, valued at USD 176 million, have been signed with the Chinese operator China Unicom.

Ericsson will expand GSM networks in five provinces with installations scheduled to be completed by the end of this year.

China Unicom is a major Ericsson customer. Contracts valued at USD 220 million were signed during 1999. Earlier this year, Ericsson was also named China Unicom's largest supplier of WAP equipment.

#### Mexico to lead way with EDGE

>> Mexican wireless operator Telcel will be the first to deploy 3G EDGE technology in Latin America, with the assistance of equipment and services from Erics-

EDGE (Enhanced Data rates for Global Evolution) is a technology that offers GSM and TDMA operators an effective way to upgrade to third-generation mobile capability without requiring new radio spectrum.

EDGE allows data transmission speeds of 384 kbps over large areas and even higher speeds with indoor cover-

#### Joint venture with WorldCom

>> Ericsson and UUNET, a WorldCom company, will collaborate in the development of new services for mobile operators, especially within the

The two companies also plan to conduct joint field testing of WAP and GPRS later this year.

WorldCom is a US-based global operator and one of Ericsson's larger cus-

#### Poland gets radio broadband

>> Ericsson will deliver MINI-LINK BAS equipment to the Polish operator Telekomunikacja Polska. It is based on LMDS, a broadband point-to-multipoint technique using radio links. The Polish contract is one of Ericsson's first

Initial deployment of the system will be in Warsaw.

#### **UMTS** training offered in Norway

>> Now, as UMTS licenses are being issued, Ericsson in Norway has become the first company on the market to offer a complete training program for that tech-

The company recently signed a contract with Telenor Mobile Communications and negotiations are under way with operators in other countries.

"When it comes to UMTS, we cover both the market and the technology, utilizing a combination of teacher-led instruction, workshops and Web-based courses," says sales manager Ola Svartberg at Ericsson AS.

UMTS Competence Step, as the Norwegian training program is called, is based on Ericsson's comprehensive skill development campaign, the Knowledge

## Partners to manufacture entry-level phones

In the future, Ericsson will develop and manufacture entry-level phones together with more partners. A new organization in Malaysia will delevop and manage this ac-

Two weeks ago, Ericsson announced that the company has signed a letter of intent with the Taiwanese company Arima, to develop and manufacture entry-level mobile phone models.

The contract is part of Ericsson's strategy to return the Consumer

Products Division to profitability, and to concentrate on the development of more advanced mobile phone models.

"We need to make use of collaborative partners in order to be a major supplier of entry-level mobile phones. That does not, however, mean that we will cease production of high-volume telephone models ourselves," says Jan Ahrenbring, Vice President, Marketing and Communications, Consumer Products Division.

Ericsson estimates that between 400 and 440 million mobile phones

will be sold worldwide this year. Entry-level mobile phones account for approximately 60 percent of the global phone market.

The new organization, which is a part of the Product Unit Entry-Level Phones and which is headed by Johan Paulsson, is being established at Ericsson's mobile phone plant in Malaysia

"The mission is to create a competitive and profitable telephone program that follows rapid changes within the industry. This together with more focus on our internally developed "entry" phones should also increase profitability in this segment," says Johan Paulsson.

Ericsson already maintains contracts with other outside manufacturers including Estonian-based Elcotec, which has manufactured Ericsson telephones since the early

The first products developed in conjunction with the Taiwanese company Arima are expected to reach markets by next year. Manufacturin's specifications.

Nils Sundström

## Ericsson TV soon here

Starting next March, Ericsson will begin daily internal television broadcasts. Current news and information will be broadcast around the globe.

"Broadcasts will be ten minutes at most, transmitted once an hour and updated daily," says Johan Ljungqvist, head of internal information at the corporate level.

This will be a totally new information channel for Ericsson employees. Most workers will be able to view broadcasts directly on their own computers.

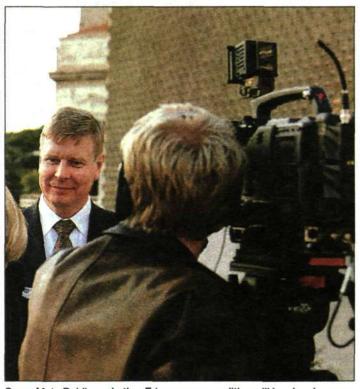
Televisions currently being used for internal TV will also be able to show the broadcasts. Initially, broadcasts will reach about 80,000 employees around the world.

The TV channel will also be available for regional and local

"There will be room for broadcasts from business units, divisions, product units or local companies," says Johan Ljungqvist.

The next few months, prior to the start of transmissions, will be filled with preparations including studio construction, selection of a production company and test

"Even though the decision to have television broadcasts is only days old, I've already received applications from people who want



Soon, Mats Dahlin and other Ericsson personalities will be showing up on Ericsson's own television channel. The first broadcasts get underway next March. Photo: Lars Åström

to be involved. People with sound television experience will be needed. The most critical task now is to locate an experienced project manager," according to Ljungqvist.

At least two studios should be ready to go by the end of October,

and by the middle of November a decision should be made on the programming structure. Test transmissions will start in December.

Patrik Lindén

#### **InfoCenter now** on WAP phones

>> It's now possible to have continuous access to InfoCenter and receive

the latest Ericsson news in WAP format. Ericsson is now one of the first companies in the world to disseminate company news in WAP format. Employees and others who are interested following com-



pany activities can now easily receive updates while traveling or if they do not have access to a PC and Web browser.

News on the WAP site is retrieved directly from InfoCenter. Ericsson Business Consulting in the Netherlands developed the service and is continuing to refine it. As InfoCenter develops new content, other kinds of information will also be accessible via WAP phones.

If you wish to have Ericsson news easily accessible on your WAP phone, simply bookmark the address http://www.ericsson.se/news ("http://" does not need to be included if you are only using the http communication protocol).

Let us know your opinions, suggestions or ideas about how we can further develop this service.

#### New policy clarifies personal computer use

Go ahead and use your work computer for personal e-mail correspondence. Just be aware that Ericsson can view the contents. The company is allowed to inspect links and documents on the network at any time. This is clarified in a new policy covering computer use and e-mail at Ericsson.

"The question of how work computers can be used has been discussed for a long time, and now political questions have been raised in that regard. Consequently, we wanted to

clarify the rights and responsibilities that employees have," says Stephan Almqvist, the company's security manager, about the new policy.

Technology makes it easy to retrieve, store and disseminate materials. This increases the company's need for control. Ericsson also owns all of the content in its networks.

"Information security will be one of the most critical issues facing Ericsson in the future. We also have responsibilities to the outside world, especially now as we form increasingly strong partnerships with our customers. We have to be able to

demonstrate our security precautions," says Stephan Almqvist.

"There have been cases where we've been forced to ask employees to leave Ericsson since they were using computers for activities that were not in keeping with Ericsson's values," says Stephan Almqvist.

Misuse of computers and e-mail includes such things as pornography, racism and the use of pirated software. When suspicions are raised that a computer is being used for inappropriate activity, an employee's immediate supervisor is not allowed to check the contents of their e-mail or review the logs of Internet sites visited. Instead, the "grandfather principle" is applied, placing the decision about an inspection into the hands of that person's supervisor, affording the employee a certain amount of integrity.

"I believe that this is a very liberal policy, which allows for personal use within reasonable limits." says Mats Renée, who oversees Ericsson's presence on the Internet.

Nils Sundström

inside.ericsson.se/security/

## Focus on 3G offerings

The Division Mobile Systems will have a new organization come the first of October.

With fewer business units, the division will have an organization that more closely meets the demands of the market for third-generation mobile phone systems and provides a stronger basis for

"We should be first on the market with leading 3G solutions. Consequently, it is of the utmost importance that we have a business-oriented organization that supports our offerings for both new and existing customers," says Mats Dahlin, Executive Vice President, Division Mobile Systems.

Ericsson offers complete solutions for both second and thirdgeneration mobile phone systems, something that will be reflected in the reorganization. The new division will contain three mobile systems business units. Each of them will oversee one solution for thirdgeneration mobile phone systems -WCDMA, cdma2000 and EDGE.

Two additional business units will also be included in the division - Transmission Mobile Systems and Special Business Operations.

#### Largest unit

The largest will be the GSM, TDMA and EDGE Systems unit, headed by Bo Bergström. This unit will oversee existing GSM and TDMA systems, GPRS and CDPD packet data solutions, and EDGE, a third-generation mobile phone system solution.

"EDGE is a complimentary solution to WCDMA. We believe that all GSM operators will choose EDGE for their existing spectrum licenses," says Bo Bergström.

Björn Olsson, who currently heads the TDMA Systems business unit, will join Bo Bergström's management team for the large new business unit.

Three product units will be included in the GSM, TDMA, EDGE Systems business unit. They are Radio Network Products, headed by Urban Fagerstedt, Radio Base Station, under the leadership of Ulf Wahlberg, and Mobile Enterprise, mobile solutions for the office, headed by Thomas Norén. The business unit will also have a GPRS



Mats Dahlin's reorganization of the Mobile Systems Division will highlight Ericsson's 3G offerings. Torbjörn Possne, left, will head up the new WCDMA and PDC Systems business unit. Bo Bergström, right, will head up the GSM, TDMA and EDGE Systems business unit. Photo: Lars Åström

project office, under the leadership of Björn Samuelsson.

The WCDMA and PDC Systems business unit will be headed by Torbjörn Possne, who was previously responsible for WCDMA sales, among other things.

A portion of the GSM Systems sales organization will also move over to Torbjörn Possne's new unit. Two product units are also part of the business unit - Core Networks Mobile Systems, headed by Roland Fors, and Wideband Radio Networks, headed by Dan Redin.

#### Controlled from San Diego

The third business unit for mobile systems, CDMA Systems, will be managed from San Diego by Åke Persson, as before, and will be responsible for the current cdmaOne system as well as the new cdma2000 system.

The Transmission Mobile Systems business unit will be overseen by Sivert Bergman

On July 1, Optical Networks operations were incorporated into the Division Data Backbone and Optical Networks. The Special Business Operations business unit includes operations such as Mobitex and Wireless Local Loop.

That unit is led by Staffan Svens-

Union negotiations regarding the new organization and new positions will take place at the beginning of September. The new organization will formally go into effect October 1, although certain relocations caused by the reorganization will be implemented incrementally throughout the autumn.

Nils Sundström

Organization of the new Division Mobile Systems









## TDMA and GSM form single unit

Ever since Ericsson coined the term business unit in 1992, GSM and TDMA have had their own organizations for everything from development to sales.

Now they will be joining forces, establishing a new common business culture.

"This is about taking the best from both organizations. In the past, the units have operated rather independently, competing against each other in certain markets and sometimes even internally for success," says Carl-Gustaf Leinar, personnel manager for the Division Mobile

The GSM and TDMA business units have, to some extent, utilized separate processes and tools to oversee their operations. And yet, technical advances have brought the units ever closer to-

Both GSM and TDMA operators will be able to choose EDGE as a solution for converting their networks to the third-generation mobile system.

Employees at Ericsson Radio Systems in Kista will experience the biggest changes from the merger.

#### FACTS/DIVISION MOBILE SYSTEMS

The Division Mobile Systems accounts for 57.5 percent of Ericsson's sales and employs 51,700 worldwide. This reorganization marks the biggest change in this area since the early 1990s, and reflects the company's effort to be a

leader in all digital mobile systems for the mobile Internet. At the start of this year, Ericsson had a 29 percent share of the world market for mobile systems - a position that has improved during the first six months of 2000.

The GSM unit's 5,000 employees will now become close colleagues with the TDMA unit's 1,200 work-

"Following the merger, many will still have the same manager and the same workplace. Others will be relocated and some of the managerial positions will disappear," says Carl-Gustaf Leinar.

Nils Sundström

#### HELLO THERE ...



#### Torbjörn Possne

...who will become the head of the WCDMA, PDC Systems business unit in the Division Mobile Systems, as part of the reorganization taking effect the first of October.

#### Why are WCDMA and PDC in the same business unit?

"The explanation is simple. Japan, where PDC is used, is an advanced market. Already their second-generation mobile system includes services that are characteristic of 3G. One example is iMode, which has been a real success."

"In Japan, the migration to WCDMA is also going faster than in any other country since there are no other alternative, such as GPRS or EDGE."

#### How many employees will the business unit have?

"There are thousands of people working on PDC here in Sweden. Two very large product units are also part of the business unit - Core Networks Mobile Systems and Wideband Radio Networks with several thousand employees. There are also many people working on WCDMA development at various development centers around the world that are not a part of the business unit."

"Even though we have many employees, it's important that we have a rapid decision making process and utilize our resources in the best possible manner. Although we are business-oriented, we keep our focus on technology."

#### What will be the most important thing this autumn?

"We have to succeed with the big projects we have, both in terms of radio networks and core networks. In order to gain credibility in 3G, it's also important that the positive developments within GPRS con-

"On the marketing side, we have to do our best to land 3G contracts. Things have gotten off to a good start for Ericsson. We're in a strong position as the leader in 3G, but it is a demanding market. Another important task is to maintain a leading position when it comes to the rapid developments occurring within the mobile Internet field."

#### How long have you worked at Ericsson?

"I started at Ellemtel in 1979, where I worked in research and development, primarily with the MD110 business switch. In 1994, I moved to Brussels and become the head of Ericsson's company in Belgium. In January of this year, I returned to Sweden and since then I have been the head of sales at GSM Systems."

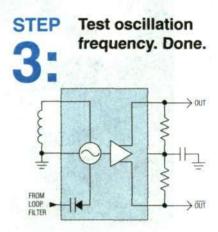
**Gunilla Tamm** 

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MAX2608	300 to 500	2.7	-100
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## Good products – poor deliveries

Ericsson is a skilled partner and has great products, but customers give us poorer grades with respect to deliveries and service. These were the results of a survey among Ericsson's network customers that was presented recently.

"We are pleased with many of the results, but we also know where we need to improve," says Marie Brandvold, who was responsible for the customer survey.

This is the first time that Ericsson has conducted a comprehensive survey among network operators, which represent the company's largest customer segment.

More than 250 operators in 80 countries were asked last winter to answer questions about how well Ericsson meets their expectations. The strength in such a comprehensive survey lies in providing uniform information, so that the appropriate part of the organization at the customer, division and business-unit level is able to implement its own action program.

The perception of Ericsson among customers is mainly positive. GSM operators are Ericsson's most satisfied customers.

#### Top scores for quality

Customers who purchase Ericsson's datacom and wireline products, however, also give Ericsson better-than-average scores.

"The atmosphere within the Multi-service Access division is much more positive. Self-confidence is improving, which tends to be reflected in greater customer satisfaction," says Anna Jarlinger, the division's customer surveys.

At the time of the survey, a majority considered that Ericsson was performing at about the same level as six months previously, although nearly 40 percent felt that Ericsson had improved across the board.

With respect to product quality, Ericsson along with Siemens receives the top scores in the industry, closely followed by Alcatel. Partnering and good communication with customers are also among Ericsson's strengths.

"Many customers are very satisfied with the work done by our Key Account Managers and their relationship with them. Ericsson's internal communications, however, are often perceived as poor. For customers, it is important that account managers can make decisions and have the authority to deal with problems immediately," says Marie Brandvold.

"We are often perceived as a little too technology-oriented. We must become more aware of the customer's requirements and understand the customer's customers."

#### Loyal customers

Too many customers were also dissatisfied with poor deliveries and installation work for the products and systems that they had purchased.

This dissatisfaction also extended to after-market support, an area in which improvement work is in progress. One example is TTC Global, a program that is intended to reduce delivery times (see separate article). The survey showed that Ericsson customers are loyal.

Together with Nokia, Ericsson is the company that the greatest number of customers would recommend to other operators.

Alcatel and Siemens, whose products are ranked higher than Nokia's in the survey, received lower marks on loyalty-related questions.

"This proves that neither products, delivery precision, service or even good relationships are enough. Other factors, such as image and future visions, have a great impact on customer loyalty

and willingness



Marie Brandvold

to recommend a supplier to others," notes Marie Brandvold.

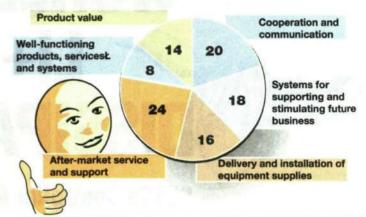
This trend is also reflected in customer opinions with respect to the companies that will be Ericsson's strongest competitors.

Nokia is seen as Ericsson's strongest competitor both today and in the future, even though the Finnish supplier's importance is expected to diminish. Nortel and Siemens are also strong competitors today, but will be overshadowed in importance by Cisco and Lucent, according to this survey.

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

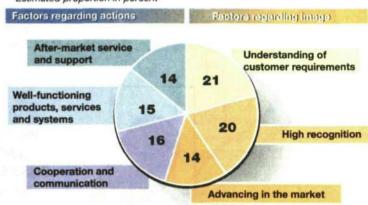
#### SERVICE AND SUPPORT IMPORTANT FOR CUSTOMER SATISFACTION

These are the factors that determine customer satisfaction: Estimated proportion in percent



#### MAGE IS IMPORTANT FOR CUSTOMER LOYALTY

Factors that influence customers to remain loyal and recommend Ericsson: Estimated proportion in percent



Graphics: Mikael Parment

#### ...and the answer is

Delivery problems are often one of the greatest sources of customer irritation. TTC Global provides relief for this problem.

As a result of the TTC Global improvement project that Ericsson conducted throughout Europe last year, Ericsson has straightened out a convoluted delivery structure and standardized its product offering. TTC Global is now being extended to other parts of the world.

"The incredibly demanding requirements that third-generation products will place on coordination are the main reason why we are forced to rationalize the entire flow from order to delivery and installation," relates Lars-Göran Hansson, who is responsible for TTC Global.

Today an increasing number of customers can order a growing number of products directly on the Web. Some 15 manufacturing plants are assuming a new role and becoming what are called Flow Control Centers. These plants receive orders and control delivery and distribution. By offering standard product packages, the number variations for a radio base station, for example,

has been reduced from several hundred to about 20.

"Initially, we were the driving force. Today, however, customers are driving the change," continues Lars-Göran Hansson.

"In January and February, customer satisfaction increased. Unfortunately, component shortages in the industry then created problems, but we were at least able to see that we have made favorable progress in eliminating internal structural problems," he concludes.

Mia Widell Örnung

### New division paves the way for mobile Internet

Haijo Pietersma's task as head of the new Internet Applications and Solutions division could not be clearer.

"We must offer services and solutions that create the best possible growth opportunities for the mobile Internet," he says.

Assisting him are some 3,000 employees around the world. Over the next year, this number will double.

Mobile Internet and broadband networks are not just a question of technology. Compelling content is absolutely essential for attracting subscribers to the operators' new networks. In the new organization introduced this summer, Ericsson has elevated this business segment to the highest level.

"We need to act as a catalyst in the new market," says Haijo Pietersma. "We have to help other companies to become successful by offering the systems and services that provide



Haijo Pietersma heads the new division for Internet Applications and Solutions which he will manage from Kista.

the best opportunities for growth for the mobile Internet. This in turn will contribute to Ericsson's growth and make us more competitive."

#### Changing industry

At issue are primarily services and solutions for e-commerce, portals, infotainment and personal communications, such as wireless e-mail and calendar applications.

It will also be necessary to develop positioning services for all application areas. Further in the future, product plans call for developing machine-to-machine communications.

"Systems expertise is our strength. We have detailed and comprehensive knowledge of the complex architecture required for the new networks, and we have the right terminals. Now we want to make sure that total solutions are quickly developed that work on any network," says Haijo Pietersma.

Customers include fixed and wireless operators, service providers and certain enterprise segments. Division Internet Applications and Solutions will therefore work closely with the Mobile Systems, Multi-Service Networks and Consumer Products divisions.

"With the changes taking place in the industry, a completely new value chain is emerging. Companies realize that the mobile Internet will enable them to reach customers anywhere at any time. The result is new business concepts that create opportunities for new players," continues Haijo Pietersma.

#### Partnerships essential

The roles of operators and suppliers are changing. For Ericsson, business thinking developed over more than a century is being turned upside down.

"We cannot assume that we can develop everything on our own. Partnerships and joint development are an increasingly important part of our business, and that forces us to change our thinking," emphasizes Haijo Pietersma.

Ericsson will develop perhaps 1 percent of the applications for the new networks, while partners will contribute 9 percent.

For most applications, however, Ericsson will rely on third-party developers participating in the Developers' Zone on the Net or the company's design centers in various countries.

The Internet Applications and Solutions division currently totals about 3,000 people around the world.

About 1,000 persons work within the Internet Applications unit, while 2,000 are employed within Internet Solutions (formerly Business Consulting), which will now also work closely with operators.

"Within a year, I expect personnel to double. We need a new type of business expertise and creative people who are not necessarily engineers," concludes Haijo Pietersma.

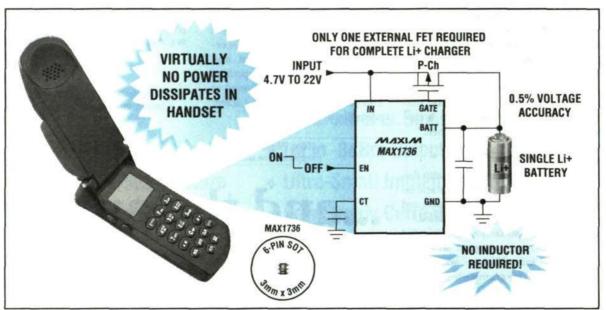
Nils Sundström

nils.sundstrom@lme.ericsson.se

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## Lili charms Asia's young

Within a few months, a video jockey with silver-colored hair has achieved enormous popularity among young people throughout Asia. Lili, a virtual, interactive character, is the product of the joint efforts of MTV Asia and Ericsson.

At the end of June, Martin Blomkvist, in charge of brand communication for consumer products in Asia, was more nervous than he had ever been

Ericsson and MTV Asia were about to hold a joint presentation for international press of their brainchild, the animated wonder, Lili.

#### Unique technology

The technology behind Lili was completely new. She had never been tested before.

The press conference was a great success. Initial suspicion that Lili was actually prerecorded gave way to astonishment and delight, as the onscreen Lili responded to a question from a Chinese journalist in fluent Mandarin.

Since then, Lili has captured the hearts of thousands upon thousands of MTV viewers.

In two months, her requests program has become the most successful TV show in Shanghai. In Australia, Lili receives 1,000 e-mails and 500 phone calls every week.

"This is really fun," says Martin Blomkvist, one of the seven proud "parents" who created Lili in a mere six weeks.

Lili's show is actually called Lili Version 1.2 Powered by Ericsson, it is broadcast six times a day, seven days a week, on MTV throughout Asia.

Lili is one facet of Ericsson's marketing drive to target young people. The Lili concept arose during discussions held by Ericsson with MTV Asia regarding sponsorship cooper-

After several more traditional ideas had been bandied about, someone in the group mentioned a new technology for an animated VJ, and a demo was shown.

The Ericsson contingent became quite excited about the idea, and jumped into the project that was to produce Lili.

#### Up on all the trends

Lili is a digital person living in a digital world. She is up on all the trends in music, technology, fashion and youth culture.

On the other hand, she knows nothing about how people live, or how they feel.

In the program, she talks with young viewers about their life, and

in exchange for their thoughts and opinions shares her knowledge.

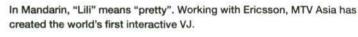
"Lili speaks with young people about things that concern them, and she is adapted to speak their local language. These are two of the factors behind her success. The format of the show allows Ericsson to integrate it with marketing ventures," Martin Blomkvist explains.

Special advertising films featuring Lili are under way. To introduce the campaign for the 310 telephone, Lili's alter ego, BeiBei, is pictured surfing after a shark-fin antenna during the show's music video ( the phone has an antenna that resembles a shark fin).

Martin Blomkvist has frequently been asked how Lili works. But it is a secret. Only a handful of people know how Lili was created.

"No-one has ever successfully combined technology in this manner before. We do not want to dispel the mystique surrounding Lili," savs Martin Blomkvist.







## Rough and tough phone Broadband with

The telephone built to stand rough treatment is here, designed for people who prefer the outdoors. The R310 models, which are now starting to be launched and sold worldwide, are quite different from traditional mobile phones.

The phone is shock-resistant, through the use of special rubber gaskets, and can withstand dusty environments thanks to a membrane developed by the same company known for GoreTex.

If the phone becomes dirty, it is easy to clean it by holding it under running water. Ericsson believes that the R310 phone will primarily attract people who have an active lifestyle and people who are attracted by a sports-type image.

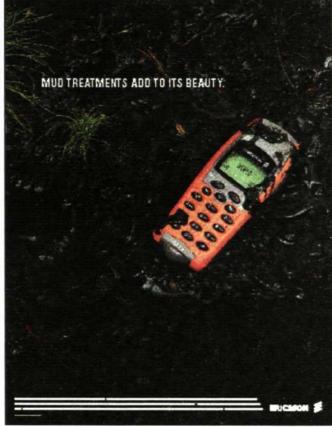
Per-Axel Larsson, who has been working on marketing the phone, compares it to clocks:

"Many people buy scuba watches. Probably, many of them have never been involved in diving. Still, they want to signal a certain lifestyle. This is the way it is with the R310 telephone.

"The market for robust telephones is new, and I believe it may become very large. In terms of the brand name, this phone really adds something: all the advertisements, store display materials and TV advertising created for it have a humorous slant."

The Web naturally offers more information about the telephone, including an opportunity to follow an expedition and the chance to win great prizes.

Ericsson has previously touched



The new brightly-colored Ericsson R310 telephone appears on billboards throughout Europe, the Middle East and Africa.

on this market. Last year, Ericsson launched the R250 Pro phone, which had similar performance characteristics but was more adapted for particular types of work.

The buttons were larger, which meant the phone could be operated by someone wearing work gloves. It even had a com-radio function.

The R310, on the other hand, is

aimed at a larger group of users. Weighing in at 170 grams, and with 160 hours of standby time, this phone is equal to just about any challenge.

> Patrik Lindén contact@lme.ericsson

mobile.ericsson.com/R310

## better content

To be successful, broadband networks require attractive content. Consequently, Ericsson and Telia are starting a business-development program in cooperation with the University of Rapid Growth, to create new services together with participants from various industries in Sweden.

Broadband reshuffles roles. A telecom operator may become a CD producer, while newspapers, TV networks and artists quickly create completely new electronic services.

However, interactivity, constant Internet connection and the ability to download large data files require new business ideas.

"The broadband networks now being constructed require many different services. The technology itself is worthless without content, and creating innovative content requires many players," says Torbjörn Hedqvist, program manager at Telia, which has joined forces with Ericsson Sverige AB to operate the Broadband Creators businessdevelopment program.

#### Different industries meet

Apart from Ericsson and Telia, the 26 participants represent Shell, Razorfish, FöreningsSparbanken, Svenska Spel and NCC

After the three months of the program, it is hoped that the participants will have produced several new business ideas.

Last year, Ericsson and Telia started a similar program for new mobile

It resulted in several concrete business ideas that are now being further developed.

"By giving, we receive a great deal. We are more likely to find new business ideas in the border zone where we meet different approaches and skills," says Helge Högetveit, business developer at Ericsson Sverige

#### The best of all media

An initial meeting was recently held with invited knowledge providers from industries such as media, film and music, to demonstrate some ideas for possible uses for the tech-

Entertainment services clearly seem to be driving development, but there is also a market for services in home maintenance, education and safety.

David Jensen, head of the Razorfish broadband and digital TV campaign, described how future consumers will be able to obtain the content they desire regardless of distribution mode - via mobile phone, large-screen HDTV or PC.

"Broadband will retrieve the best of all media types, such as films, TV, Internet and CD-ROM games. Storytelling will be critical to the success of broadband services."

Nils Sundström

## German 3G bids higher than expected

After Germany's 3G auction, concluded in mid-August, German national coffers are over SEK 420 billion richer. This is clearly more than what the German government expected.

"Many commentators expected a dampened outcome, since several players opted out just before the auction. What happened was the opposite," says Johan Strandberg, telecom analyst with Deutsche Bank in Stockholm.

The six licenses went for a total of SEK 422,340,880,000. The winners were Viag Interkom, Mobilcom Multimedia, Mannesmann Mobilfunk, Group 3G, T-Mobil and E-Plus Hutchison. All players were awarded equally large licenses entitling them to two frequency blocks of 5 MHz each. The seventh player, Debitel Multimedia, quit the bidding early, after round 126 of the 173-round

The final sum is five times higher than what the German government indicated would be considered healthy. The high costs shook the telecom industry and the stockmar-

The high ticket has also already had repercussions in the form of lower credit ratings for the bidders.

Only a few days after the auction, Hong Kong-based Hutchison defected from the group backing E-Plus, leaving the other players primarily the Dutch KPN Mobile and the American BellSouth - to foot the entire bill.

#### Bidding accelerated

The reason for the unexpectedly aggressive bidding is that the two dominant players - Mannesmann Mobilfunk and T-Mobil - were aiming for three 5-MHz frequency blocks each. This accelerated the bidding drastically, and when it became clear that it was not possible to acquire three blocks, they accepted two blocks after round 171.

The bidding then ceased, and by the afternoon of August 17, after 173 rounds, the auction was over.

The process continued on Friday, however, with a second and less important session, in which five "leftover licenses" were sold to the highest bidders



German 3G licenses were auctioned off for slightly over SEK 420 billion, which was a welcome contribution to the German Reichsbank.

Photo: Heinz Wiessler/Pressens Bild

"These licenses, which generated proceeds of EUR 285,000 (SEK 2.4 million), may be used to reinforce network capacity during high traffic or in densely populated areas such as the Frankfurt area or around Berlin," says Johan Strandberg.

The German 3G auction was preceded by extensive speculation that began when the British 3G auction brought in approximately SEK 330 billion for five licenses. At that time, many people believed the German auction would generate SEK 500 billion, since the German market has greater potential.

#### Disappointing Dutch affair

The Dutch auction held early this summer, however, was a disappointing affair, with considerably slower

When nearly half of the registered bidders defaulted before the start of the German auction, the auction was not expected to be intense. Reality proved otherwise.

#### Ten percent higher

The German auction procedure differed from that of the UK in that every bid had to be 10 percent higher than the preceding one - the reason being that the German telecommunications authority, Die Regulierungsbehörde für Telekommunikation und Post, wanted to hasten the process to avoid the kind of longdrawn-out bidding that took place in the UK. However, as it turned out, the authority was forced to lower the bidding levels to 5 percent, and later to 2 percent, once the bidding be-

The main question now is whether the players can succeed in making the 3G networks profitable.

"Simulations we have carried out show that the consortia that already have extensive 2G networks will recover the capital they have invested in five to eight years, whereas the socalled green-fielders, players without existing 2G networks, must reckon with ten or more years," says Johan Strandberg.

The simulations that Deutsche Bank has carried out differ, however, from the results on one key

"All calculations assume only five players. Given that the auction ended with six players, the predictions are less likely to be borne out."

#### The price was too high

That is presumably a key reason for Hutchison's defection from the E-Plus consortium.

"Hutchison's sortie is a clear signal that the price tag had become too high," says Johan Strandberg, who also believes that some of the weaker consortia will cooperate on net-

"This applies particularly to 'green-fielders,' Group 3G, Mobilcom Multimedia and E-Plus.

However, many parameters in the calculations of the viability of the business models, are uncertain - for example: how will the introduction of 3G will take place? What are users prepared to pay? What will the impact of the expensive licenses be on service ranges offered? How will 3G penetration among end-users de-

Germany's license undertakings indicate that, by 2005, 50 percent of the country's population will have

Mats Lundström

German Minister of Finance Hans Eichel has good reason to smile. Proceeds from the 3G auction will be used to reduce the national debt.

Photo: Michael Jung/ Pressens Bild

#### More 3G auctions where each license will cost slightly

After the auctions in the UK, the Netherlands and Germany, new rounds of bidding await telecom players. Next in line is Italy, for which applications are currently being submitted.

Italy has chosen a combination of beauty contest and auction, where the minimum price is slightly more than SEK 33 billion. "Beauty contest" refers to the fact that the relevant government authority selects the players best able to carry out net-

In France, four licenses are being distributed by a "beauty contest,"

more than SEK 41 billion. Norway, Switzerland, Sweden and Portugal are also using the beauty contest model, but with considerably lower. or no, entrance fees.

In Denmark, four or five licenses will be awarded in a straight auction procedure scheduled to begin at the beginning of next year. Austria has recently begun a process in which the players must qualify for future auctions. The Belgian authorities have not vet decided how cense, to British Telecom-owned Vithey plan to carry out the license ag Interkoms.

Several countries have already

Suomen Kolmegee consortium, as well as to the Swedish Telia Mobile. Spain held a beauty contest last spring, where the licenses were given to Telefónica, Airtel, Xiera (in which Sonera is one of the partici-

tests. The first was Finland, that as

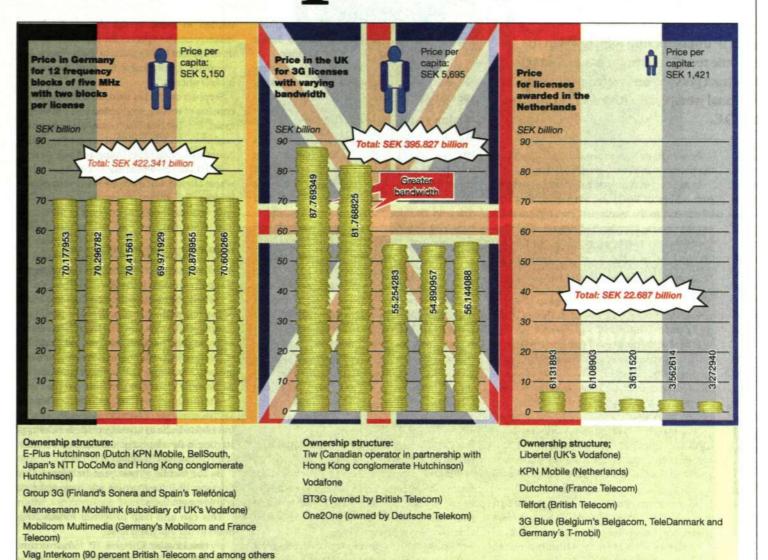
early as March last year distributed

four permits to three Finnish players

- Radiolinia, Sonera and the

pants) and Relevision. Last spring, Liechtenstein also awarded a li-

Mats Lundström



## Japan – the world's largest WAP market

It is no surprise that Japan is the world's largest mobile Internet market. Fewer people are aware, however, that Japan is also the world's biggest WAP

With over 15 million mobile Internet users, Japan is the world's largest market for mobile Internet. The iMode service, offered by mobile phone operator NTT DoCoMo, is the largest. Other operators also provide mobile Internet service, including DDI's EZ series, Ezweb. The service is based on Phone.com's HDML format, which subsequently evolved into what we now call WAP. The EZ series has approximately

2.8 million users who have access to the world's most technically advanced WAP network with transmission speeds of up to 64 Kbps. Moreover, the network supports packet data, resulting in optimized and simplified transmission of graphics, images, programs, games

DDI was very successful in its launch of the EZ series. This was due to a combination of better sound quality and higher transmission speeds than DoCoMo's iMode. A third operator, Japan Telecom,

also offers a very popular mobile Internet service known as J-Sky. It has just under two million subscribers. I-Sky cannot, however, be direct-

ly compared with the rest of the WAP family since its service is based on Mobile Markup Language (MML), which is a sub-set of HTML. This makes it very simple to cre-

ate or adapt web pages to specific J-Sky pages, which is an important reason for its great popularity. The Japanese are the first in the world to be offered 3G service, with its highspeed transmission rates. That, however, is not the reason why Japan has been successful in offering mobile Internet over 2G.

Rather, the reason has more to do with a focus on user-friendliness and the fact that they succeeded in providing important services despite the low bandwidth.

Lessons learned from the Japanese market include not talking about technology but instead finding out what would be most useful for customers. The general public has a difficult time identifying with many of the services that are devel-

Obviously, Ericsson would like those services that are developed to reach the general public.

It is only then that the mobile Internet market will be aggressively developed, regardless of whether that means iMode, WAP or some-

> **David Giana** Edited by Mats Lundströr

Graphics: Paues Media

#### Hot spots in the IT world

holm-Kista area is ranked just shy of first place on a ranking of the world's leading high tech centers, according to the magazine Wired. Wired consulted local sources in government, industry, and the media to find the 46 locations that matter most in the new digital ge-

Silicon Valley, California. Silicon Valley is the home of hardware, software, etailing and the Internet. Its special allure is a combination tal (USD 13.4 billion in 1999), a scientists.

>> Thanks to Ericsson, the Stock- strong research infrastructure and a steady stream of innovations.

> Stockholm-Kista, Sweden. Sweden's high tech home, with mobile phone giant Ericsson playing den mother, according to Wired. The magazine also points out that research house IDC (International Data Corporation) proclaimed Sweden the world's leading information economy.

Boston. A longtime tech heavyweight, thanks to a concentration of a huge amount of venture capi- of research centers, engineers and

Israel. Israel adopted the Califor- London. The EU's largest concenworld's fastest growing high tech and biotech companies.

Helsinki. Competes with Stockholm for the title of high tech capital of Scandinavia (Nokia vs. Ericsson). Hewlett-Packard's decision to build the first of its mobile e-services wireless development centers there was considered to be a great Finnish victory.

Raleigh-Durham-Chapel Hill, North Carolina. Each year, research universities in North Carolina take in over USD 600 million in R&D funding.

tration of Internet, pharmaceutical

Austin, Texas. Huge on the hardware side. Dell, Motorola, IBM and AMD are among the area's top ten

Bangalore, India. Home to 300 technology companies.

San Francisco. Otherwise known as Multimedia Gulch, the area is home to a sea of talent that generates scores of Internet sites.

Charlotte von Proschwitz

#### Market unhappy with Telia report

>> Telia's semi-annual report was met with disappointment by the Stockholm stock exchange when it was released in the middle of August. Although the recently listed company posted an increase in net sales, profits were lower than anticipated at SEK 3.87 billion.

Telia was unable to meet expectations due to a large number of onetime expenses that lowered earnings. Telia has also been subjected to considerable pricing pressures, significantly lowering the company's margins. Pressure was greatest within fixed telephony, where the former state-owned company was met by increasingly stiff competition.

The market's overall reaction was also the result of the poor development of Telia's mobile operations. The company has not completed the number of acquisitions necessary in order to satisfy the market. Since their introduction in June, Telia shares have fallen by more than ten percent.

www.telia.se

#### iMode suffers interruptions

>> Japanese operator NTT DoCo-Mo's mobile service, iMode, has suffered a series of interruptions over the past six months. The latest struck in the middle of August, affecting a half million users in Tokyo and lasting several hours. The week before, service went down throughout Japan for five hours.

The underlying cause for these problems is the rapidly expanding number of subscribers, now calculated to exceed ten million. Problems began last April when the iMode system could no longer handle the load. NTT DoCoMo has temporarily ceased all marketing campaigns in an attempt to dampen the rate of growth while simultaneously expanding system capacity.

NTT DoCoMo has made several acquisitions outside of Japan in recent months. Japan's largest operator acquired a 15 percent stake in the Dutch company KPN, and most recently the American Internet company Verio, among others

www.ntt.com/

home.verio.com/

www.kpn.com

#### **Tele Danmark** split up

>>> Denmark's largest operator, Tele Danmark, is being split up into five independent stock corporations.

They are Mobile, Internet, Communications Solutions, Cable TV and Publishing. Yet another company, Tele Danmark Services, is being formed to oversee operations of the other portions of the company. The reorganization will affect 18,000 employees, according to a Tele Dan-

www.teledanmark.dk

mark press release.

## On track with right people

In the US state of Maryland, Ericsson IP Infrastructure is involved in the struggle to find expert employees. While recruiting recent graduate engineers, the company is also keen to attract persons on foreign assignments. Attractive features include a professional workplace with a relaxed atmosphere and proximity to Washington D.C.

➤ "Employees with IP expertise and the AXI 540 router give us an excellent position in the datacom industry. Success, however, requires having the right customer channels, which are now available to us as part of Ericsson," says Jean-Luc Abaziou, Vice President of Ericsson IP Infrastructure

The company, which is located in Maryland in the US and was acquired by Ericsson in April last year, was formerly called Torrent Networking Technologies

Hermant Kanakia, who previously worked at AT&T's Bell Laboratories, founded the company in August 1996.

When Ericsson purchased Torrent, the company had some 80 employees, but this number has since grown to about 160.

"By year-end, we expect to have more than 200 employees," relates Jean-Luc Abaziou,

• The AXI 540 is one of the cornerstones of

• It is an Edge Aggregation Router for Internet

Service Providers. Internet Service

Providers include Internet operators for

wireline networks and also mobile network

operators, which are switching to GPRS and

The router is installed at the edge of a back-

bone network and handles and aggregates

traffic from several users, primarily compa-

nies with a large amount of Internet commu-

. The AXI 540, which was launched commer-

cially in January 2000, gives operators the

possibility to improve existing services,

while also supporting a large number of new

3G packet-data technology.

Internet applications.

Ericsson's packet-based backbone network

who came to Torrent in January 1999 from Alcatel. "We are increasing personnel gradually at the fastest pace possible. Being part of a global organization is a great strength when it comes to market presence and name recog- Jean-Luc nition."

FACTS/AXI 540



Abaziou

Personnel growth exceeded the capacity of the premises in Silver Springs, Maryland.

In August, the company therefore moved to new offices in Rockville, Maryland, about 30 kilometers to the northwest. In addition to its employees in Maryland, Ericsson IP Infrastructure has about 30 employees in North

#### Foreign assignments welcome

"Finding employees with the right skills isn't easy," says Ericsson IP Infrastructure's HR director Jesper Smith.

"There are a number of newly started datacom companies in the area that are all fighting for the same talent. Previously, recruitment focused on experienced engineers, but now we are increasingly looking for new engineering offer both at Ericsson IP Infrastructure." graduates as well."

"We are eager to share our IP competence," continues Jesper Smith. "We welcome Ericsson employees on foreign assignments, for example, and we hope to work even more closely with our colleagues within Ericsson."

Jesper Smith is himself working on a foreign appreciates being close to Washington, D.C.

The atmosphere at Ericsson IP Infrastructure is relaxed yet extremely professional, and the

company tries to maintain this atmosphere through such employee activities as lunch every Friday and breakfast every Monday.

Ericsson work methods and tools are being adopted wherever possible without making the job more difficult.

#### Mixing young and experienced

"Step by step, we are introducing the processes that are already in place within Ericsson and making them part of our daily work, while maintaining a 'startup' approach", says Hans Pruim, a former Alcatel employee who joined Ericsson IP Infrastructure a year ago and is now Vice President in charge of research and

Currently, some 110 persons are working in research and development. The goal is to increase this number by 50 employees this year.

"Our employees possess a high level of expertise, and it is important that we keep them in the company so that we get the right mix of newly graduated and experienced engineers," says Hans Pruim. "Engineers want to work on challenging technologies, while having the right competence for it, and we can

Stephen DeAngioletti is a new employee who joined the company in February.

"Before coming to Ericsson, I worked for four years at Avtec, a privately held company in the satellite industry. After seeing an ad in assignment. He likes working in Maryland and the Washington Post, I applied for a job at Ericsson," says Stephen.

> "I was writing software for satellite ground station networking circuit cards at Avtec, but I

industry and be a part of the rapid and exciting development taking place in the industry. As a company, I only knew Ericsson through its mobile phones.

Stephen enjoys his work at Ericsson, which consists of writing production test software to assist the hardware/software/manufacturing engineers and technicians in testing router hardware during prototyping and production.

Eventually, he would like to take a job somewhere abroad, but there are also many opportunities for advancement through working with various projects at Ericsson IP Infrastruc-

#### Greater security for employees

Ritesh Ahuja joined Torrent in 1996, when the company was first formed.

"When Ericsson purchased Torrent, much of the uncertainty that people felt previously disappeared," says Ritesh Ahuja. "The future looks brighter now. We have started a number of joint projects with other Ericsson units that are very rewarding, and we have learned a lot, particularly in wireless communications."

Ritesh Ahuja and his colleague Niranjan Vaidya, manager of interface software, recently traveled to India to investigate the feasibility of starting a development unit at one of Ericsson's companies in India.

By the middle of next year, he expects that Ericsson IP Infrastructure will have some 20 employees in India.

This can also help to recruit Indian engineers in the Maryland area.

By working at Ericsson IP Infrastructure, they will have an opportunity to be able to



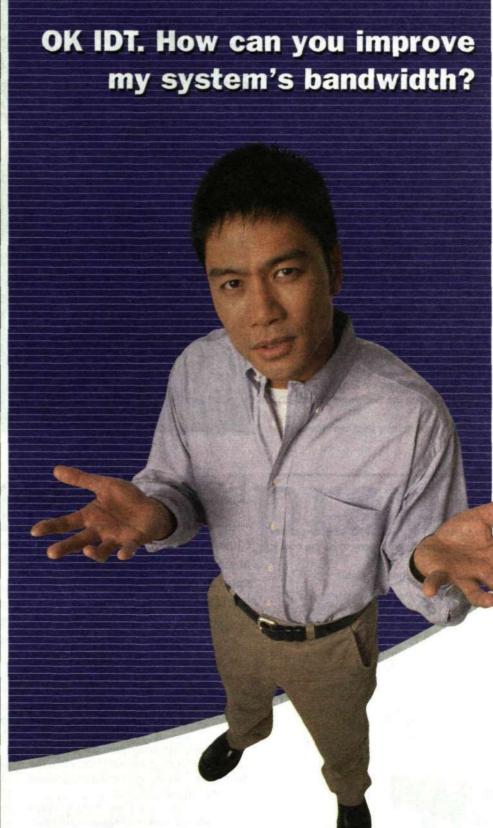
Nguyen are both relative newcomers to the company

Photo: Gunilla Tamn

In late 1999, Ericsson IP Infrastructure launched its new AXI 540 Router. All development work took place in Maryland, while production, which was previously outsourced, is now taking place in

"We have an excellent product that we hope to get out on the market through Ericsson's sales channels," says Jean-Luc Abaziou. "We are also continuing to improve the AXI 540 by adding more functions and making it smaller for mobile applications. With the right products and strategy, we are breaking into the wireless industry, which is where the future is."

In parallel with improving the AXI 540. development work has begun on a larger router for Ericsson's backbone network



Eric Lee and Alice

work in India without having to leave Ericsson.

Lynchburg, Virginia.

**Gunilla Tamm** 

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## Ericsson IP Infrastructure.

**Innovative** 

Stephen DeAngioletti really wanted to

work in the telecom sector and joined

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The AXI 540 router is an important product at Ericsson IP Infrastructure in Maryland. The number of employees is increasing and the company recently moved to new premises. Mike Davis is one of the 160 employees.

Photo: Dennis Brack

## Hope riding on horses

A sport based on communication and a company with great ambitions – that's Team Ericsson, the world's first officially registered equestrian team.

➤ Team Ericsson was presented for the first time during the World Cup competitions held in Paris this past March.

Six riders – Franke Sloothaak and Marcus Ehning, Germany, Markus Fuchs, Switzerland, Jerry Smit, Italy, Olivier Guillon, France and Swedish elite rider, Maria Gretzer, will now become part of a team that Ericsson will sponsor over the next three years. This is a serious campaign.

"We'll be assisting with travel, equipment and much of the practicalities surrounding competition," says Kristina Forsman, who is involved in sponsorship at the corporate level at Ericsson.

The reasons for an equestrian sponsorship are many

"This is a major sport, which excites people of all ages. Moreover, the values associated with the sport are a good fit with Ericsson," says Kristina Forsman, who cites leadership, professionalism and integrity among others.

Sponsorship of a group of riders who are part of a team is a new endeavor for the equestrian sport. Already similar groupings are underway, however.

The idea behind this sponsorship is that there will be competitions where the riders are not only competing individually or for their country, but also for their sponsorship team.

#### Group solidarity

Team Ericsson was assembled with the assistance of former world champion Franke Sloothaak, who has become something of a captain for the team. At the outset, the goal was to find riders who would work well together, while at the same time trying to find as much depth as possible within the group.

"No doubt there are several reasons as to why

I was chosen, perhaps I'm a sufficiently outgoing person, and I've also had consistent results. Furthermore, I've trained under Franke before so we already know each other," explains Maria Gretzer, the only Swede on the team.

#### Important support

This new sponsorship has considerably improved things for her efforts. Now she can concentrate on competing and does not, for example, need to work as hard on overseeing training as she did before.

"Moreover, you get fantastic support from others on the team. That feels good when you're participating in competitions. It's a real boost," she says.

The team has been quite successful so far this year, with over twenty victories at the Grand Prix level. Now, however, most of the riders are focusing on the Olympics in Sydney. At least four of them have been selected to represent their respective countries, and perhaps a fifth.

"Marcus Ehning and Markus Fuchs definitely have a chance at medals," says Maria Gretzer, who prefers to downplay her own chances.

Still, she is the Swede who has come the closest to earning a medal in an Olympic jumping competition in a very long time.

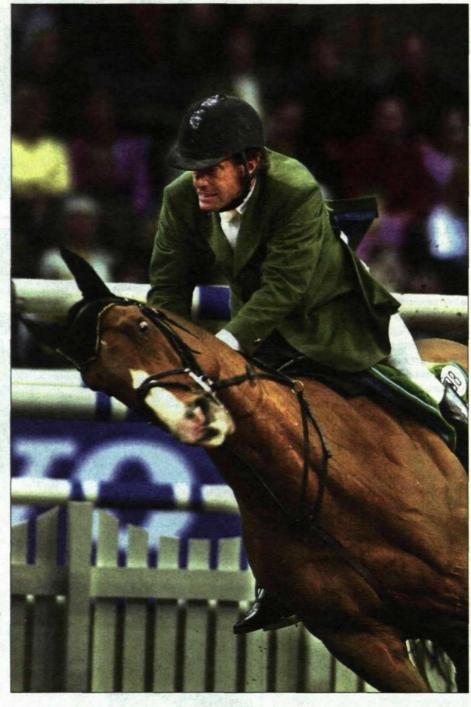
At the Olympics in Barcelona, she earned a sixth place finish riding the fantastic Marcoville. Following the Olympics, the team plans to meet up at competitions in Kiel before beginning the World Cup series again. The goal is to make it to the finals at the Scandinavium in Gothenburg next year.

Sussi Stamming

inside.ericsson.se/brandexperience/

Markus Fuchs, of Switzerland, is a member of Team Ericsson and one of the Olympic medal hopefuls in Sydney. He is pictured here with Tinka's Boy, at the Gothenburg Horse Show.

Photo: Tommy Svensson/Pressens Bild



### Even the ancient greeks

Close to our roots, nature and ancient civilization, equestrian sport represents something unusual in today's society.

➤ Equestrian sport has a long history.

As far back as 680 BC, horse owners in ancient Greece dreamt about winning the Olympic games. At first, the only event was four-in-hand driving, although two-in-hand and horseback riding events were eventually added.

Something akin to our show-jumping competitions did not appear until 1865 when the Royal Dublin Society arranged a competition with long and high jumping.

Today, it is one of the few sports in which women and men compete against each other on equal terms.

#### Huge popularity

Riding is the second largest youth sport in Sweden (after soccer) and among the ten largest sports in most European countries. Germany and England each have approximately two million active riders.

Interest in horses is also incredibly strong in the US where there are around 15 million horses. Western riding is, however, more popular than the English riding style which dominates Furone

Television coverage of the sport in Europe is good. The largest competition in Europe is held in Aachen, Germany, attracting as many as 40,000 spectators.

#### Strict rules

Show-jumping is the main arena sport within the equestrian world and the competition that is most popular in the most countries. A certain number of fences must be jumped in a specific order, without the horse knocking them down or refusing.

There is also a maximum amount of time allowed. If several competitors have the same number of faults, then there is a "jump-off" with the winner being the one with the fewest number of faults and the fastest time.

#### Communication and control

Riders must have excellent control over a horse's rhythm, pace and strength in order to clear all the fences.

Riding is a sport where riders communicate with their bodies, requiring complete body control, very good balance and strength.

Sussi Stamming

#### FACTS/TEAM ERICSSON

#### Franke Sloothaak, age 42.

Born in the Netherlands, but resides in Germany for which he also competes.

Best horses: Joly Coeur, Landdame

Merits: World Champion 1994, Gold medal team at Olympics in 1988 and 1996, currently ranked sixth in the world. Was forced to decline spot on Olympic team due to injured horse.

#### Maria Gretzer, age 42, Sweden.

Best horses: Feliciano, a gentleman and somewhat of a couch potato (ready for Olympics), High Stepper – both Swedish-bred Merits: Best Swedish Olympic results in 40 years when she took sixth place in Barcelona 1992. She won the outdoor Swedish Championship this year. Qualified for the Swedish Olympic team.

Marcus Ehning, age 26, Germany.

Best horse: For Pleasure, a 13-year-old bay stallion, considered by many to be the best in the world.

Merits: Going to the Olympics.

Markus Fuchs, age 45, Switzerland. Best horse: Tinka's Boy Merits: Going to the Olympics.

Jerry Smit, age 32, Italy Best horse: Lux Z Merits: Going to the Olympics

Olivier Guillon, age 28, France. Best horse: Adelfos Merits: An up and coming rider



Team Ericsson, the sponsored equestrian team, surrounds Art McCabe, head of Ericsson's sponsorship activities at the corporate



Mohd Azlin Ghani and Azharin Khamis from the Internet company Xinu in Malaysia believe that there is substantial interest for their new WAP service that reminds users when it is time to pray.

Currently, half of Malaysia's population of 11 million are Muslims. Celcom expects that the number of WAP users will climb to 60,000 by year-end.

Photo: Lars Åström

# Beep when it's time to pray

Beep! A message appears on the WAP phone display. "In 30 minutes it's time to pray. The nearest mosque is in Kuala Lumpur, and it will take 10 minutes to get there." This is one of the new WAP services being launched in Malaysia this autumn.

➤ Today the climate in Malaysia is favorable for entrepreneurs with smart business concepts, particularly in the IT and telecom sectors. Mohd Azlin Ghani and Azharin Khamis are two software developers in Kuala Lumpur whose ideas will soon be realized.

"We are currently talking to three different operators who are interested in our prayer service for Ericsson WAP phones. We expect a decision within a week," relates Mohd Azlin Ghani, President of Zinu, a small company that specializes in Internet applications, or an "information artist company," according to Mohd's business card.

#### Nokia rejection

Mohd Azlin Ghani and his colleague Azharin Khamis show few outward signs of their Muslim faith. Dressed in white T-shirts, they look like most programmers. Mohd Azlin Ghani tells how the company became involved with Ericsson.

"We spoke to Nokia first," he says with a laugh. "They're really good in phones, so it seemed natural to contact them first."

The reception at Nokia was cool, however. Their calls were not returned. At the same time, a newspaper ad announcing that Ericsson and Celcom, one of Malaysia's largest cellular operators, would be launching a number of WAP services attracted the two men's attention.

#### **Help from Ericsson**

"We phoned and asked if we could come to the launch. We were invited, and once there, we met Mushir Che Chik, who is business development manager at Ericsson. After that, one thing just led to another," continues Azharin Khamis.

The two developers' perception of Ericsson changed dramatically after the initial contact.

"We thought the company was boring and conservative. We had no idea that Ericsson was the leader in mobile Internet. Our picture changed very quickly when we began working with them," relates Mohd Azlin Ghani.

Through Ericsson, Xinu's five employees received help with everything from training in WAP and Bluetooth technology to developing a business concept and contacting the right people with the various operators.

#### Concept service

"We have lots of ideas and we're really good programmers. But we really don't know so much about how to market the company in the best manner," says Azharin Khamis. "If we had contacted the operators ourselves, I don't think they would have been very impressed. It really means a lot to us to be able to work with a large, global company. We feel that if Ericsson believes in us and our ideas, then the whole world will, too."

But isn't there something immoral about charging people to remind them when they should pray?

#### FACTS/MALAYSIA IN BRIEF

Population: 22.7 million Government: Constitutional monarchy Official religion: Islam Capital: Kuala Lumpur

"Well, if this was the only service for which we charged, it would feel wrong, but we are charging for an entire concept in which the prayer service is included in the price," explains Mohd Azlin Ghani. "We see our solution as a personal assistant: you are automatically reminded of your obligations and thus able to devote more energy to other things."

The prayer service will initially be offered as part of a package that includes e-mail, calendar and phone book functions.

#### Continued improvement

The software developers at Xinu are not satisfied yet. A lot more work remains to be done.

Soon their service will be put up on Ericsson's local WAP server, which is called the WAP Focal, so that Internet companies and operators can test the service.

Development plans also call for including GPS (Global Positioning System) so that users can receive information about the location of the nearest mosque, directions for getting there and tips about restaurants and stores offering Muslim food.

Ulrika Nybäck

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## Campaign stimulates new companies

Both local and global services will be needed to make WAP exciting for users. Ericsson in Malaysia is therefore working closely with local Internet companies and helping them with everything from business contacts to marketing.

> To stimulate development of local WAP services, Ericsson Malaysia has developed the WAP Focal, an Ericsson initiative to build a community of developers and content providers by providing everything from tools for downloading and training to WAP services developed by local companies that are still being tested.

The local WAP server is in turn linked to the WAP Developer's Zone, an Ericsson-wide server with the same objectives, but without the local content.

#### Chatting with popstars

"Today we are working with more than 20 Malaysian companies that are developing WAP services. Their businesses range from banking and insurance to music and entertainment. One of the new services, for example, allows users to chat with a local singer or artist," relates Abd Mushir Che Chik, business development manager at Ericsson Malaysia.

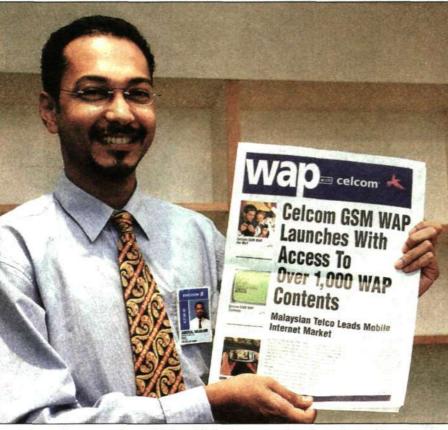
The most ambitious WAP efforts are currently being mounted in such areas as telemedicine, various education projects and e-government projects. The latter of these projects will allow citizens to discuss various issues with local politicians on the Internet.

#### Contest for innovation

Telemedicine, which is a more established application area, will allow doctors to work more efficiently by giving them more rapid access to patient data via wireless Internet connections, for example.

Abd Mushir Che Chik is eager to talk about further Ericsson WAP initiatives.

"We have just announced a contest in which the company that develops the most innovative application will be awarded a



"Both the WAP server and the WAP Focal Gathering as meeting places for local Internet companies in Malaysia," says business development manager Abd Mushir Che Chik at Ericsson Malaysia, which is currently working with about 20 local Internet companies

Photo: Lars Aström

prize. In addition to innovation, we take into consideration whether or not the service serves society in some way and how many people might want to use it," continues Abd

Contest entries are being discussed at the "WAP Focal Gathering," a meeting place for various Internet companies. At these quarterly meetings organized by Ericsson Malaysia, everyone interested in WAP is invited to listen to presentations, exchange ideas, demonstrate their latest application and make new contacts.

#### Developing for the future

"These events have become extremely popular. About 100 persons came to the last WAP gathering," notes Abd Mushir Che Chik with satisfaction.

Abd Mushir Che Chik believes that contacts with local Internet companies will continue to be rewarding when it comes to developing services for GPRS networks, as well as tomorrow's

This year, Celcom, one of the country's largest mobile operators, will begin offering GPRS services.

By year-end, the Malaysian government will decide how 3G licenses will be allocated. Many believe that the most reasonable option is a combination of so-called beauty contests, in which operators are judged according to their ability to quickly deploy services, and auctions.

Ulrika Nybäck

### Operators in fierce competition

Competition among the largest Malaysian operators is fierce. Together with Ericsson, Celcom recently succeeded in being among the first to offer WAP services, but who will be the first to launch GPRS is not yet clear.

➤ With Celcom's launch of WAP services, Ericsson beat its competitors, Lucent and Siemens, in delivering the WAP systems to Celcom. This is the first Ericsson WAP system bought by a Malaysian operator.

"After the launch of Celcom's WAP services, we have noted increased interest from other operators who want to start working with Ericsson in other key accounts," says Mohd Reduzuan Abu Samah, key account manager for Celcom at Ericsson Malaysia.



Mohd Reduzuan

"This shows how important it is for the company and the brand that Ericsson is always first. But we have to keep working hard, so that Celcom will also be the first to launch GPRS services as well," he continues.

Celcom's original plan was to launch GPRS services during the first quarter of 2001, after a four month trial that will start in October this year. Nonetheless, there is an ongoing discussion to expedite the commercial launch of Celcom GPRS to the fourth quarter whereby the trial will be shortened. The GPRS network allows users to always be online and enables packet data traffic to be transported over the circuit-switched GSM network.

Celcom has been Malaysia's largest operator for the past eleven years. Last year, the company accounted for 25 percent of Ericsson's total sales in the country.

Celcom, together with Maxis and Time Wireless, were among the first to launch WAP services in June. At present, all three operators are aggressively marketing their WAP services to the Malaysian subscribers. Mobile Internet is fast picking up in Malaysia with the launch of WAP services by the operators.

Ulrika Nybäck

## IT revolution strengthens Asia's economy

After several years of financial crisis in Southeast Asia, the economy is recovering strongly. The dramatic turnaround has created a feeling that everything is possible, according to ecomomist David Hale, IT companies are a major force in economic growth.

> Who can forget the pictures of the weeping bankers in Thailand when the financial crisis began three years ago?

The meltdown, which spread throughout Southeast Asia, was triggered by the Thai government, which was forced to float the nation's currency. This in turn created a debt crisis for the banks, since the Thai economy was in large part dependent on foreign loans.

A year ago, however, there was a turn-

around, and today all indications are that Asian countries are back on track. At least that's the case if you look at how successful companies are, how many new companies are being created and how many people are employed.

For business, the turn-around has meant increased competition in the market, lower prices and better service for consumers. Nonetheless, the financial crisis caused considerable damage that will take some years to repair. Several banks have not recovered.

Nepotism is still prevalent, and many companies are still struggling under enormous debt

#### A powerful force

David Hale is chief global economist at Zurich Financial Services. According to an article in the Far Eastern Review, he credits the strong development in the IT sector for much of to-

"The IT revolution is a powerful force for all the structural changes we've been talking

#### FACTS/ERICSSON IN MALAYSIA

- · Established in 1964
- · The country's largest supplier of fixed and wireless networks
- · 2,200 employees in four locations: Ericsson Business Consulting, Ericsson Business Support Center, EHPT and Ericsson Academy
- · Ericsson has delivered systems to three of
- the country's five operators: Celcom, DiGi Telecom and Telecom Malaysia
- Ericsson Mobile communications opened the country's first manufacturing plant for mobile phones in 1997
- · In its first three years of operation, the plant produced four million phones

about since the crisis began three years ago," says David Hale. "Following so soon after the financial crisis, the sense of drama is greatly intensified. And that's positive in terms of going forward."

#### Loans easier

To further stimulate development in the telecom and IT sectors, most countries in Southeast Asia have deregulated the telecom market. This has resulted in everything from free

Internet connections in Singapore to free longdistance calls in Hong Kong.

Optimism for the future has also reached the banks. Just a few years ago, borrowing money to start a company required material assets as collateral. Today, smart business concepts and patents may be sufficient. Entrepreneurs must also prove that they have sustainable business plans and partners who believe in them.

Ulrika Nybäck





telecommunication background but working in Sweden to implement the

Photo: Lars Aström

## Jun's baby grows up

"Ericsson must learn to charge for its training courses," says Jun Toh at Ericsson Malaysia, who has developed a new interactive Web-based training program for the company's different mobile systems. This autumn, she will be working in Sweden on developing a similar program at the corporate level. "It's time for the baby to grow up," says Jun with a smile.

Many before Jun have tried to develop a similar web-based training program but failed. Previous implementations have been too expensive, not sufficiently intuitive or demanded excessive capacity.

"I started my work by studying previous attempts to learn what had been done right and what didn't work. I hat was a necessary starting point," says Jun, when we meet at Ericsson's offices in Petaling Jaya, Malaysia. Recently, she moved to Stockholm to continue developing her training program.

#### **Burning interest**

Her manner is demure, but appearances are deceiving. She only needs to talk for a few minutes about her latest project for listeners to understand that beneath the unassuming manner there is a will of steel and a burning interest for both technical and human resource issues.

In less than a year, Jun Toh, with the support of her boss and a number of suppliers, has developed a course for anyone who has no telecommunication background but who would like to learn about wireless communi-

#### Uses need motivation

The training program currently encompasses ten Ericsson systems, including GSM 900, 1800, GPRS and 3G networks. GPRS is a technology that allows packet data to be sent today's circuit-switched GSM networks.

The idea for the training program was conceived just months after Jun began at Ericsson. As an employee at Ericsson Academy in Malaysia, she noted that the best lecturers were always booked and worked extremely

In addition, operators wanted methods for following up what knowledge had been retained and what needed further study. The most important question for Jun Toh became how to motivate users to keep learn-

"Discussion groups where users can chat, interactive video lectures and the ability to forward questions to a specialist make the training come alive. The fact that all components are Internet or intranet-based makes the cost very competitive," continues Jun Toh.

This raises a hot topic. How can Ericsson convince customers to pay for training that to date has been included for free when they purchase a system?

"Today, training entails so much more. Take interactivity, for example. Now customers can obtain confirmation of what they have learned in the form of a diploma, endorsed by a University, when they have completed all course components. This is something requested by many operators," notes Jun Toh.

#### University prospects

Confirmation of what users have learned is something that Jun Toh intends to develop further. In the future, it will be possible to receive some form of academic degree and possibly university diplomas.

Many people have been impressed by Jun Toh's system, including competitors. A few months ago, she was asked if she would like to be part of a group at the corporate level that will refine the concept and develop a global training program along the same lines.

"For me, being able to complete this project was like a dream come true, and being invited to come to Kista and continue my work is to me recognition of my success. This first version is like my baby. More development is needed, and it's time for the baby to grow up," says Jun Toh with a smile.

There have been a lot of enquiries about EAM's e-learning system since its launch in

May 2000. The University of Malaysia has already purchased the interactive training course, and three of the country's operators have expressed interest. The program has already attracted attention outside Malaysia and generated queries from two universities in South Africa and Taiwan.

"That I was able to complete the project with such limited resources is because my boss believed no percent in me and the idea. My own burning desire to develop the program was also a pre-requisite," concludes Jun

Ulrika Nybäck

#### FACTS/WEB SCHOOL

The interactive training program is very intuitive. The user logs on and starts learning. Questions on a number of topics with varying degrees of difficulty are asked as the course

If the number of correct responses falls below a certain level on any section, a training phase begins. A new learning plan will be sug-

If the student gets stuck, it is possible to send an e-mail to a specialist at Ericsson.

The program is developed in association with a local university in Kuala Lumpur.

## Bromine and lead are out

"We know that these are difficult goals, but the industry is proceeding too slowly and this is the only way to get anything done," says Lars-Göran Bernau, who oversees the company's environmental efforts. "We believe that we'll be able to achieve our goal for even less than what it currently costs us!"

➤ Ericsson has initiated a "lead- and halogenfree products" project. It involves the removal of lead from soldering processes utilized in manufacturing as well as from components themselves. Halogenated flame-arresting materials will also be removed from printed boards and components.

"Lead-free products are important symbolically," says Lars-Göran Bernau.

"Our goal is that by the end of the year 2001, 80 percent of Ericsson's new products will be manufactured using lead-free processes, 80 percent of the new printed boards will be made without halogenated flame-arresting materials and 100 percent of new products will be made without beryllium oxide."

The tricky part is finding good replacements – substances that are neither hazardous to the environment nor detrimental to technical qual-

ity. Another difficulty is the fact that the entire manufacturing process is affected. New materials will, for example, require higher soldering temperatures. It is a major undertaking to change manufacturing processes for the mass production of mobile phones and transceivers.

#### Five testing plants

Five Swedish plants – Katrineholm, Borås, Linköping, RSA in Kista and Gävle – are involved in the lead-free soldering mixture project. Project manager Stig Ek is a circuitry specialist from Nynäshamn.

Ericsson's collaborative partners, including Flextronics, Solectron and SCI in Scotland, are also involved in the project. Every unit has chosen a typical product from their plant.

Their task is to find replacements for the tinlead solder alloy that has long been the standard within the electronics industry, and to develop design parameters for the new materials.

"At the Prototype Center in Gävle, we've been testing two different solder alloys, both containing 95.8 percent tin, 3.5 percent silver and 0.7 percent copper," says Fredrik Nyman, project manager for process verification in Gävle.

The biggest difference is that these new lead-free solder mixtures melt at 219 degrees Celsius compared with 180 degrees. The higher temperature means longer times in the oven, especially for components with high thermal densities, placing greater requirements on both circuit boards and components.



A lead-free soldering mixture is being tested at the Ericsson Radio Access plant in Kista. It will result in an improved workplace environment for Marie Söderström and other machine operators at the plant.

Photo: Kurt Johansson

So far, the difficulty has been in achieving these high temperatures to solder everything completely without damaging the product.

As for circuit boards, the primary challenge is to eliminate so-called halogenated flame-arresting materials, usually bromine compounds, which can generate poisonous dioxins and dibenzofuranes during firing. Alternative flame-arresting materials are based on nitrogen and phosphorus compounds.

#### Prototypes are working well

"Our work includes the evaluation of electrical and physical parameters of printed boards along with their processability, reliability, toxicity and accessibility," says project manager Martin Valfridsson, who is also the head of research and development at the Printed Circuit Board Technology Center in Kumla.

In addition to test and model printed boards, a number of prototypes have been manufactured in collaboration with Ericsson's business units. "Generally speaking, we can say that prototypes using the new materials are working well," says Martin Valfridsson.

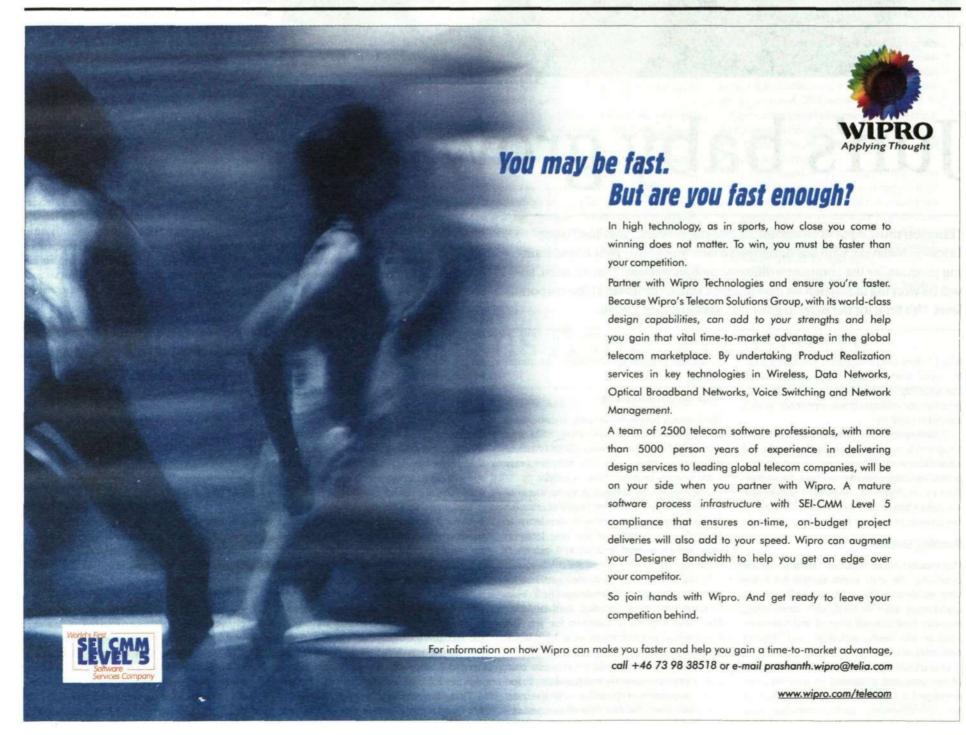
Gunnar Löfquist is project manager for the component project. His first goal is to develop lists of components that can withstand lead-free soldering. Subsequent goals include developing components that do not contain lead or halogenated flame-arresting materials.

Response from subcontractors has been substantial, with most of them working on this issue. Some have made considerable progress.

The challenge in the conversion to lead-free processes is that there are certain components, such as oscillators, which have a difficult time handling the higher soldering temperatures necessary for alternative soldering mixtures.

It only takes one component that does not to prevent a conversion to the new process.

Lars Cederquist
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## Mid-way for new AXE

"Everything is going according to plan," says Leif Woll, project manager for the next-generation AXE platform. "The business model is proving to be even stronger than we first believed, and technical development is moving ahead, even though many problems remain to be solved. But, of course, that's always

Network Core Products (CNCP), which consists of Ericsson Utvecklings AB (UAB) in Älvsjö plus a number of design centers, has now reached the halfway point in the development of the next-generation AXE system. A year has passed, and a year remains until the first system is taken into operation.

The new platform will transform AXE as radically as the transistor transformed the electronics industry. Based almost without exception on commercially available standard components, the new platform erases the stamp of closed or proprietary system that AXE has traditionally borne.

This is AXE's contribution to third-generation (3G) mobile systems and packet-based switching technology. In addition, the new platform will also significantly increase capacity, thus sharply enhancing network concentration.

#### **Group switches**

Hasse Johansson, in charge of project communications at UAB, provides an example.

"With the developments now occurring in switching, a mobile switching center will soon be able to handle all traffic in a country the size of Sweden. Just three employees will be required to handle operations, and the switch itself can be placed in an isolated location where site costs are minimal. We're not quite there yet, but customer demand is pointing in that direction."

The new switch will allow large group switches, which is the unit responsible for associating incoming and outgoing time slots. The theoretical limit is 512K, meaning 512,000 channels or multiple positions.

This corresponds to 256,000 simultaneous calls, since each call requires at least two inputs and outputs in the switch. But what about the processor that is able to operate such a switch? And is there really a need?

Technology has already advanced to the point where 128K switches able to handle 56,000 calls do not pose problems.

#### **AXE** milestones

The first milestone will be passed at year-end, when Ericsson's new APZ 212 33 central processor will be released. One year later, the APZ 212 40 will be released, which will do full justice for the new platform.

This unit is based on a commercial processor running at more than 1 GHz, which can be as advances in microelectronic occur

Several characteristics of the new platform will constitute milestones for AXE:

· This will be the first AXE switch that opens



"AXE is definitely alive and we are launching a new open generation. It is based on commercial programmable processors and will be running commercially by the summer of 2001," says assistant project manager Gunnar Jakobsson and project manager Leif Woll. Photo: Jezzica Sunmo

Reserve these dates in your calendar! For more information and registration: http://sourcing.ericsson.se/Development Tools/MentorExpo/

up the AXE core using commercially available programmable processors. The APG 40, for example, which is an adjunct processor for monitoring and control of the system that completely replaces the IOG 20, is based on Intel Pentium processors running the Windows NT operating system.

- The platform is generic for all standards and marks the transition from circuit to packet
- More system functionality, implemented as downloadable software, can be remotely downloaded over the network, compared with previous products.
- · The switch can be monitored entirely without human intervention, and if a hardware fault occurs, it can be corrected by virtually anyone by replacing a circuit board.

The most outstanding feature of the new platform is GEM, Generic Ericsson Magazine, which will allow the magazine to contain virtually anything, including the switch, ETs (exchange terminals), the clock unit and codecs.

#### Record time

This, combined with a sharp reduction in size - an entire magazine according to the previous building practice can in principle be replaced by a single card, will result in a more compact node that can be installed in record time. The customer's node will be delivered as two double cabinets, containing four GEMs, eight option magazines and one CPU, all packaged on a single EU pallet.

Reduced power consumption and size will also mean that this will be a "green" switch with minimal environmental impact.

The demands that Ericsson business units place on CNCP, however, are high.

#### Sharply reduced costs

In addition to being able to handle vastly greater traffic, manufacturing costs for the new switch must be reduced by 25 percent per year. The same applies to installation costs.

Reducing costs by half may be possible, but reducing power consumption by the same amount will be difficult.

In addition, the number of cards must be reduced by 30 percent. This will not only reduce faults, but also simplify inventory management.

If a system restart is required, this should take no more than 30 seconds. The average time during which the switch is not generating revenues for the operator may be no more than two minutes per year.

**Lars Cederquist** 

#### New tools for **WCDMA** designers

>> Ericsson recently launched two new PC-based commercial tools for designers of WCDMA networks. The tools, which are intended to be used by Ericsson and its customers, are packaged in a toolkit called TRAM (Tools for Radio Access Management) that contains the new products WCDMAplanner and WCDMAtransporter.

WCDMAplanner is used for cell planning in WCDMA networks and performs traffic simulations and coverage calculations. Uses include both planning new WCDMA networks and migration from existing 2G networks to WCDMA. In the latter application, the tool is able to use the information on traffic models and topography available in the existing 2G network.

WCDMAtransporter is used for planning the transport network. Using data from WCDMAplanner, the new tool can design both logical and physical links, suggesting leased lines or microwave links, for example.

#### Compaq recovers IT equipment

>> Compaq has signed an agreement with Ericsson whereby the supplier will recover IT equipment in Sweden. The service, which is called Computer Asset Recovery, includes all IT equipment, regardless of make.

Equipment can be transported (by Ericsson or Compaq) to collection centers for forwarding to the recycling center in Nijmegen in the Netherlands, where it is repaired or disassembled for reclaiming of components, depending on the scrap

#### Researcher debunks IT myths

>> In a doctoral thesis presented at Stockholm University, Bo Lennstrand attempts to present a balanced view of IT trends. There are plenty of myths, such as the belief that a company must be first to market. Reality shows that it is more important to be the first to succeed, such as Microsoft and

Neither is it certain that the lifecycle for IT products shows the same ups and downs as the classical curve.

#### Smart antennas for mobile phones

>> Swedish company Allgon is developing a smart antenna for mobile phones. The antenna will be optimized for mobile Internet and controlled electronically by extremely fast micro-mechanical switches.

The antenna continuously adapts to the surroundings, always ensuring optimal performance for more reliable transmi sion and lower power consumption. The new antenna, which will work with multiband phones, is expected to be available by the end of 2001.



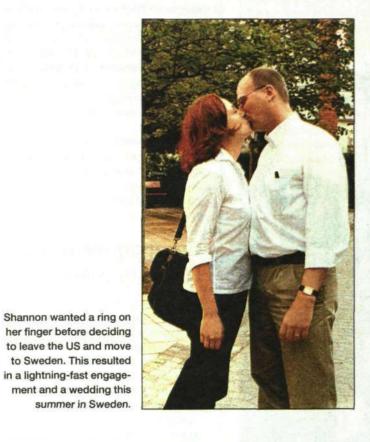
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## A touch of taboo



They met in Stockholm at a one-day meeting on a Mobility server in spring 1999. Shannon Cook was sitting waiting at the conference table when Lennart Schmidt walked through the door.

"I thought he was really cute, but thought to myself 'He's probably married and drives a Volvo."

But she was wrong. The attraction was mutual and, on June 17 this year, Shannon became Mrs.

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Meeting rooms and corridors are not exactly romantic environments. However, it is still more likely that you will meet your partner at work than in a bar or during a vacation. Shere Hite, the American psychologist and writer, predicts that the workplace will secure its position in the future as the number-one ren-

"We spend so much of our time at work," says Lennart. "I don't find it strange."

That first day's meeting was rounded off with a dinner and socializing. Both Shannon, who had flown in from Ericsson in North Carolina, and Lennart stayed the entire evening. The next time Shannon came to Sweden, she had hardly arrived at the hotel before Lennart called and asked her out to dinner. They both felt that they had found the right person.

"It was so easy to talk to Shannon," says Lennart.

"I felt so calm and relaxed," says Shannon.

#### "Let's just be friends"

Despite this, she said that they could only be friends, since they worked together. After a week of friendly dinners, however, it was obvious that a relationship was unavoidable. For a long time, the relationship was kept secret from the couple's colleagues.

"It wasn't really a secret," says Lennart. "Oh yes it was," says Shannon. "You didn't

want us to tell anyone at work. "No, no, but it was a matter of the usual caution. Even if you meet someone outside work, you don't have to shout it from the rooftops right at the outset."

After a short discussion, the pair agree that there were actually several reasons for being discreet. Lennart points out that he wouldn't have liked people gossiping about him and Shannon as long as they were involved in the same project.

"It was a rather hectic period," Shannon recalls. "Everyone was working extremely hard and we didn't want to be accused of wasting valuable work time. Imagine if people thought that we were making business trips just to be together, for example."

Gradually, their colleagues noticed what was going on. Shannon and Lennart were so set on not showing their feelings that they ignored one another completely - they hardly said hello when they met. Naturally, this was interpreted as being highly suspicious.

The relationship became public knowledge and the reactions were positive.

A short time later, the project was completed and Shannon and Lennart moved on to new assignments. Today, they are both working on WCDMA, but in different parts of the

#### Ericsson doesn't want rules on this

Relationships are banned within many companies, but Ericsson is crawling with married people and couples in love. There is no policy covering this, either. According to Bo Lindgren, head of human resources in Sweden, this is a conscious choice.

"We think it stupid to have rules on these matters. We will solve problems as they arise. You can't stop people liking one another, nor can you punish them by forcing them to move or having one of them quit

But there is also a downside to this. During the preparation of this article, Contact received several requests from people who have



Shannon and Lennart travel together to Kista every morning. On arrival, they split up, since they work in offices in separate buildings. Shannon contends that during the day Lennart transforms

worked with couples and have found the situa-

"Please don't write the article in too positive a light," has been the message.

One objection is that couples form a power alliance that is difficult to manage. Another problem can be that colleagues are drawn into private intrigues and are forced to take a stance if the couple falls out.

#### Conflicts of interest may arise

Extra problems arise if a manager is involved

"We want to avoid situations like that," explains Bo Lindgren. "Those involved, Ericsson, fellow employees...everyone benefits from avoiding conflicts of interest and loyalty. But it is my opinion that most people are able to solve these difficulties at a local level. The easiest solution is that one person changes workplace. This is where it is an advantage that Ericsson is such a large company. It is not particularly difficult to move to another part of the organization."

Shannon and Lennart understand those people who think that love on the job is inap-

"I would never go on a date with my boss, for example," says Shannon and raises her eyes to the ceiling. "Never ever."

The couple are happy to be working some way from one another, although they are both in Kista. It would feel awkward to go to the same meetings or to have offices next to one

"And, naturally, it would be really bad for everyone else if a couple were to break up," Shannon reflects. "That's why people should think things through a little more before starting a relationship with someone at work."

#### Better chance of survival

On the subject of break-ups, Shere Hite's statishave a 5-percent greater chance of survival, compared with other relationships. And, although a broken relationship takes away energy from work, the same is true when breaking up with someone from outside the workplace, she argues in her book, "Sex and Busi-

In the book, she also tackles the criticism that couples create power blocs. The same applies to friendships, she writes. The only way to avoid these types of complications would be to form workplaces where nobody really knows anyone else

Lennart points out that today's labor market is so mobile that people seldom stay longer than a few years in the same post. That's why he believes that everything is rather simple.

"If there are prerequisites for a long-term relationship, it would be unreasonable to give that up because of a job that you may only have for about a year."

#### Change of lifestyle

Shannon has now left family and friends in the US to move to Sweden and Lennart's small apartment in downtown Stockholm. They leave the apartment every morning to commute to Kista. They often meet for lunch, too.

Doesn't this mean there is a risk that they will get tired of each other or that they will talk too much shop?

"No, this works for us. I love going by train with you," says Lennart and nods to Shannon. "And we have rules for the amount of time

we spend talking about work," Shannon notes. "Never at weekends or on vacation. That is for-But they often find it is fun to discuss work

with each other. It is a shared interest. They can swap knowledge, make use of one another's network of contacts and have no problems keeping up when telling each other about the working day or problems.

> Maria Paues freelance journalis



We have rules for the amount of time we spend talking about work. Never at weekends or on vacation. That is forbidden."



inside presents

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# Vacancies AT ERICSSON

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

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#### **Contact No. 13 2000**

#### **ERICSSON TELECOMMUNICATIONS ROMANIA**

Ericsson Telecommunications Romania SRL Ericsson Telecommunications Romania SRL was established in 1994 and has today over 140 employees working with all Ericssonproducts. In 1997 ETR signed a contract with Mobifon dominated by Airtouch and TIW, one of the mobile operators. In 1999 we signed another contract with Cosmorom. The tempo is very high and our customers are in a tough competitive situation. Now we are looking for:

#### BSS Expert Support Engineer, CME20

● The main responsibility 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 advice, assistance and transfer knowledge to less experienced local staff. You also need to participate in 24-h emergency support periodically. Provide technical competence for resolving complex problems in the Radio Net-

Competence requirements: Minimum 4 y ears working experience on AXE 10 application systems plus minimum 2-3 years CME20 and or CMS40 systems, preferably verification/support and you have, excellent trouble shooting skills.

The candidate must have good English skills both spoken/written and be customer oriented. Only applications from Ericsson employees will be considered for this position.

#### SS Expert Support Engineer, CME20

• The main responsibility for this position will be to manage, co-ordinate and participate in investigations and trouble-shooting activities in the SS area at highest technical level and to address customers expectations/needs. Provide technical advice, assistance and transfer knowledge to less experienced local staff. You also need to participate in 24-h emergency support periodically. IN an Pre-Paid experience is desirable.

Competence requirements: Minimum 4 years working experience on AXE 10 application systems plus minimum 2-3 years CME20 and or CMS40 systems, preferably verification/support and you have, excellent trouble shooting skills.

The candidate must have good English skills both spoken/written and customer oriented. Only applications from Ericsson employees will be considered for this position.

Contact: Adem Sumertas, Techn. Director, +40 1 40 10 162, adem.sumertas@etr.ericsson.se or Simona Zinca, HR Manager, +40 1 40 10 122, simona.zinca@etr.ericsson.se

#### ERICSSON INC., RESEARCH, TECHNOLOGY AND

#### **Senior RF Design Engineer**

The RF and Analog IC Group in Research Triangle Park, North Carolina, USA, has the following opening:Senior RF Design Engineer (REF. 00CV11648).

We are engaged in the development of key technologies for cellular phones based on the American Standards (including TDMA, EDGE and IS-95).

• We are looking for a senior RF design engineer, with experience in the design of RF systems within complex communication equipment. This position requires excellent knowledge of typical RF components and sub-systems (LNA, PA, Synthesizers, etc.) and relative design/analysis techniques. Ability to generate innovative solutions in the field of RF design for wireless products is also instrumental for this position. Good experience with common RF and system simulators (ADS for instance) is also necessary. Familiarity with RF ASIC design techniques is preferred. Experience in the design of battery powered wireless equipment is preferred.

Contact: Aristotele Hadjichristos, +1 919 472-7755.

The Technology Development Organization in the Research Triangle Park, NC (USA) has the following opening:

#### **Senior RF Design Engineer**

REF. 00CV11648

 We are engaged in the development of key technologies for cellular phones based on the American Standards (including TDMA, EDGE and IS-95). We are looking for a senior RF design engineer, with experience in the design of RF systems within complex communication equipment.

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Contact: Domenico Arpaia, +1 919 472-7799.

#### TELEFONAKTIEBOLAGET LM ERICSSON, SWEDEN

#### **Project Manager**

 For the global Business TV project. We are currently looking for a new project manager for the ongoing Business TV project. The previous manager, Elisabeth Ljungberg has decided to leave Ericsson after 7 years for a new challenge asHuman Resource Director at a external publishing agency.

Are you interested? You will be responsible to establish, manage and drive the business tv project from the start-up, pre-study phase to the end of rollout. You will build and lead a team of sub-project managers from the various line organizations as well as co-ordinate with external production companies.

We are looking for a good mixture of competence and would like a person who have: Prior experience as total project manager. Are results and people-oriented, creative and have a sense of general technical understanding and good communication skills, also in English. However, equally important is your commitment and motivation!

Contact; Johan Ljungqvist +46 8 719 01 82, Johan.Ljungqvist@lme.ericsson.se

#### ERICSSON BUSINESS CONSULTING SVERIGE AB, VÄSTBERGA

#### IM & CM consultant/teacher

(5 positions)

Ericsson Business Consulting is the leading provider of Mobile Internet Business Solutions. We supply total solutions including advice, integration and managed services. The mission involves piloting the clients, large and fast-growing enterprises, into the Mobile World and turning new business logic into a competitive advantage for them.

Within the unit Information Management Business we are focusing on Information Management (IM) and Configuration Management (CM). Today we are approximately 20 persons located in Stockholm (Kista and Västberga) and in Dallas. The interest for our products and services is constantly increasing and consequently also our need for consultants and teachers. Our customers are mainly other Ericsson companies in Sweden and abroad but we also have assignments outside Ericsson in cooperation with our partners.

• Working for us means a lot of freedom and good comradeship. We often work independently in different kinds of customer projects. That means that we are constantly increasing our ability to cooperate and meet the customer in a proper way, basically by working across our teams and different working areas. In that way, you have a lot of possibilities to influence your own assignments.

#### **Information Management**

(2 positions)

Our Information Management team is organizing and structuring Ericsson's information and document management for the future by focusing on processes and IT. We are now looking for two new consultants to our team who will be working with business development. That means working with pilot studies, analyses and design of business processes and implementation of IM solutions.

#### **CM Academy**

3 positions)

CM Academy is Ericsson's Competence Center for Configuration Management and is focusing on both methodolo-

**Updated August 25** 

gy and tools within the area of CM. We are now looking for teachers and/or consultants to work with our services, e.g. Ericsson's framework for CM (CM Framework) and tools within the ClearCase family. Both our areas give a lot of variation and good possibilities for specialization within for example consulting, training and seminars. You will have good opportunities for traveling and you don't have to be worried.... you won't get bored!

We prefer that you have an academic background and a few years in some of the areas mentioned above. Experience of design and development projects, Windows NT, Unix and different EDM/PDM and CM-system (e.g. ClearCase, Documentum, Matrix or Metaphase) is an advantage.

With our international connections and as English is the main language within Ericsson, you must speak and write well in English. To work with us, you should have the ability to work in a team as well as independently and have a good feeling for service. Please visit www.ericsson.se/businessconsulting and http://consulting.ericsson.se

Contact: Mikael Schönström, Information Management Team, Mikael.Schonstrom@edt.ericsson.se, +46 8 585 330 68 or Michael Östergren, CM Academy (methods), +46 8 568 636 03 or Niklas Svedberg, CM Academy (training and tools), +46 8 568 603 71.

Application: marked IM & CM consultant/teacher: recruitment@edt.ericsson.se

#### NIPPON ERICSSON K.K. - JAPAN

3rd Generation WCDMA/IMT-2000 OPPORTUNITIES IN IAPAN.

In order to meet the challenges presented by the deployment of a 3rd Generation UMTS/IMT-2000 Network in Japan the IMT-2000 Integration Unit (NRJ/SW/I) within Nippon Ericsson is looking for a number of highly motivated and talented engineering personnel. The majority of these positions are based in Shin Yokohama, however some positions may be based in other locations within Japan.

All positions require a strong customer focus and the successful candidate should be able to work well within a team environment and be able to work with people from a large range of cultural backgrounds. English fluency is essential. For further details regarding Nippon Ericsson K.K please visit the web-page at: http://inside.jp.ao.ericsson.se

## System Support Engineers (Radio Network and Applications)

• The successful candidates shall be responsible for providing integration, configuration and software system support during the deployment of the IMT-2000/UMTS network and then provide first line software technical support for the network whence it is in service. The applicant is required to have at least 3-5 years experience in integration, system support, verification or design role in the mobile telecommunications, preferably in the radio networks, Radio Base Stations and Controllers.

These positions offer an excellent opportunity for engineers wishing to move into the IMT-2000/ WCDMA field and a number of vacant positions are now open. Training as required will be provided and some overseas and domestic travel may be necessary. There may also be a requirement for some engineers to be available at times on an emergency support/on call roster.

Contact: kasem.mohamed@nrj.ericsson.se, +81 45 475 4482, Mobile: +81 90 99738717, Fax: +81 45 475 4350

#### NIPPON ERICSSON K.K. – SHIN-YOKOHAMA, JAPAN

#### Senior Data Transcript Engineer

The NRJ Data Transcript Section is looking for two Senior Data Transcript Engineers for CMS30 Research on the future projects and IMT-2000 Core Network DT production for our test plants.

• The main responsibility for the CMS30 Research DT engineer will be to research the impacts to DT on the future projects, to improve our current processes, to train local DT engineers, and to investigate and develop DT method and tools. The candidate should have at least 6 years of AXE ex-

perience in data transcript production, testing and related areas, preferably in CMS30.

The IMT-2000 Core Network DT engineer's responsibility will be to produce DT for our own test plants, to train local engineers and to support IMT-2000 Core network DT production for the customers. The candidate for this position should also have at least 6 years of AXE experience in data transcript production, testing and related areas in GSM, and GPRS experience is a plus.

The successful applicants will be self-motivated, take own initiatives, and work independently. As these are demanding positions, you must be flexible and sensitive in your relationship toward the customers and team members. Occasional presentations and meetings with the customers can also be expected. Good co-ordination and communication skills in English are essential. Applicants should be computer literate in MS Windows environment. Experience in UNIX Windows environment is a plus. And experience in DTSS, GREGER, DTH, PPDC and IMT-2000 is an asset. We expect the successful candidates to start November 2000. The duration of the assignments will be at least eighteen months.

Contact: Hitoshi Kawasaki, DT Manager, +81 45 477 5518, hitoshi.kawasaki@nrj.ericsson.se or Raymond Mui, DT Supervisor, +81 45 477 5515, raymond.mui@nrj.ericsson.se

#### ERICSSON, VENEZUELA

#### **Technical Support Manager**

• Responsible for managing the operations of the Local Support Office (ELS). Duties include hiring, developing, and managing a subordinate staff, providing technical support and problem management to customers, controlling budgetary matters, analyzing troubles and making decisions, prioritizing assignments for the organization, formulating routines and monitoring the areas system performance.Manage organizational development, strategic planning, and leadership development in functional areas of the Local Support Office

Requirements: Engineering discipline with progressive experience 5 to 8 years in telecommunications industry, preferably in technical support. Supervisory experience in a technical support organization. Knowledge of telecommunications networks and specifically Ericsson products. Fluent in English and Spanish.

Contact/Application: Edgar Portilla, +58 02 2730240, edgar.portilla@cev.ericsson.se or Maria Isabel Meneses, +58 02 2730181, maria.meneses@cev.ericsson.se.

#### ERICSSON SYSTEMS EXPERTISE LTD, IRELAND

#### System Engineers

• in Business Communications. As a Systems Engineer in Ericsson Business Communications you will specify, develop and deliver business communication products. Our Unit has Global Product Marketing responsibility for Network deployed business applications. We work in the exciting area of Voice and Data Network Integration for the business market, worldwide. Our Task is to bring Voice reliability and capacity to Data Networks and to bring data flexibility and mobility to voice applications. So whereever you are, you can access your complete business environment. You will work in an integrated team with product and business experts to bring specific new products to market.

System Engineer Responsibilities: Product specification and Customer Requirement definition. Technical investigations on quick studies and feasibility studies, involving technologies like OOD, Visual Basic, SDK, JAVA, C++. Strategically Steering our product portfolio into 3G platforms, UMTS, NGS, IP, WAP, PC-Clients and Data Gateway Products. Write and Submit Patents to Ericsson Patent Organisation. System development and integration in solution teams. Technical support for Market units, sale team and customer meetings. Participate in Ericsson's Systems Engineering forums (GSM/Wireline/Data Products). Liaison with other Ericsson companies and 3rd Party suppliers. To attend industry seminars and standards bodies (ECMA, ISO, PARLAY etc.) Customer Presentations and Demonstrations.

The following qualifications are required: Experience in Data and/or Telecommunications product development or Systems Engineering, (2-6+ years, a range of experiences will be required in the team). Demonstrable communication and organisational skills. Good presentation, written and oral skills. Good team working ability is essential.

Application marked MK: Mike Kehoe, Recruiting Manager, +353 1 207 7098, Mobile +353 87 2246310, Mike.Kehoe@eei.ericsson.se.

#### Sales manager

● The main responsibility of the Sales Manager is to drive sales of Business Communications products/solutions towards operators through the local Ericsson companies in specified markets. With an ever increasing mobile customer base, the Sales Manager will be responsible for providing market and customer feedback to BCSC. Participation in Programme Plans will also be required as part of the on-going process to improve sales opportunities. The Sales & Marketing Manager, the Sales Team Leader and each Sales Manager will agree specific country areas of responsibility.

This role is part of a team of sales managers. Each manager is assigned a number of countries worldwide to support. The sales process involves supporting local Ericsson Company's in their entire sales process towards operators in assigned markets. This includes, but is not limited to, estab-

lishing and managing the relationship with them and their customers by providing: Presentations both commercial and technical. Delivery of supporting sales and marketing material, e.g.: Business Cases, Brochures, Positioning documents, etc. — with support from BCSC Programme Management and Marketing Management. Organisation and preparation of Product Demonstrations. Provision of support on technical queries. Ongoing relationship building with local Ericsson Companies and appropriate channels to market. Following the strategic selling process already in place within the BCSC organisation. Other duties may also be assigned from time to time.

The Sales Manager will report directly to the Sales & Marketing Manager and will be supported by the Sales Team Leader. Travel will be involved and at least two years in Telecoms or IT environment would be preferable.

#### **Design Section Manager**

 Reference: MANAGEMENT POSTS. A vacancy has arisen for a Design Section Manager within the Wideband Radio Network Department of the Radio Network Solutions Centre.

The WRN Department is actively involved in the definition, design and test of applications and sub-systems for Ericsson's 3G W-CDMA solution. W-CDMA (Wideband Code Division Multiple Access) is one of the third generation radio interface technologies that is optimised for wideband radio access to support high-speed multimedia services in areas such as video conferencing and Internet access, as well as voice calls. Software systems are engineered using the latest open systems technologies including UML, Java, CORBA and XML.

The Design Section Manager is responsible for the day to day operation and development of a design group within the Wideband Radio Network Department. Key responsibilities of the Design Section Manager include: Ensure the appropriate technical competence and processes are in place to support the development of new 3G radio network applications. Establish Technical Infrastructure and Test Facilities to support OO development.

Active participation in the management of the WRN Department in respect of:Strategic planning and goal realisation. Manager planning and recruitment. Budget and cost control. Manage all planning, monitoring, reporting and day to day activities within the Section. Line Management including appraisals, implementation of the R&R (Rewards & Recognition) system along with staff training and team coaching. Ensure the Long Term development of competencies & skills within the section. Responsible for delivering FRAME to the ERA organisation as part of the Wictoria project. Ensure that the department works to a documented Quality System. Representative of the department both within & outside the RNSC. Build on existing development plans to secure the long term growth and success of the

The ideal candidate will have a proven background in the management and /or development of open systems projects. Applicants will be qualified at degree level and will have built up sufficient technical and business experience to allow them to function independently at a professional level for all activities. The nature of the role is dynamic and therefore will require pro-active individuals with good problem solving and decision-making skills. Demonstration of Leadership and People Management skills are important as is strong customer and quality awareness.

#### Java Developers/Designers

 Reference: eei/mod. Vacancies have arisen for Software Developers / Designers within the Wireless Radio Network Dept. of the Radio Network Solutions Centre. W.R.N. is developing applications for 39 mobile systems.

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

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

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

Candidates should be capable of working on assignments either in a team or individually as the need arises. An active contribution to the development of the group in terms of quality, productivity and time is required. The ideal candidates will naturally be able communicators on technical matters and be capable of working to tight deadlines when required to do so.

#### I & V Section Manager

 A vacancy has arisen for a I&V Section Manager within the Wideband Radio Network Department of the Radio Network Solutions Centre.

The WRN Department is actively involved in the definition, design and test of applications and sub-systems for Ericsson's 3G W-CDMA solution. W-CDMA (Wideband Code Division Multiple Access) is one of the third generation radio interface technologies that is optimised for wideband radio access to support high-speed multimedia services in areas such as video conferencing and Internet access, as well as voice calls. Software systems are engineered using the latest open systems technologies including UML, Java, CORBA and XML.

The I&V Section Manager is responsible for the day to day operation and development of a Test and Support team within the Wideband Radio Network Department.

Key responsibilities of the I&V Section Manager include: Specification and timely provisioning of a complete 3G Test Environment.Establish Technical Infrastructure and Test Facilities to verify complex distributed applications. Ensure the appropriate technical competence and processes are in place to support the integration and verification of new 3G radio network applications. Development of Test strategies for Node and System level testing. Initiate and support the deployment of most effective test strategies and practices.

Active participation in the management of the WRN Department in respect of: Strategic planning and goal realisation. Manpower planning and recruitment. Budget and cost control. Manage all planning, monitoring, reporting and day to day activities within the Section. Line Management including appraisals, implementation of the R&R (Rewards & Recognition) system along with staff training and team coaching. Ensure the Long Term development of competencies & skills within the section. Responsible for delivering FRAME to the ERA organisation as part of the Wictoria project. Representative of the department in I&V forums both within & outside the RNSC. Build on existing development plans to secure the long term growth and success of the WRN department.

The ideal candidate will have a proven background in the integration and verification of open systems projects. Applicants will be qualified at degree level and will have built up sufficient technical and business experience to allow them to function independently at a professional level for all activities. The nature of the role is dynamic and therefore will require pro-active individuals with good problem solving and decision-making skills. Demonstration of Leadership and People Management skills are important as is strong customer and quality awareness.

#### RADIO NETWORK SOLUTION CENTER, DUBLIN

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.

#### **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.

#### **C Programmers**

 As a C programmer you will be part of a team that will deliver a feature to the BSC R9 Project. Your main responsibility will be developing GPRS/EDGE applications on the RPP platform. You have 2-3 years experience in C software development. Previous experience with RPD/RPG platform is an advantage.

#### **Programmers in Assembler**

 As an Assembler programmer you will be part of a team that will deliver a feature to the BSC R9 Project. Your main responsibility will be developing GPRS/EDGE applications on the DSP platform. You have 2-3 years experience of programming in assembler. Knowledge of the DSP environment is an advantage.

#### System designers

• As a system designer you will be part of a systems team involved in technical investigations, technical and product committees and you will provide technical support to the ongoing BSC projects. You have at least 5 years experience in AXE development environment, you have previously held a technical responsible role and you have a deep understanding of telecommunication systems. You are flexible and innovative with excellent communication skills. Previous experience in mobile systems and/or telecommunication protocols is an advantage.

Application: Noeleen Waters, HR Dept, Radio Hse., Beech Hill Clonskeagh, Dublin 4, Ireland, Fax: 353 1 2072887, Recruitment.Process@eei.ericsson.se.

#### ERICSSON CARIBBEAN, DOMINICAN REPUBLIC

#### **Local Product Manager**

Market Unit Caribbean covers an area of 15 countries and 15 dependencies with some 27 million people. The telecom market is growing strongly with tough competition between operators. Several large global operators are present in the region.

 We are now looking for an experienced product manager for a new GSM client in Dominican Republic who can support the KAM in driving the sales and marketing activities, provide product strategic information and system proposals to offerings to the assigned client.

The candidate should have a good technical knowledge of cellular systems with a successful track record. Knowledge of 3G Mobile technology and Ericsson's datacom solutions is a merit. As for your personality, we expect you to have a drive for result and excellent interpersonal skills.

Fluency in English, Spanish is essential and knowledge in French desirable.

Contact: Mats Skoglund, Ericsson Caribbean, +1 787 771

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

#### **ERICSSON RADIO SYSTEMS AB, KISTA**

#### Project Manager -Wideband Supply

Ref nr: R/H1485

● We are looking for Project Managers to the project office Supply & Services within the Product Unit ~ Wideband Radio Networks (PU-WRN). The project office at Supply & Services needs to reinforce our department with several Project Managers. We are a young and expansive organisation that works with modern methods and tools. Applicants must be skilled in running projects and be open for personal challenges and development. Our assignments vary from implementation of entire supply flow for new radio network products to improvement projects for efficient and rational supply of WCDMA products.

Task: You will work closely with design departments and factories to design new products, which will run smoothly through our Supply Chain to Customer.

Skills & abilities required: You are focused on result and have leadership and teambuilding competence. You are outgoing and have good communications skills (English is required). We presume that you have the ability to arouse enthusiasm, structure the work and communicate your coworkers as well as a strong determination to work towards goals. If you have documented university degree or if you have got the knowledge and experience some other way doesn't matter, don't hesitate to call us now!

Contact: Håkan Wallin, +46 8-404 5631, hakan.wallin@era.ericsson.se or Richard Althoff, HR, +46 8 404 5126, richard.althoff@era.ericsson.se.

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

#### ERICSSON SDN BHD, KUALA LUMPUR, MALAYSIA

#### Switch Network Products (SNP) Senior Product Specialist

● Start ASAP. Duration: 1 year long term contract. Location Kuala Lumpur, Malaysia. Ericsson Malaysia (EMY) DiGi Telecom Key Customer account (EMY/L) is putting more focus on Switch Network Design in our current work towards DiGi Telecom. The objective is to strengthen the EMY/L organisation during the coming network expansion. Following are key tasks required:

Initiate and drive the SND (switch network design) activities in cooperation with the network design center, as a member of the Technical Management Department in EMY/L Perform SND (switch network design) activities, with an emphasis on AXE hardware dimensioning, Perform all AXE hardware dimensioning, including extensions on existing nodes, as well as, new nodes. Assist with GPRS, EDGE, and 3G presentations and related network evolution planning.Perform LPM (Local Product Management) duties for SS (Switching Subsystem) products.Support the sales process in a proactive way towards DiGi Telecom.Plan and execute the knowledge transfer required for a seamless 'hand-over' of responsibilities to the EMY local organisation.

As a Network Design engineer with a few years experience you are familiar with the SND activities required in expanding GSM networks. You are focused on SND but have a general understanding of the ND area as a whole. You are dedicated, self-motivated and can take the role as a teamleader on occasion. You enjoy working together with others in project teams and have an ambition to share your competence. Your personality is suitable to work in a respectful and harmonizing way in a mixed cultural environment. We offer you a challenging position in a very dynamic environment in the midst of Asia-Pacific.

**Application:** Stefanie Lau, Human Resource Management Unit, Ericsson Sdn Bhd, stefanie.lau@emy.ericsson.se.

#### NIPPON ERICSSON K.K. (JAPAN)

#### Mobile Systems Marketing Managers

Japan has today the world's highest penetration of mobile Internet with over 15 million subscribers accessing advanced services including Internet over their mobile phone. Our customer J-Phone Group has almost 9 million subscribers with good growth in market share. J-Phone Group will launch 3G service in October 2001. KAM J-Phone Group Marketing is responsible to drive new business and to secure commercial success of new products, through business development and tough negotiations. We are now looking for Marketing Managers, who will drive our business and work closely with product management, our regional offices and FRA/I.

• Main tasks are to create, market and sell mobile solutions through good customer relations, but also marketing activities, offering and contract negotiations. Initiative, business-orientation with strong perseverance and drive, planning and leadership are relevant key-words. Excellent customer orientation and a good understanding of the telecommunications market place is required, with knowledge of Ericsson's products, solutions and services.

Candidates should have a university degree or similar with long experience from telecommunications or related high-tech industry. You are able to express yourself in English. Being Japanese or knowing Japanese language is a big advantage.

Contact: Johan Westberg, +81 3 5216 9115, +81 90 8450 2285, johan.westberg@ericsson.com or Mats Rosenberg, +46 8 404 46 73, +46 70 576 8809, mats.rosenberg@era.ericsson.se

#### EED, HERZOGENRATH/AACHEN, GERMANY

EED in Herzogenrath/Aachen, Germany, in the heart of western Europe, is a young and growing company with an open working atmosphere and highly 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 designing, 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:

#### RPC (Rapid Product Change) Project Manager

Proj.No 144/E00

• The NPU-MSC Project Office has the total responsibility for all Rapid Product Change (i.e. short lead time and high customer urgency) projects within product unit CNM. As RPC project manager you have the total responsibility for development and deployment of RPC projects from prestudy to G.A. With this responsibility your network will span from CNM management, through NPU-MSC management to all different development centers and verification departments. You will also interface towards ASOs and FSCs for the RPC FOA activities.

The main tasks and objectives is to: Co-ordinate all RPC development within CNM, i.e. MSC/VLR, HLR, SCP, SSP, etc.; cover all the RPC activities, irrespective of the organisations involved; interface towards SPM for evolution and business case of every RPC developed; fully control of RPC projects in both TTM and TTC; report RPC progress to NPU-MSC and CNM management; update and maintain RPC information (web) and process descriptions.

In this position you will gain valuable insight on how CNM plans, organises and runs projects. You will learn which organisations are involved in the decision making and how their roles and interfaces are defined. Thus acquiring valuable competence and knowledge for future career opportunities. As a project manager you will need strong initiative, good planning, co-ordination, and communication skills and the nature to "never give up".

#### 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.

#### 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/MSC/VLR Test Leader, UMTS CN 1.0 and 2.0

Proj Na 102/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/MSC/VLR 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 MS8 (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: HR EED/H/R C. Schneidawind, +49 2407 575 7814, eedcsch@eed.ericsson.se, CSS/GSM Project Office, EED/X/RJC Jan-Owe Johnsson, +49 2407 575 7872, eed-joj@eed.ericsson.se; Andreas Westh, +49 2407 575 7869, Andreas.Westh@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 responsible 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, workexcessive hours if required and handle extensive travelling within and outside Europe.

Contact: HR C. Schneidawind, +49 2407 575 7814, Christina. Schneidawind@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/MSC/VLR/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 competencies: 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 signaling 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

#### DO YOU WANT TO TAKE PART IN THE UMTS CHAL-LENGE? COME AND JOIN US IN ERICSSON PARIS

Ericsson France has very high objectives in terms of development of the radio business (Wireless Local Loop, Transmission, UMTS). Radio UMTS is the objective n°1 of the company. The premises are located near Paris.

Within the Technical Division, the Core Network Department is looking for

#### UMTS architect and systems engineer

You will be part of a group of 6-8 systems engineers, working for existing operators and the future new UMTS operators. The activities covered are UMTS network architecture and dimensioning including systems expertise on Ericsson Core Network products (Support to sale and project execution). You will have to develop the cooperation with the same organisations in other markets units and Sweden.

Suitable candidates have proven experience in one or more of the following areas: GSM systems, ATM and IP Protocols, IN Networks, UMTS knowledge is a plus.

Contact: Jean Reysset, + 33-1-40-83-42-20, mobile + 33-6-83-83-81-84, jean.reysset@esf.ericsson.se or Cécile Sardet, + 33-1-40-83-42-84, cecile.sardet@esf.ericsson.se

Within the Technical Division, the Wireless Access Department is looking for different profiles having a radio background:

#### Cell Planning Section Manager

You will have to coordinate the activity of a group of 10 Cell Planners (some experienced and some trainees), working mainly for WLL, UMTS, and GSM export., for the existing operators and the future new UMTS operator. The activities covered by the section are support to sales, nominal planning, measurements, radio survey, network optimisation.

You will have to develop the cooperation with the same organisations in other market units and in Sweden. We are looking for an person with management skills and experience (as Section Manager and/or Project Manager), and with a cell planning technical experience. Speaking/reading/writing French is definitely a bonus, but not mandatory.

#### Cell Planners

You will be part of a group of 10 Cell Planners (some experienced and some trainees), working mainly for WLL, UMTS, and GSM export., for the existing operators and the future

new UMTS operator. The activities covered are support to sales, nominal planning, measurements, radio survey, network optimisation.

We are looking for senior cell planners (3 years of experience as a minimum) that could lead RND projects and coach trainees. UMTS knowledge is a plus. Speaking/reading/writing French is definitely a bonus, but not mandatory.

#### Test Section Manager

You will have to coordinate the activity of a group of 10-15 testers (some experienced and some trainees), working mainly for WLL, UMTS, and GSM export., for the existing operators and the future new UMTS operator. The activities covered by the section are test preparation, system tests, interworking tests, and acceptance tests, for turnkey solutions in the technologies presented above. You will have to develop the cooperation with the same organisations in other market units and in Sweden.

We are looking for a person with management skills and experience (as Section Manager and/or Project Manager), and with a testing technical experience. Speaking/reading/writing French is definitely a bonus, but not mandatory.

#### Test and Verification experts

You will be part of a group of 10-15 testers (some experienced and some trainees), working mainly for WLL, UMTS, and GSM export., for the existing operators and the future new UMTS operator. The activities covered are test preparation, system tests, interworking tests, and acceptance tests, for turnkey solutions in the technologies presented above.

We are preferably looking for senior testers (3 years of experience as a minimum) that could lead test projects and coach trainees. UMTS knowledge is a plus. Speaking/reading/writing French is definitely a bonus, but not mandatory.

Contact: Patrick Orsini, +33-1-43-50-42-50, mobile +33-6-84-52-52-62, patrick.orsini@esf.ericsson.se

#### Systems Deployment Project Managers

You will be responsible for the implementation of deploy-

ment projects. The activities covered are handling deployment projects (installation/integration/upgrades) from request to successful completion of the product deployed, representing the Ericsson deployment organisation in dealings with customers and local deployment offices during on-site and remote deployment activities, developing and maintaining sufficient product knowledge for current products, installing/upgrading software and hardware products, providing on site on call support, providing remote support to onsite Ericsson deployment personnel, reviewing hardware and software configuration for deployed products, performing installation and/or acceptance tests of deployed products, producing and maintaining deployment tools.

We are looking for people with management skills and experience and with a deployment technical experience. A good level in speaking/reading/writing French is mandatory.

#### Bid Manager UMTS

You will have to manage the bid process on the operational side and finalise the offers to the customer after obtaining all the internal authorisations from the Ericsson departments/functions involved in the bids.

You will be responsible for running the in-country bid management function and contribute to continuous improvement of bid management standards, providing the local UMTS bids forecast, coordinating and planning the overall bid resources, participating in the UMTS project management, defining with the KAM/NAM and management the winning strategy for each bid, managing the qualification process, providing consistent briefs to the management to implement the winning strategy and have the appropriate resources allocated as soon as possible, building the bid team with appropriate skills.

Animate and motivate the bid team, producing bid management plans, building relations with appropriate resources outside of the local organisation, conducting risk assessment and produce risk analysis summary, supervising the bid production activities, controlling the schedule to meet the customers' deadlines, monitoring handover to postsale teams for every win. Speaking/reading/writing French is definitely a bonus, but not mandatory.

Please contact: esf.drh@esf.ericsson.se

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, C. Schneidawind, +49 2407 575 7814, Christina. Schneidawind@eed.ericsson.se

We are looking for someone to drive the SW development methods in the Ericsson GSM R9/UMTS Core Network Project.

#### Methods Responsible – Total R9/UMTS Project

Droi No 31 /EO

• 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 organizations, actively drive the new Work Package methodology, position reports directly to the Total R9/UMTS Project Manager.

Contact: HR C. Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, Project Manager, Keith Dyne, Keith.Dyne@eed.ericsson.se, EED/X/LC, Peter Lopez, Peter.Lopez@eed.ericsson.se

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 3rd generation Mobile Switching Center (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 organization 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**

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.

#### Calling Design Maintenance Engineers

Proj.No 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 oriented, innovative and a strong team

Contact: Dave Henderson, EED/X/P, +49 2407 575 630, eeddhe@eed.ericsson.se, C. Schneidawind, HR, +49 2407 575 7814. Christina Schneidawind@eed.ericsson.se

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 modeling 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 oriented, innovative and a strong team player.

Contact: Gina Roege, EED/X/P, +49 2407 575 254, eedgina@eed.ericsson.se, C. Schneidawind, HR, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se

#### **Competence Manager**

Proj.No 72/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.

Contact: HR, C. Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, EED/X/PC, Klaus Schneider, +49 2407 575 156, klaus.schneider@eed.ericsson.se

The MSC is a key component of the Core Network Mobile Systems and we at EED/X/D are responsible for MSC system management and participate in the Core Network system management. This includes overall System Management coordination of MSC related activities plus responsibility for specific core network hosted activities. The Platform Management & Dimensioning group, EED/X/D, is looking for

#### System Engineers, 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 the MSC 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 delivering 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.

#### **PC-MSC Chairman**

Proj.No 09/E00

Tasks for PC-MSC chairman is to organize the PC-MSC inspections of the System Level 1 documentation, assist the source system responsible in technical issues, prepare system documentation, etc. Normally, the job as PC-MSC 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/ MSC Chairman

Proj.No 10/E00

• Technical inspections within the new Core Network Mobile Systems organization will be carried on in a network fashion similar to the former TC-CSS. That is, TC-CN/MSC 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/MSC 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 organize 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.

#### MSC 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 MSC.

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.

We are looking for people who 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 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.

Contact: EED/HR C. Schneidawind, +49 2407 575 7814, Christina.Schneidawind@eed.ericsson.se, EED/X/DEC, Per Ljungberg, +49 2407 575 609, Per.Ljungberg@eed.erics-

#### 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 have experience of GSM. A solid technical understanding of mobile solutions offered by Ericsson is a must.

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The Node Product Unit MSC has been the driving organisation behind Ericssons SDL activities. We have been active in this area since 1997. To strengthen our possibilities we are establishing a team of three people, who will be located in the new MSC Software Engineering Support department. If you would like to drive a growing and important area while working internationally, please take a closer look at the following job-offers.

#### Project Manager

Proj.No 64/E00

"SDL Support for NPU MSC". The Project Manager "SDL Support for NPU MSC" is responsible to identify the projects needs to further develop SDL, the needed tools and methods and relay these requirements to the "SDL Responsible for NPU MSC". You will support the "SDL Responsible for NPU MSC" in finding FOA projects, drive a SDL network and facilitate the sharing of SDL competence within the NPU MSC. The project Manager has to set -up and maintain a virtual SDL support organization, coordinate the SDL support

needs from the NPU MSC User Projects and interface these needs to Telelogic. You should also support and introduce new methods and tools developed in the SDL Area into the User Projects. The Project Manager "SDL Support for NPU MSC" reports directly to the department manager.

For this position you need a 'driving' personality, AXE background, design experience with PLEX (practical SDL is a merit, not a must) and networking skill (Network within MSC and Ericsson is a merit).

#### **Project Manager**

Proj.No 65/E00

 "SDL Responsible for NPU MSC". The EED/X/I Project Manager "SDL Responsible for NPU MSC" is responsible to identify the needs from NPU MSC to further develop SDL. the needed tools and methods and relay these requirements to the appropriate authorities. You act as main interface for NPU MSC to SDL-SG, SDL-PM and other units using SDL and as "SDL Deployment Responsible" towards SDL PM according to role-description keep track of the SDL activities within NPU MSC. You have to identify which parts of the NPU MSC design world will benefit from the usage of SDL and in which parts of the design process SDL can bring additional benefits. You define strategies as results from points e and f and forward them to the appropriate authorities for approval. The Project Manager "SDL Responsible for NPU MSC" reports directly to the department manager and the SDL Steering Group.

You must have a 'driving' personality, AXE background, design experience with PLEX or SDL is a merit (not a must) and networking skills (Network within MSC and Ericsson is a merit). You have a strategic way of thinking and fun in setting up plans.

#### Technical Support for SDLTool

Proj.No 66/E00

● The Technical Support give recommendations which tool-version to use to the NPU MSC user projects and act as an interface in the trinagle of the organizations NPU MSC, APS and Telelogic. You package and prepare the distribution of new tool versions in the NPU MSC and towards APS and collect technical support requests regarding SDL and SDL-tool from the NPU MSC and spread the solution. You introduce new methods and tools developed in the SDL Area into the User Projects with technical expertise and support the team with technical background and evaluation of new requirements. You have a AXE and Unix background, design experience with PLEX or SDL (is a merit, not a must) and experience in the methods and tools area. You are very service minded.

The SDL product management has the full responsibility for, and the ownership of, the Ericsson adaptations of Telelogic TAU. The major customers are within the MSC, CXP, BSC and CAPC organizations, but there are also a lot of customers from non-AXE platforms. The SDL Product Management is hosted by the new department "MSC Software Engineering Support" within the node product unit MSC. Currently we have the following open positions:

#### **Operative Product Manager**

Proj.No 62/E00

• As operative product manager you will be responsible for handling requirements, follow up and, when needed, act upon trouble reports, initiate and follow up system investigations in the development projects, participate in technical discussions with our customers etc. You will work closely together with the strategic product manager as well as with the methods and training responsible. You will participate in the SDL steering group meetings. Since this is an international responsibility some travelling will be part of the work.

As a suitable candidate you have a good background in AXE/Plex and preferably also SDL. You must be self driven and be able to deal with our internal customers as well as tool providers from external companies. We take for granted that you can write and speak English without problems and that you know the importance of high quality.

#### Methods and Training Responsible

Proj.No 63/E00

As methods and training responsible you will work closely together with the SDL product management and be responsible for the SDL specific methods and training, that they are in a good shape and kept up-to-date. You will be actively involved in SDL methods development projects and you should follow the use of the SDL methods and training closely in order to see the needed updates. It is also important to be aware of the latest state-of-the-art development methods. Since this is an international responsibility some travelling will be part of the work.

As a suitable candidate you have a background in AXE/Plex with a great interest in methods and how to change the way we develop software today. Knowledge in SDL is good but not a must. You should be self-driven and be able to deal with our internal customers as well as work together with development teams from different organizations. We take for granted that you can write and speak English without problems and that you know the importance of high quality.

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The Test and Support Department (EED/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 therefor offer positions at the very edge of technology in all current movements in the Tele Communications field. EED/S/T is looking for two candidates to fill the positions of:

#### GSM SS/UMTS System and Network Testers

Proj No 55/300

• 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 LIMTS 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 Signaling 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 favored. You will also need good interpersonal and organizational skills to work as an effective member of a project team.

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The section EED/S/L is responsible for the Product Line Maintenance (PLM) and takes central maintenance responsibility for the Worldwide CME20/GSM Switching System, it 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 setup

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.

#### Senior Product Line Maintenance Tester

Proi 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.

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#### Experienced Troubleshooters

Proi No 46/399

 Support Engineers and Testers needed for GSM SS node Help Desk. 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 pre-studies 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

## Job opportunities in Ericsson Turkey.

Ericsson has been active in Turkey for over a century. Ericsson Turkey is a leader in telecommunications in Turkey, with a reputation for advanced systems and products for fixed-wire and mobile communications in both public and private networks. Ericsson Turkey serves the mobile phone market through the GSM system it installed for Turkcell and retains a dominant share in the competitive market for mobile phone models. We are active in the export market with projects in Iran, Pakistan, Middle East, the Caucasus and the Central Asia and is implementing GSM networks in Azerbaijan, Georgia, Kazakhstan and Moldova.

Ericsson Turkey has captured 5 percent of net sales and reached 7th place in Ericsson's 10 largest markets in 1999. Based in Istanbul, with representation and operation offices in Ankara and site offices in tencities, we are determined to provide communication solutions that meet our customers' opportunities and needs though innovation, customer orientation and technical superiority.

Now, we are looking for Product Managers in the following areas: Multi Service Backbone Networks, Intelligent Network Services and GSM Network Design.

#### **Product Managers**

Multi Service Backbone Networks

The ideal candidate should have a comprehensive knowledge of the Ericsson DNIP product portfolio> & competitor products. Candidates should have practical experience of IP routers and ATM switchs gained from an implementation, integration & configuration background. Knowledge in PDH, SDH and framerelay will be considered useful. As Product Manager you will provide DNIP product & solution management support to our business accounts and customers. You will participate in customer meetings and communi-

cate the Ericsson portfolio and roadmap information. You will provide technical support&consultancy services to the customer during system trials. An important aspect of the responsibility will be to communicate the evolution of our products into a 3G network solution.

#### Intelligent Network Services

The ideal candidate should have a deep knowledge of IN products, services & protocols gained from previous experience within a design, support or product management role. As Product Manager you will be responsible for IN platform & services within GSM network. You will create total solutions and provide expertise in this strategic area for our market. You will also participate in the IN network design process for deployment of new IN services. Investigating the requirements for implementation&integration of new services on existing platform and the impacts on the HW, SW, signalling and network interfaces (Billing, Customer Care etc.) will be also under your responsibility. Currently, the IN services that we are supporting are PPS, PPL & MVPN. Participating at regular customer meetings and acting as an interface to the Product units and 3rd party suppliers are also important aspects of the position.

#### GSM Network Design

The ideal candidate should have a strong technical background on AXE platforms. Experience gained from working in network planning and design area is a clear advantage. Candidates should be familiar with the SND activities required in expanding GSM networks. You should have excellent HW knowledge and an understanding of Application System management. As Product Manager you will participate in the network design process mainly on the Switch Network. Dimensioning the network nodes and preparing

the technical parts of proposals will be under your responsibility. You will provide technical support to the customer and our business accounts. Evaluating the impacts of new Mobile Internet, VAS&IN services on the core GSM network and participating in network evolution studies with the customer are also the important aspects of the position. You will be also responsible for following the HW evolution into 3G networks.

Candidates with any of the following qualifications are encouraged to apply. Bachelor and/or Masters degree in Electronic/Electrical Engineering, Communications Engineering and/or Computer Engineering.

The candidates should have excellent interpersonal, presentation, communication (both oral and written) skills, along with strong self- motivation. In addition, the candidate should possess excellent analytical, problem solving and decision making skills. Willingness to share knowledge and experience with the local organization is required from all candidates.

All candidates must be fluent in English and willing to travel both domestically and internationally.

Please send your applications marked "PME01" to: E-mail: ferhan.karabacakoglu@enk.ericsson.se



Make yourself heard.



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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#### **Web-Developer**

Proj.No 81/R00

• for WWW development for the System House 'Core Network Integration Center. The Web-Developer will define and develop the Web structure for the complete System House to fulfill the System House and the department needs on: Provide Information in an easy accessible, structured and fast way, Ensure Information quality on professional and easy maintainable WWW sites, Connecting Databases to the WWW and presentation of extracted information in a professional and fashionable way, Development of Tools to generate regularly updated WWW sites in a fast way, Studies, defining strategies and run trials to provide information via WAP sites.

You should bring in competence in the Internet technologies like HTML, JAVA script, JAVA, PHP. Knowledge about connecting Databases to WWW sites as well as WAP would be very beneficial. Finally creativity, target-oriented working and good communication skills are clear advantage.

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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 center 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 should 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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The Core Networks Configuration Management Department (EED/S/O) is part of the Core Networks Verification and Integration Centre (CNIC). The department is responsible for test configuration management (TCM) for Core Networks verification projects and NPU-MSC function test (FT) and verification projects.

Within the department the Testbed Integration Group is responsible for the definition of the configuration of the Core Network within the test projects, correction handling for the projects and preparation, installation and support of the software dumps provided for the various Core Network node elements. We are presently seeking candidates to assume the duties of:

#### Group Manager, Testbed Integration

Proj.No 158/E00

● As group manager you will hold a leading position in the Core Networks Configuration Management Department – a motivated and experienced team of over 50 people responsible for Core Network Configuration Management and TCM for Core Network verification projects and NPU-MSC FT and verification projects. With the recent reorganization within Mobile Systems, and the establishment of the Core Networks Verification and Integration Centre, the challenges facing the Testbed Integration Group have substantially increased.

As group manager you will be responsible to ensure the test projects you support are provided a viable test network on which to execute their test activities. Network planning for the Core Network test environment, data transcript design, correction handling and preparation and distribution of the dumps for each node element are the principle tasks of the group.

As group manager you will ensure the assignments are carried out in accordance with applicable Ericsson, EED and project guidelines and they are realized within approved cost, time and quality frames. As the leader of the group you will be responsible for competence and career development of group members, appraisal of their performance, information dissemination to the group and voicing their concerns when higher management attention is needed. You will also be charged with recruiting new and replacement group members. You will have a key voice in the formulation of the department's operational goals and direction.

In this position you will need strong organization planning, coordination and communication skills. A good candidate is an Ericsson employee with TCM, test or design experience in GSM, GPRS or UMTS and experience in working within Ericsson development, verification or support projects. Most importantly you should have demonstrated leadership abilities and team building skills.

#### Assistant TCM Project Manager - R9/UMTS CN 1.0

Proj.No 69/E00

• We are presently seeking qualified candidates to join our project management team for the R9/UMTS CN 1.0 project. Your main tasks will be the planning, alignment, execution, and control of local TCM activities in the MSC/VLR function test (FT) project and coordination of core network (CN) TCM for the core network verification activities. Essentially, this boils down to ensuring the delivery and support of the test environment to the FT and verification projects. You will work closely with design, function test, verification, test bed integration, AS handling, customer product information, correction handling and STE support. Travel will be necessary as the development of the core network is spread across Europe.

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. ClearCase and/or Ericsson ClearCase knowledge is a strong plus. You will need strong organization, planning, coordination, and communication skills. You will have to be flexible and have the ability to work under time pressure.

#### Assistant CM Project Manager - R9/UMTS CN 1.0

Proj.No 70/E00

• We are presently seeking qualified candidates to join our project management team for the R9/UMTS CN 1.0 project. Your main tasks will be the planning and alignment of configuration management activities in the MSC/VLR function test (FT), verification and core network (CN) verification projects. You will work closely with the MSC/VLR LDC's to ensure the smooth integration and support of Ericsson ClearCase in the FT project.

Also, you will be tasked to ensure clear communication and understanding within the CN verification project of the means for receiving node deliverables, ClearCase alignment (rules, labels, etc.) and correction handling for the various node elements. Travel will be necessary as the development of the core network is spread across Europe.

You will need to closely monitor and report status of CM activities. Innovative and proactive solution seeking skills are essential. Improvement of methods and quality relating to CM 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 ClearCase and/or Ericsson ClearCase knowledge is desirable, as is design and/or test experience. You will need strong organization, planning, coordination, and communication skills. You will have to be flexible and have the ability to work under time pressure.

In the CME20 SS "Product Line Configuration Management Section (EED/S/O)" 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.

#### TCM Project Manager – GPRS R1

Proj.No 51/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/S/K 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 interface drivers for external tools (e.g. IOG, AIMS, Protocol analyzer)

Competence: Knowledge of testing and telecom systems. Experience in programming and a sound background in mathematical/computer science.

#### **Competence Manager**

Proj.No 78/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 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 of your main tasks and activities are: resource planning, performance and development talks, recruitment, salary review & setting, team coaching, career development and planning, keep a thorough overview and understanding of all operations, understand impacts from future technologies for strategic competence planning etc.

As an ideal candidate you should have a degree either in a technical area or in psychology, sociology or business administration etc. and minimum 2-3 years of professional experience.

A clear advantage is knowledge in Telecommunication and Softwaredevelopement, as well as previous management experience.

You should have excellent leader- and communicationskills and a strong interest in human beings. You will have the opportunity to gain experience in project- and peoplemanagement and be able to take responsibilities for further developments in the area.

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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 trouble shooting in the simulated environment.

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#### **Mobile Applications**

• The Application Design department in the Mobile Data Networiks Unit 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 MIAp. The chances are quite high that the InfoServer will be part of the core infrastructure for Ericssons 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/MO

• 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 organization 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 Ericsson 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 he 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 (UNBIX, 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 management 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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The Systemhouse Mobile Data Network (MDN) is responsible for the Network Verification of the data traffic in the GPRS network. This task includes handling of all nodes in the network, definition of reference networks, the configuration of all parts of the networks and the verification of the network.

#### Group Manager SCM (Software Configuration Managment)

Proj.No 73/E00

● The Software Configuration Management group is responsible for handling the SW dumps of the single nodes, for maintaining the CM infrastructure (ClearCase, ClearCase MultiSite, ClearDDTS), for getting testdata, testscripts, test-tools under CM control in order to enable automatic and reproducable testing. The Group Leader is responsible for people management of the group. This includes recruitement, competence development, etc. Moreover, he is reponsible for mid- and long term planning of the group.

As a perfect candidate, you have had experience with SW-design or SW-test. Experience with software configuration management - especially non-AXE - is a definitive plus.

#### TCM BSC

Proi.No 74/E00

• The TCM group is responsible to maintain the complete GPRS network. This includes MSC, BSC, GSN, different backbones like ATM or FrameRelay, the mobiles etc. The Planning of different network configuration and interface function to the units responsible for the single nodes is included in the task. As a BSC responsible, your task is to set up and configure the BSC and to support the network verification test activities.

You should have several years of experience handling a BSC. You should be team oriented, have the ability to work under pressure and be supportive.

#### TCM GSN

Proj.No 75/E00

● The TCM group is responsible to maintain the complete GPRS network. This includes MSC, BSC, GSN, different backbones like ATM or FrameRelay, the mobiles etc. The Planning of different network configuration and interface function to the units responsible for the single nodes is included in the task. As a GSN responsible, your task is to set up and configure the GSN and to support the network verification test activities.

You have a solide background in UNIX (eg. as a system administrator), and good experience data communication (IP, ...). You should be team oriented, have the ability to work under pressure and be supportive.

#### **TCM Backbone**

Proj.No 76/E00

● The TCM group is responsible to maintain the complete GPRS network. This includes MSC, BSC, GSN, different backbones like ATM or FrameRelay, the mobiles etc. The Planning of different network configuration and interface function to the units responsible for the single nodes is included in the task. As a responsible for the backbone, it's your task to connect the different nodes with backbone networks like IP, ATM, Frame Relay. The backbone, however, is part of the test as well, ie. several different configurations of the backbones have to installed and verified.

You have good experience in data networks. If you have worked already in the TCM business that's definitely a plus. You should be team oriented, have the ability to work under pressure, be supportive and well organized.

#### Software Configuration Manager

Proi.No 77/E00

• The Software Configuration Management group is responsible for handling the SW dumps of the single nodes, for maintaining the CM infrastructure (ClearCase, ClearCase MultiSite, ClearDDTS), for getting testdata, testscripts, test-tools under CM control in order to enable automatic and reproducable testing.

To have a general background of software engineering is a must. Experience in software configuration management, and testing is a definitive plus. Working experience with a UNIX environment should be available. Experience with ClearCase and related tools makes you a hot candidate for this position. People from non-AXE areas are especially welcomed. You should also be team oriented, have the ability to work under pressure, be supportive and well structured.

#### 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 scriptsthese tools become a powerful instrument to control projects and prod-

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.

#### **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 packetswitched networks. The new technology requires new tools supporting our verification engineers. The position entails introducing such tools to our staff, supporting the use of the tool and coaching your colleagues. The candidate will keep contacts with the tool suppliers and our partner organisations in Ericsson.

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

Contact: Hans-Thomas Kommer, EED/D/VEC, +49 2407 575 446, Thomas.Kommer@eed.ericsson.se, S. Seebass, HR, +49 2407 575 163, Simon.Seebass@eed.ericsson.se

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

Proi No 03/F00

 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 data-communication. You have experience to share your knowledge with new colleagues. Change is normal to you on your way to identify solutions.

Contact: HR, S. Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, EED/D/VC, Thomas Busch, +49 2407 575 178, eedthb@eed.ericsson.se

The Core Product Unit Application Core (CAPC) is looking

#### **AHEAD Project Manager**

Proi No 13/MO

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

The main authorities and responsibilities are: Set up of AHEAD Projects, competence build up in all parts of the organization, coordinate with Commercial CAPC projects (wireline/wireless) which will deploy and implement the improvements, active involvement in benchmarking of improvements, participation in the CAPC Performance Management Network, Coordinate Activities with the SSES organization (Software and System Engineering Support), support the CAPC World Class Provisioning Manager in achieving the CAPC Goals. The AHEAD Project Manager reports to his/her line manager and to the CAPC World Class Provisioning Manager.

Potential candidates shall have a sound background in wireless and/or wireline AXE or Open Platform SW development projects. Any previous experiences with quality systems, processes and project management are appreciated.

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

Contact: HR, S. Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, CAPC Performance Management, Per Olov Lundblad, +49 2407 575 5383, eedpol@eed.ericsson.se

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

This responsibility includes activities such as running product committees, handling overall technical coordination in the CAPC projects, perform system studies and source system design. Present challenges are system work for ATM and IP core network solutions for the Universal Mobile Telecommunication System (UMTS) and the Next Generation Switch (NGS).

#### Senior Systems 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 requested. 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.

#### Systems Designer, Circuit Switched Data

Proj.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 (Fngine)

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 Swicthed 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.

#### **Systems Design**

Proj.No 41/E00

• for In-Service Performance in 3G Core Networks. 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: S. Seebass, HR, simon.seebass@eed.ericsson.se, +49 2407 575 163

#### Group Manager CAPC Systems Management

Proj.No 87/M00

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

This responsibility includes activities such as running product committees, handling overall technical coordination in the CAPC projects, perform system studies and source system design. Present challenges are system work for 3G UMTS and NGS Systems both introducing ATM and preparing the systems for MM&IP on AXE and other relevant platforms.

You will be working with an experienced group of professional and highly motivated system engineers.

We are looking for a manager that can drive the technical activities together with the group, and is interested in developing the CAPC systems management together with our colleagues in Stockholm and many other countries in the world. Experience from systems or product management, or leadership is required.

Contact: Hartmut Boehmer, EED/U/RC, +49 2407 575 8093 hartmut.boehmer@eed.ericsson.seS. Seebass, EED/HR, +49 2407 575 163 simon.seebass@eed.ericsson.se

#### 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, Release Responsible CAPC7.1 (UMTS R2)

Proj.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 utilize and develop your managerial and leadership skills. The Release Responsible's perspective is to develop towards Strategic Product Management.

Contact: EED/U/XC: Carsten Bruns, Carsten.Bruns@eed.ericsson.se, +49 2407 575 106, HR: S. 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 pre-study and feasibility study on Transit products, to provide technical and system competence to support the GSM, UMTS, TDMA and PDC product lines, to participate in pre-studies and feasibility studies for the Transit projects in CAPC, to give support in the design activities in his/her area of competence, to give support to analyze trouble reports on system module level, to participate in RS and other technical inspections regarding his/her areas of competence, and to act as Technical Coordinator in Transit (sub)projects, coordinating technical issues involving several subprojects, involving the related mobile applications projects or involving associated projects.

Required qualifications are a strong technical background in technology, telecom or database industry with experience in AXE10 development and system design, good knowledge of mobile telephone systems. Able to take initiatives and work in a dynamic environment. Excellent communication and interpersonal skills. Competence in one or more of the following areas is essential: AM System development, Signaling and Protocols, Traffic Control, (Wireless) Charging, ATM or SDL.

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

The CAPC system groups are responsible for the system development of the Transit and Network Access products that are common for many of Ericsson's AXE based systems, both for wireline and wireless systems. This responsibility includes activities such as running product committees, handling overall technical coordination in the CAPC projects, perform system studies and source system design. Present challenges are system work for ATM and IP core network solutions for the Universal Mobile Telecommunication System (UMTS) and the Next Generation Switch (NGS).

#### Group Manager Wireless TCS Design

Proj.No 79/399

● The Transit Development Department in EED is looking for a group manager to establish a new group for Traffic Control design in the Application Core (CAPC). Traffic Control products are part of the new Transit-AM (TRAM) that is introduced to the mobile product lines UMTS, GSM, TDMA and PDC. CAPC and Transit responsibility is located in EED/U.

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

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

As a suitable candidate, you are an Ericsson employee and should have a 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, S. Seebass, +49 2407 575 163, Simon.Seebass@eed.ericsson.se, Transit Development Department, Norbert Floeren, +49 2407 575 228, Norbert.Floeren@eed.ericsson.se

## Are you an enabler ... can you make it happen?

AXE Local 8 'Enabler' is AXE for an IP-centric world and the 'Center of Excellence' for test and verification of AXE releases - The Software Centre (SWC) based in Dublin, Ireland, need key people to guarantee its success.

As part of Global SS&I, the SWC Ireland is responsible for Global Application System (GAS) Verification, Upgrading and Maintenance for all DMN Product Lines as well as SW Supply & Integration in AXE Customer Projects. The SWC integrates system products and verifies customer deliveries that can be demonstrated and delivered to public operators together with the local Ericsson organization. We are looking for key personnel to enhance the SWC's dynamic team - technically competent and highly motivated people who want to be at the frontline of technology.

And where is there a better place to be than in Ireland, where its warm welcome and booming economy is attracting experienced technical and engineering staff from all over the world to relocate to the home of the 'Celtic Tiger'. The SWC currently employs over 120 staff, but we need to expand and are currently recruiting the following competencies:

#### Process Manager

We require one special person who can drive TTM-TTC software verification processes into the future. The Process Manager will need to define, implement and maintain Software Supply & Integration (SS&I) processes, which includes the upgrade, verification, consolidation and maintenance of GASs and the production, verification, upgrade and maintenance of Market Application Systems (MAS). The Process Manager should manage process development across the seven SS&I units worldwide, as well as arranging seminars with representatives from these units to among others decide on which tools that should be used within the processes. We are looking for someone who wants to initiate change and turn AXE SW into a commodity product. You must have a lot of enthusiasm, be open-minded and have the ability to get others to work together towards a common vision and goal. Knowledge of Ericsson processes in general and/or AXE SW verification is an advantage but not a requirement.

#### Section Manager Product Line Consolidation

We are seeking a person to actively define and implement new strategies in this area, in order to ensure delivery of high quality, focussed and usable software updates to users of the latest products. The suitable candidate will have responsibility for the consolidation of the latest fixed network products (GAS) - Local 8. This will involve close support for the early markets in order to consolidate the quality of the product so that it can be made generally available. The position will also have responsibility for planning, ongoing evolution and improvement of product line consolidation

and as such will involve close co-operation with other Ericsson organizations. Applicants should have considerable AXE experience in a verification or support environment and have good people management skills. Ideally, the experience will have been gained in an environment involving regular contact with internal or external customers.

#### Section Manager GAS Maintenance

We are looking for a person to take responsibility for the maintenance of Fixed Network Products (GAS). This will involve the provisioning of regular software updates for released products. His or her section will define, assemble and test correction updates in order to deliver focussed, high quality packages that will enable users of the product to take regular maintenance updates. Applicants should have considerable AXE experience in a verification or support environment and good people management skills.

#### Section Manager GAS Verification

We are seeking a person to lead a section with the responsibility for verification and delivery of AXE Global Application Systems.

The duties of the section include software verification of the Global Application Systems for Local and Transgate. This position offers the opportunity to work on the latest AXE products, which now form part of the ENGINE delivery.

Applicants should have at least 5 years experience gained in similar positions on projects involving AXE. The positions require a high degree of technical knowledge of AXE and may suit AXE testers or trouble shooters seeking a change of role. The positions also entail dealing with the representatives of end customers and Ericsson local companies and therefore requires skills in communication.

#### Testers & Troubleshooters

Key personnel are required to supplement our existing test and troubleshooting teams. Applicants should be experienced in AXE 10 software design, verification or support. Customer focus will be an important attribute. Ideally, experience will have been gained in an environment involving regular contact with end customers. The duties will include software verification of Global and Market Application Systems, design and verification of GAS/MAS Upgrades, MAS rollout support, GAS maintenance and development of SWC's automated testing capability.

#### Test Leaders

We are seeking a number of Test Leaders who will perform tasks similar to the Tester, but will be primarily responsible for the test planning, coordination and assigning of tasks to the testers and technical coordinator. The Test Leader will provide technical reports on test progress or issues impeding the progress of the projects. He or she will work closely with the Technical Coordinator on progress of outstanding faults and unsuccessful test cases and decide on the corrective action. Applicants should have experience in AXE10 software design, verification or support with good soft skills and a drive to deliver successful results.

#### **Technical Coordinators**

We are seeking a number of Technical Coordinators who will support the Test Leader with technical issues in the day to day activities of the assigned project. Typically tasks will include: Technical pre-/feasibility studies, setting up STP, supporting less senior staff with difficult tasks (tests, TR-reporting and trouble shooting), Test execution, dedicated TR shooting on the assigned project working closely with the trouble shooting section within the SWC when necessary. The Technical Coordinator will work closely with the Test Leader and the Troubleshooting section in defining what areas and how they should be tested during a project. Applicants should have experience in AXE10 software design, verification or support with good soft skills and a drive to deliver successful results.

We invite applications from personnel who believe that they have acquired sufficient expertise in the relevant areas to undertake one of the above tasks. The positions listed may involve foreign travel.

As a screening process based on applications received will take place, it may not be necessary to interview all candidates. Applicants should apply in writing, enclosing a comprehensive Curriculum Vitae and names and Memo ID or email address of referees to:

Lucy Maher in EEI/SWC/HR at lucy.maher@eei.ericsson.se or telephone +353 1 207 7467 for more information.



Make yourself heard.



## Employees want shorter meetings

>> There is one opinion that most Ericsson employees seem to share: meetings are too long.

In an intranet survey, 1,737 people were asked which word best describes a meeting at Ericsson.

Nine percent responded "productive," a similar number answered "boring," while an overwhelming 74 percent felt meetings were far too long.

## Diva better than CEO

>> Now it has been proven: Ericsson employees love their work.

The following question asked in an intranet survey led Contact to the above conclusion: "Who would you like to switch jobs with for a week?"

The 1,899 respondents could choose among Mariah Carey, Kurt Hellström, Bill Clinton, Kofi Annan, or to not switch at all.

The most popular response, chosen by 32 percent, was to not switch at all. Of those who desired a change, 19 percent preferred filling in for Mariah Carey, while Kurt Hellström and Bill Clinton each garnered 18 percent.

The least popular alternative was Kofi Annan – only 13 percent wanted to fill his shoes.

## Wear your e-mail address

>> The best ideas are often the simplest. For instance, what if you had clothing that had a small number on it.

And if that small number was an e-mail ID allowing you to follow up your fleeting glimpse of Mr. or Ms. Right on a subway platform with an

e-mail?
That's exactly what Swiss brothers
Daniel and Markus Freitag decided
to manufacture with their company,
skim.com.

Each garment has a visible identifying number, which is also the person's e-mail address (a person wearing a 99999 on the sleeve could be contacted at 99999@skim.com, for example)

The idea is not simply a matchmaking scheme; the founders say they want to promote art and music through their company.

## WAP! You're cursed!

➤ It was about time voodoo curses came online. Let's face it, making that doll, and sending a curse by snail mail just takes too much time. We need instant curses, right?

A site called pinstruck.com is where you can stick some pins into your enemies. Simply go to the site, choose a few attributes according to your enemy's appearance, type in his/her e-mail address and off it goes. Anonymously.

The best thing is that you can do it using your WAP phone, too.

Just remember: what goes around, comes around.

www.pinstruck.com

## Nifty niches

When the shop is a website, all you really need is a warehouse, a good delivery system and a lot of imagination.

➤ Once upon a time, brothers named Jim and Joe Adamczyk had a great idea. Having both been in "the real world" with jobs ranging from engineer to IT consultant, they decided to take their combined 40 years of experience in business and use it to sell ... mustard.

#### No warehouses needed

Sounds crazy? Well it might have been, before the World Wide Web came into being.

Online shopping may still be finding its feet, but it is already a dream come true for many "niche" businesses that, through prudent outsourcing, can now be run out of a small office, with a tiny staff and the lease of a nice big warehouse.

This is the philosophy of companies like mustardstore.com. As its Web site says: "Your neighborhood gourmet store has limited shelf space and can only offer a few dozen varieties (at best). You could drive all over town and maybe find a dozen more.

At the Mustardstore you can find over 600 different mustards, and we add more every two weeks."

#### Fruit-flavoured mustard

So if you've never tried fruit-flavoured mustard, or champagne mustard, or their all-time top seller "Authentic Stadium Mustard," or attended the worldwide mustard championships, or joined the monthly mustard club, well, it's not too late.

But moving all that mustard must involve a lot of wear and tear on the feet. Aren't Jim and Joe wearing out their socks?

Without leaving their desks in Harrisburg, Pennsylvania, Jim or Joe could log onto justsocks.com. Based in Louisville, Kentucky, justsocks.com sells brands like BaySix, DeFeet and Fox River to anyone from runners and cyclists to triathletes, hikers and ordinary walkers.

#### Boom or boo?

These small businesses are typical of many companies – largely but not exclusively in North America – who have realised that customers don't care where the goods come from as long as they arrive reasonably promptly. With air delivery and computer tracking becoming ever more efficient, a lot of companies are gambling on exponential growth. But will it be boom or – well, boo?

The recent failure of boo.com won't halt the march of the dotcoms, says financial guru Marc Gordon.

"The shake-up in the technology sector has not deterred venture capital companies from seeking interesting investment opportunities," says Marc Gordon, managing director of Close Fund Management.

"All companies are spending vast amounts on e-commerce and technology infrastructure, because e-commerce is one possible way of reducing costs and administration," he says. "Small companies like these are going to be among the main beneficiaries."





# Chee ese \* Maria Welcome to the #1 resource for cheese! Chama.to.anim Chama.to.anim Chama.to.anim Shama.to.anim Shama.to.anim Shama.to.anim Shama.to.anim Shama.to.anim Chama.to.anim Chama.to.anim

If you know exactly what you want, there's probably an e-commerce site that sells it. Here is a sampling of some of the Web's nifty – albeit sometimes odd – niche stores.

#### FROM THE PAST

>> Over the years, Ericsson's presidents have been portrayed in various ways. This photo falls undeniably into the lighter side. The man to the left is Axel Broström, Ericsson's President between 1900 and 1909. He was Ericsson's first president following Lars Magnus.

Axel Broström was sometimes characterized as headstrong and inaccessible, but also as a very colorful person, which is, perhaps, evident from this picture.

The photo is believed to have been taken in the US shortly after the turn of the 19th



century. Axel Broström died in 1909, in an automobile accident, only 45 years old.

#### **ERIC & SON**





Jan-Olof Andersson works as a buyer for Ericsson Microelectronics. He has been employed for 30 years at Ericsson and knows that product quality is one of the company's strong points. This past summer he found out just how durable those products can be when his T28 mobile phone ended up going through the washing machine.

## T28 survives wash, rinse and spin

Jan-Olof Andersson's wife was working in the laundry room. In went his pair of jeans into the washing machine. When he went to look for his phone, he realized that his jeans were not the only thing getting a wash.

Now and then, Contact receives reports about the durability of Ericsson's telephones. There are phones that have been run over by cars, dropped from high places onto hard surfaces and that have received all

kinds of bumps and scrapes - and still they worked. But running a phone through a washing machine is definitely unusual, to say the least.

"It wasn't possible to stop the cycle, so we could only wait," explains Jan-Olof Andersson. "Although it's probably not recommended, the T28 survived both the laundry detergent, the wash and spin cycles," he recounts with a laugh, definitely surprised by the outcome.

"Fantastic! Although my snuff container, which also went through the wash, didn't fare as well."

When the machine finally stopped, he retrieved his telephone. He took it apart and cleaned the inside with a little alcohol. He then let the phone dry out for a day and a half before reassembling it. It started up im-

The 7, 8 and 9 keys were, however, dead. So Jan-Olof repeated the procedure, cleaning the interface for those three keys. After that, the phone was like new again - or at least as clean.

"My manager's spontaneous comment was that we should perhaps provide washing instructions with our products," says Jan-Olof with a good laugh.

Mia Widell Örnung

mia.widell@lme.ericsson.se

#### UPCOMING

On September 15, new facilities for manufacturing 3G equipment will be inaugurated at the Gävle plant in Sweden.

The Mobile Systems Division has been reorganized, in an adaptation to the new business realities of thirdgeneration mobile telephony (3G).

September 1: Launch of R380 WAP telephone in

September 1: The final date for applications for 3G licenses in Sweden. Ten groups of companies applied for one of the four licenses that are being awarded. Sweden has decided not to auction the licenses, but rather hold a "beauty contest".

#### **NEW ASSIGNMENTS**

Henrik Brehmer was appointed the head of internal communications at the corporate level on September 1. Most recently, he worked at Ericsson Microwave Systems AB in Mölndal, Sweden, where he was the information



Anders Wännström, Ericsson Radio Systems, has been named senior specialist within the field of Wireless Technologies - Education.

After 15 years, Mats Lindoff is leaving Ericsson to become President of C Technologies, the scanning pen company. Mats Lindoff was in charge of strategic planning and technology at Ericsson Mobile Communications in Lund, Sweden. Tord Wingren will take over that position.



## 200 175 150 Split 4:1 May 5, 2000 125

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

