**ERICSSON** PUBLICATION FOR EMPLOYEES WORLDWIDE

No.2 • 5 MARCH 1998



Photo: PATRIK LINDÈN

## **Cool investments in Canada**

Nortel dominates Canada's telecom market. Nortel is to Canada what Ericsson is to Sweden. In order to create visibility and awareness, Ericsson in Canada is making heavy investments in sponsoring and other external activities. This includes sponsoring of the Canadian national freestyle ski team.

Pages 12-13

#### **Rewards for** WCDMA work

The standardization of the WCDMA mobile telephony system is strategically important for Ericsson's future business. Six people at Mobile Systems' have recently been rewarded for their outstanding efforts.

#### Mobile telephony in Latin America

The Latin American telephony market is becoming increasingly important to Ericsson. The digital mobile telephony system D-AMPS is most prevalent and Ericsson has a 42percent share of the systems market.

Page 16

#### **Real wheels**

More than 100 years ago, Lars Magnus Ericsson permitted bicycles to be built in Ericsson's workshops as a fringe benefit for personnel. Read more about this historical tidbit, accompanied by a photograph of Ericsson's cycling club of 1895.

Page 5

News from Mobile Systems see pages 16-19

**PUBLICATION FOR ERICSSON EMPLOYEES WORLD WIDE** 

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Paues Media in Stockholm phone: +46 8 665 8072

#### **Printed at**

Nerikes Allehanda Tryck, Örebro 1998

#### **Advertising**

Display AB phone: +46 90 17 79 50

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## contact Shooting for the stars

Infocom Systems intends to be one of the brightest stars in the datacom world. After a year of intensive efforts out of the limelight, the **Datacom Networks and IP Services** business unit is now attracting attention. New products include an Ericsson-developed ATM switch. There are also many new development projects that will help the unit achieve its goal of capturing a five to six-percent share of the European datacom and IP market within two years. This year, however, the unit intends to make its entry on the U.S.

"These are completely realistic goals," asserts Lars Fossum, who is acting manager for the business unit. "Anders Igel has challenged us by stating that we should have order bookings totaling USD one billion by the year 2000. During the past year, we have concentrated on shortening lead times in product development and succeeded beyond our expectations.

Partnerships have also been established with the U.S. companies Juniper Networks, manufacturer of gigabit routers, and Sun Microsystems, whose business includes developing Internet servers. These are important alliances that will contribute to Ericsson's rapid growth in an increasingly competitive datacom mar-

"This year we are devoting considerable energy to finding attractive business partners or smaller companies that we can acquire in the datacom and Internet areas which will strengthen Ericsson's position in the industry," says Infocom Systems business area manager Anders Igel. "Together with Sun Microsystems, we have an excellent opportunity for getting a foot into the American market with a joint offering of multimedia telephony and public intranets, or so-called virtual private networks, which are intended for operators and large companies."

#### Internet focus

As the name implies, the Datacom Networks and IP Services business unit, is the unit within Infocom Systems that is focusing on communication networks and services for the information society, in which the Internet Protocol (IP) provides the bearer service. Primary customers include all types of Internet operators, which in practice means Ericsson's traditional customers, the telecom operators, but also completely new customer groups, such as corporate IT departments and fast-growing Internet service providers (ISP). The most geographic markets Scandinavia, Great Britain, Germany, France, Italy, the Netherlands and Austria, countries which the business unit is giving priority this



Henrik van Delden (left) from Ericsson Switzerland was one of some 160 participants from 19 countries at a sales conference in Bad Reichenhall, Germany in early February. "The conference gave us a feeling of optimism and confidence about the future. It is now up to us in the local companies to build on our strong local presence", he said, here shown with the business unit's acting manager Lars Fossum.

year. Special attention is also being devoted to the gigantic but extremely competitive U.S. market.

#### Heading for the valley

"Establishing operations in the U.S. is being given high priority within the business unit, reports Anders Igel. "A solid position in Silicon Valley, which is the heart of the datacom industry, is essential for success. There, among the industry leaders, is where Ericsson can strengthen its competence in datacom and Internet technology. Silicon Valley also has a business climate characterized by innovation and rapid development, which are the cornerstones for Infocom Systems' business strategy."

A platform for Datacom Networks and IP Services has already been established in Silicon

"We will also transfer some of our business development activities to the U.S.," continues Anders Igel. "Jan Snygg, who was recruited from his position as manager for the corporate product portfolio, will soon move to California to head the new unit there. His assignment will be to establish useful contacts in the industry, to be on the look-out for possible alliances or acquisitions, and to lay the groundwork for new customer contacts.'

Datacom Networks and IP Services has succeeded in developing several new and interesting products over the past year. Now the time has come to accelerate sales. Datacom

Networks and IP Services' recipe for success is to work as a small company at all levels. The organization is very non-bureaucratic, with small teams that are dedicated to getting out products as quickly as possible.

The most important thing for us is to meet all deadlines. My message from the start has been that we would rather eliminate functions than delay deliveries," says Lars Fossum. "The situation today is such that our customers place greater priority on speed and reliability than on perfection. It takes some getting used to, but it's become a way of life for our organiza-

#### Collaboration essential

Datacom Networks and IP Services also does its best to erode internal departmental walls, which create unnecessary confusion and duplication of effort. Internet telephony, or voice over IP, is a prime example. In this area, several different business areas have similar products, which in the final analysis target the same customers.

"We have made considerable progress in Public Networks business unit, where we have managed to present these as a product family, rather than as competing solutions," notes Lars

#### **LENA WIDEGREN**

More information on the business unit is available at http://bn-dnip.ericsson.se

#### Who does what at Contact?

■ In this issue of Contact, we would like to present the permanent staff members. Contact them with suggestions, ideas and other contributions.

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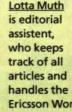
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#### news briefs

#### **GSM** on rails

■ Ericsson has introduced a communications solution for rail companies known as GSM-R, using GSM technology. This system can be employed for functions such as train signaling and traffic planning. One advantage is that the cost of the infrastructure can be shared with conventional GSM operators.

#### D-AMPS for Venezuela

■ A framework agreement worth SEK 1.6 billion (USD 200 million) has been signed between Ericsson and Movilnet, the Venezuelan operator, for digitalization and extension of the Mobile network for D-AMPS (IS-136).

The first step is to extend capacity in the major urban areas, and then the national network will be improved. The digital D-AMPS standard is employed in a total of 35 countries.

#### New network for Tatarstan

■ Ericsson will be supplying a GSM network to the Russian Republic of Tatarstan. When completed, the network will be able to handle 100,000 subscribers. The order was placed by TAIF, the local operator.

The contract, which is Ericsson's largest in Russia for a complete GSM system, is worth SEK 400 million (USD 50 million). The first phase of the system will provide capacity for handling 10,000 subscribers and will cover the capital of Kazan and the main roads in the region. The network will be completed within five years, and the first phase is expected to be completed by late 1998.

#### Dual Band for Portugal

Optimus, Portugal's third-largest GSM operator is purchasing radio and exchange equipment from Ericsson for its

Dual Band network (GSM 900/1800). The order is worth SEK 800 million (USD 100 million).

Optimus received its GSM license in November 1997. Portugal has 1.5 million mobile phone users, which means a penetration rate of 15 percent. Ericsson is supplying equipment to all three operators in Portugal.

#### GSM 1800 for Hong Kong

■ A declaration of intent for a framework agreement between Ericsson and People's Telephone Co., the Hong Kong operator, was signed recently. The agreement covers extension of the infrastructure for a GSM 1800 network. The first part of the agreement envisages a SEK 225 million (USD 32 million) contract. Ericsson supplies GSM equipment to 55

#### Breakthrough in Romania

■ RomTelecom, the Romanian operator, and Ericsson have signed a framework agreement for at least 500,000 lines. The agreement, which is for a period of five years, means a breakthrough for Public Networks in Romania, making Ericsson one of the main suppliers for the digitalization of the Romanian telecom network.

### NMT breaks new records

■ The Mobile Telephone Systems – GSM, NMT, TACS business unit sold more NMT equipment last year than ever before. NMT technology has been around for some time, but it is still alive and kicking!

Ericsson Radio Access, which delivers channel units to NMT, sold more units last year than the total for the two preceding years. NMT 450 is responsible for most of the system's successes. NMT has expanded every year since it was launched in the 1980s.

## Home base station links to fixed network

Ericsson's wireless GSM system allows subscribers to use their mobile telephones as a normal cordless phone around the home for calls on the fixed network.

Ericsson recently presented this new development at the GSM conference in Cannes.

With the help of a small home base station plugged into an ordinary telephone socket, subscribers can be reached wherever they happen to be. If the phone is close to the home base station, the call goes via the ordinary telephone network, and if the phone is out of range of the home base unit, the GSM network is used. This means that subscribers can be reached wherever they are, and that a mobile phone can be used as a cordless home telephone for calls on the normal fixed network.



Ericsson's new home base station enables you to use a mobile phone as a cordless handset, over the fixed network.

#### **Facelift for News**

■ Ericsson's "News" service has a new layout and is more compatible with the Internet. All the services previously provided are retained, and new services have been added.

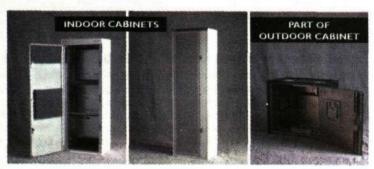
You can pick up News on a normal Web browser, but if you have access to the intranet you also have parallel access to the older News format. The new features include a "topten list" of the most popular pages, such as exchange rates, news clippings and vacancies.

It is now possible to order reminders on your memo when certain pages are updated. There is also a search option and information about current share prices. The News page is linked to several Web sites, but if you want to have direct access, the address is http://nytt.ericsson.se.

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## Share prices week by week in Contact

■ Ericsson's stock market valuation has indirect effects on all employees of the company. Now that nearly 50 percent of employees in Sweden and many worldwide have a chance to become shareholders in the company through the convertible issue, Contact believes interest in the price of Ericsson shares will increase.

On September 9, 1997, an extraordinary meeting of shareholders approved a proposal to issue convertible debentures to employees in Sweden. The conversion price was fixed later at SEK 472 per share (see diagram). Contact will show share price trends in future editions of the publication. The share price quoted will be the Friday closing sale price for Ericsson's B-shares at the Stockholm stock exchange.

The conversion period extends through June 30, 2003.

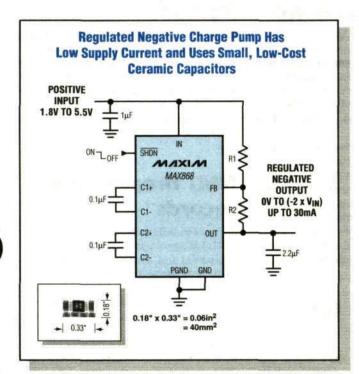


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## Asian currency problems directly affect Ericsson

Southeast Asia began experiencing currency problems last summer. The hardest hit countries are Thailand, Malaysia, Indonesia and the Philippines. In other parts of Asia, it seems as though China, Japan and India will pull through without too much damage. Events in this part of the world have an effect on Ericsson, albeit one that should not be exaggerated.

The pace of growth in telecom expansion and numbers of subscribers will subside in 1998, but just how much is difficult to predict. The poorest countries, where the operators also have the weakest financial position, will experience the greatest difficulties. These conclusions were presented at a seminar recently held by Ericsson Business Intelligence Network (EBIN).

#### Falling currencies

Falling currencies are a problem for operators, since most deals are in US dollars. All planned expansion becomes considerably more expensive than originally planned. In addition, many subscribers incur payment difficulties.

With the operators' weaker positions, there is a greater tendency for companies to merge, which gives suppliers, such as Ericsson, fewer customers.

The financial crisis in Asia affects
Ericsson and other telecom suppliers.
The rate of expansion will subside
somewhat. The effects would have
been worse had it not been for the relative stability in China and India. Dire
financial straits may lead to changes in
the market, such as mergers of operators. Financing solutions will be the
key to further business in this region
for quite some time.

Southeast Asia has had a subscriber growth rate of 60 percent annually for quite some time. We can now expect half that rate. The fact that China and India are still expanding prevents the situation in Asia from worsening. In these countries, telephone density is still relatively low, so price sensitivity is not as high as in Southeast Asia.

#### Financing essential

Financing is essential in order to do business in the region. For customers in Southeast Asia, it is virtually hopeless to borrow money in the usual manner in order to finance a network expansion. Difficult demands are thus placed on suppliers' ability to give credit.

From a European or American perspective, it is easy to regard Asia, and Southeast Asia in particular, as a homogeneous region. This is a dangerous mistake, both culturally and economically. The differences between

Japan and Sri Lanka clearly illustrate this

However, even if the countries cannot be lumped together in one group, Asia's importance as a region should not be ignored. The current economic crisis is not permanent. Many analysts believe that the situation will return to normalcy within a couple of years. Asia's importance to the world economy is steadily rising.

In 1970, it represented 4 percent of the world economy; today that figure has risen to about 25 percent and by the turn of the century, Asia is expected to represent about one-third. By the year 2000, Asia will also represent 60 percent of the world population.

#### PATRIK LINDÉN

More information about the crisis in Asia and other useful information can be found on the internal Web site from Ericsson's worldwatch experts called Business Information center:

http://bic.ericsson.se



#### from the past

#### A different sort of core operation

As a bicycle enthusiast and member of the Historical Bicycle Association, I became very interested in the photo below, which Nina Lundgren at Ericsson Radio Systems recently found in their archives.

The photo, taken in Stockholm's Liljansskogen park in 1895, shows members of the LM Ericsson & Co. employee bicycle

Believe it or not, the bicycles shown in the photo were manufactured in LM Ericsson workshops by the employees who worked there – at least according to information found in Bruno Mylén's 1946 book, The Tenant Farmer's Son Who Started an International Industry.

When bicycles became popular in the 1890s, Lars Magnus Ericsson allowed one of the foremen, a Mr. Andersson, to find out which of the employees wished to construct their own bicycle at the factory.

This offer was to prevent anyone from being tempted to steal materials to make their own bicycles. At that time, telephone equipment was handmade and the industry was mechanically oriented

Lars Magnus made the materials available and workers were allowed to stay an extra hour each day to work on their bicycles. Different departments made different parts.

Three months later, the 120 new bicycles were finished.



LM Ericsson employees out on a bicycle excursion in 1895.

Everybody got their own, personally manufactured bicycle, without any cost except for their own labor.

This is the account that Bruno Mylén gives. True or not? Who knows? Were bicycles really manufactured at LM Ericsson's factories? If any reader knows the answer, please contact Thord Andersson, Ericsson Business Networks, 131 89 Stockholm, telephone 08-422 0316, memo EBC.EBCTKAN.

THORD ANDERSSON

#### hello there!

## How will you present Ericsson?

Arne Johnson has just started a new job which involves ensuring that Ericsson is presented in a uniform and pro-



fessional manner all over the world. This is known as "brand implementation and development" in marketing circles.

#### How are you going to manage to achieve a uniform presentation of Ericsson?

This is very much a question of being consistent and making sure people know why we want to do this. There's an enormous amount of good work going on in the company. My job is to circulate good ideas and hints about ways of going about things. I will be primarily concerned with exhibitions and similar arrangements - that's what I have been working with previously. There's no point in people coming along from the parent company, and admonishing everyone else, telling them how to do things. We have to make our contribution, and demonstrate how things can be done.

#### Why are perceptions about Ericsson so important?

It's no longer possible to compete simply because you have good products. We are also competing on the basis of our brand. This is much more than a question of logotypes and colors and so on. It is also very much a matter of how our personnel behave and what associations people have with Ericsson what our buildings look like, and a great deal more besides - the way the rest of the world perceives us. We spend a great deal of money on external activities, so we have to make sure the budget is used as effectively as possible. Ericsson participates in about 150 or 200 different exhibitions a year.

## • When do you start your new job? As a matter of fact, I have already started. Previously, I was working in the Ericsson Events unit, which functions as a support group for major events, helping local subsidiaries that don't have enough experience or resources. We prepared an "Events Guide" at my last job, which is one of the things I am going to develop further and imple-

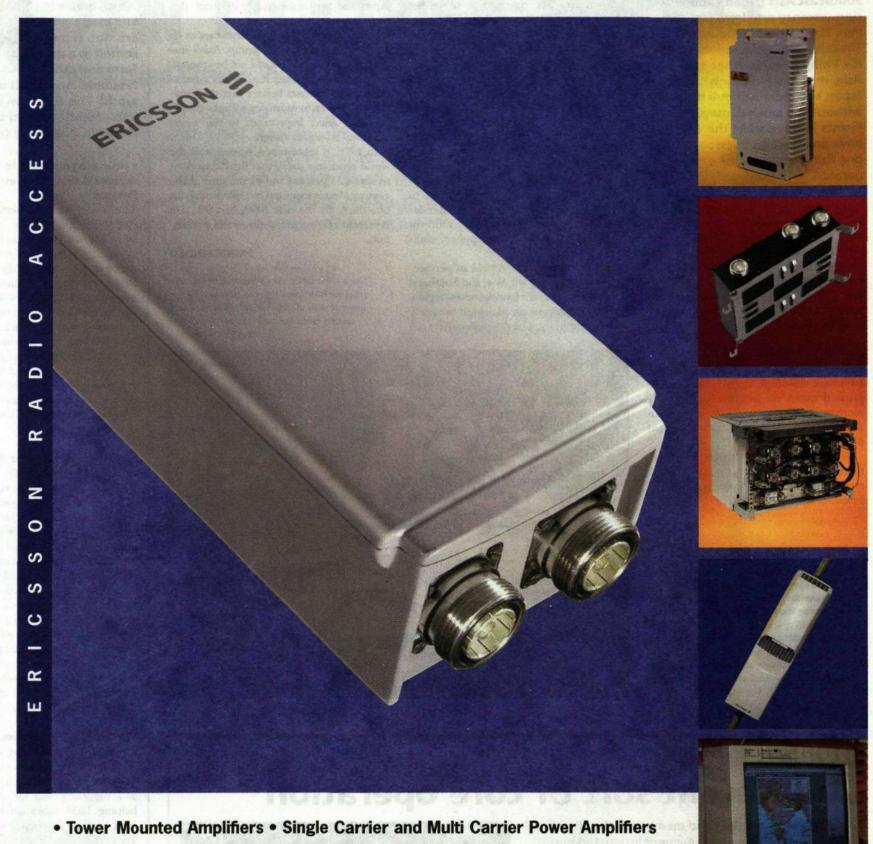
#### Do you travel much now?

I'm used to traveling a lot. It's important to meet people and build up a contact network. It's not enough just to dispatch pieces of paper around the world if you want to get things done. The real solution is communications between people... You have to get out and about. We alone can't change the world from the parent company in Stockholm. There are currently 150-200 people in Ericsson who are working on exhibitions on a professional basis.

#### PATRIK LINDÉN

Ericsson's Event Guide can be accessed on the Internet on http://www.lme.ericsson.se/ Imeevents/guide0.1.htm. This site also contains other information about developments in this area.

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#### 7

#### portrait

She has worked at a kibbutz and as secretary for a commercial airline company, designed jeans and worked at CNN's news office in Jerusalem. Today, she's a secretary at LM Ericsson Israel Ltd. in Tel Aviv.

"This time, I think I've found my dream job," says

# From jeans design to Ericsson

was fascinated listening to Shelli Mansfeld describe her experiences in professional life, although she doesn't think her background is anything special.

Shelli Mansfeld was born and raised in New Zealand. At the age of 20, like many

other young people in those days, she boarded a boat bound for Israel, where she worked at a kibbutz. Eventually, she went to London and worked as a secretary before moving back to Israel, where she worked for the country's commercial airline, El Al, for five years.

"After that, I studied fashion design and worked in the Israeli textile industry for ten years until its collapse. I mainly designed jeans," she continues.

#### Not as bad as it's perceived

For a few years after her designer days, Shelli Mansfeld worked at CNN's news office in Jerusalem, managing production logistics, perhaps better known as the practical details surrounding news broadcasts.

"Jerusalem is not as dangerous as many people might think when they see broadcasts by TV news teams from the city," she says. "Of course there is unrest and tension, but conditions are sometimes exaggerated by the media. It was a hectic job, but, at times, it seems just as hectic here at Ericsson."

Shelli Mansfeld, her husband and two sons are secularized Jews; they moved two years ago from Jerusalem to Tel Aviv, where the lifestyle is completely different. "It's easier to live here, and the entire family is happier in Tel Aviv."

Shelli got her present job as a secretary at Ericsson through a recruitment company. She started working at Ericsson in May 1997. The company was established shortly before, with Shelli Mansfeld as one of its first employees.

#### Unknown company

"At the age of 50, it's not easy to get a job. It's was very fortunate – this is a dream job. It's enjoyable and stimulating to be involved from the beginning in building up new ope-

rations. I also find it easy to cooperate with Swedes," she continues.

Ericsson is not particularly well known in Israel, and Shelli Mansfeld knew virtually nothing about the company when she applied for the job. One of her sons collects telephone cards, and he told his mother that Ericsson operates in the telecom industry. He also showed her a card with the picture of an old telephone and a few words about Ericsson.

"Of course, it's extremely interesting to work in telecommunications, an industry of the future. For me, however, Ericsson is also all of its other employees and the culture that characterizes the company," Shelli Mansfeld explains. She appreciates the freedom and opportunities to improvise, and the considerable scope offered for personal creativity. But she also likes the sense of order and accountability, an area in which she believes Swedes are highly proficient.

"We have a balanced mixture of Swedes and Israelis at the office, and it generates a strong feeling of solidarity. It's a good feeling," she says. "It's enjoyable and stimulating to be involved from the beginning in building up new operations," says Shelli Mansfeld. She was hired as a secretary in May last year at the newly established LM Ericsson Israel Ltd. in Tel Aviv.

Photo: GUNILLA TAMM

Shelli Mansfeld is interested in literature and history, often visiting antique and second-hand bookstores. She is extremely fond of Selma Lagerlöf, and we also talked about Gösta Berling and the Swedish Province of Värmland. She says she has learned a little bit about Sweden reading the works of Selma Lagerlöf.

"I understand that it must be very beautiful at Lake Fryken," she says.

The undersigned told Shelli that Selma Lagerlöf once wrote a book about a group of Swedes who emigrated to Jerusalem.

"I didn't know that, but I will certainly look for a copy the next time I wander through the bookstores where it might be found," Shelli Mansfeld said.

**GUNILLA TAMM** 

## The art of finding a company's soul

The process of getting employees sold on Ericsson's soul is now in full swing. During the spring, all 11,000 employees of the Mobile Telephones and Terminals business area will have completed training regarding the values associated with Ericsson's brand – values that should permeate all aspects of the company's operations. Contact was present at a seminar in Kista.

The training program consists of an information package and a half-day seminar. The latter is intended to engage the participants in exercises that will explain the values that constitute the brand image. The next step is to translate this knowledge into practical guidelines for use in one's own job.

The exercises were carried out in small groups of participants with various functions in the business area. The step-by-step process begins with an analysis of Ericsson's competitors and the customers' needs and leads to an understanding of the value concepts.

However, the seminars are only the first step. The project is not completed until everyone has a concrete understanding of the significance of the different values, something which takes time. Deeper insight takes time to sink in, according to several of the seminar participants in Kista.

**EVA GÄRDSMO PETTERSSON** 

#### "If Ericsson has a strong brand image, it will be easier for me to sell modules."

- Louise Barnes, sales support, Card Phones

"I work within the data section with marketing and sales of modules and PC cards. Before the seminar, I did not have a clear understanding of how values so clearly associated with mobile phones could have a practical application for those of us working in the data section and in Ericsson as a whole.

"I wholeheartedly feel that this is something I can make use of. If Ericsson has a strong brand image, it will also be easier for me to sell modules."



oto: CATHARINA WISTE



#### "Sell the brand and reap the benefits."

 Kjell G. Pettersson, finance manager, Data Development, Mobile Phones

"It's understandable that a well-established brand name means a lot. If Ericsson succeeds in communicating the brand name in the right way, we can reap many benefits. We will experience a demand for our products from customers who are prepared to pay more, just like my daughter is prepared to pay a fortune for jeans with a Levi's label."

## Ericsson's corporate network under continuous development

Ericsson Corporate Network (ECN), is the world's largest Sweden-based private network. Today there are more than 150,000 users. The network links together virtually all local networks and most company exchanges in the Ericsson world. The wind of change is blowing briskly. Larger amounts of data, Internet, virtual organizations – a new age with new demands. ECN is now being developed at a rapid pace. At year-end new services and a new way to receive payment will be introduced.

"An Ericsson employee will have global status – a person who can be contacted from anywhere. It is one of the most clear-cut goals in the IT segment of Ericsson's strategic planning and is thus one of our more most important goals," says Stefan Birksjö at Ericsson Data in Älvsjö, south of Stockholm.

Alvsjö is the network hub with the highest traffic volume. Stefan Birksjö is responsible for the 120-person unit, whose main task is to conduct and develop Ericsson's corporate network, with respect to both infrastructure and services.

In addition, a range of other communications services are handled, including Ericsson's Stockholm telephony. The work is customer-oriented, with most of the customers being Ericsson units.

#### New price model

Receiving payment in a new way is a key focus of this work. Effective January 1, 1998, connection to the network will be packaged with added services, including network supervision and security.

This combination will be designated Erinet. At the same time, an entirely new price model is being launched which, in part, consists of a fixed monthly charge per user, and a variable increment, per kilobyte of transmitted data. The aim is to adjust the tariff to the extent the network is used and

to even out the fixed costs to a greater degree than exists today.

"We measure traffic volume continuously, observing how heavy the network load is. Our need for bandwidth and flexibility is increasing. We are devoting our best effort to 'scrutinizing the map' to determine where upgrades must be made. Our ambition is to already increase capacity before the customer demands it," says Stefan Birksjö.

#### Long number is made short

In many countries, Ericsson's local organization operates its country's segment of Erinet. Ericsson's goal, to the greatest extent possible, is to gather the responsibility for the widespread network under one hat – its own.

"Being able to operate a large, global network is a part of Ericsson Data's core expertise. Our goal is to increase our participation in the development work in the IT area throughout Ericsson.

The Ericsson network does not handle data traffic exclusively. Telephony has long been operated over the data network's excess capacity, supplemented with called connections.

All Ericsson units have a so-called ECN code, similar to a country code of three digits, which is used for calls within Ericsson. In itself, the Ericsson network is so smart



that a call from an Ericsson unit to another is forced into the system regardless of whether the calling party has used the ECN code or not.

There is one finesse, however, which has resulted in some absurdities: When Ericsson in Singapore calls Ericsson in Shanghai, the connection goes via Älvsjö in Sweden! This peculiarity is being reviewed, and with a view to the coming of refined functions for selecting the optimal economic choice, to guide calls over regular public networks instead, when appropriate.

KARI MALMSTRÖM

#### **Network Compass shows the way**

That ECN is a well-managed network is clearly demonstrated in the 1996 round of the benchmarking study, Network Compass, which compares communications networks within different companies. Network Compass is one of many key studies developed and introduced by Nordic Compass Analysis AB.

"In the latest study, we obtained a highly satisfactory result," says Jan Holm, quality developer at Älvsjö. "In six of eight areas, ECN's values were better than — or as good as – the values of the international reference group with which ECN was compared."

"In the previous Compass in 1994, we received clear indications that our



Jan Holm, quality developer.

software costs were much too high. Through focused efforts we succeeded rather quickly in reducing them considerably," says Jan Holm.

#### This is the Ericsson network

■ The term Corporate Network has nothing to do with what is transmitted over the network. It is a physical infrastructure for many different logical networks which link together a multitude of servers, routers, and bridges, data exchanges – for example Eripax equipment – and company exchanges, Ericsson's MD110, in diverse variations.

The connections – the actual Ericsson network – consists both of its own lines and leased connections. From the beginning, the network was strictly a data network using a star topology with Älvsjö as the hub. With time, more major hubs de-

veloped, for example, in Richardson in the U.S., Telstra in Australia and Rijen in the Netherlands.

Thanks to the network, Ericsson's employees have, during a long period, easily been able to reach one another via Email, in which Memo is the system most used.

Other typical application areas are the many support systems for everything from product development to logistics and invoicing. The Internet boom has been duly noted – in only six months, the volume of IP traffic has increased by 300 percent.

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Chile, widely viewed as the great economic success story of Latin America, is also head-andshoulders above its neighbors when it comes to telecom.

Chile – a booming cellular industry

> he mountainous country, which stretches 4,000 kilometers from north to south, has enjoyed an average 6.1 per cent annual growth in GDP over the past ten years, and in 1995, Chile's 8.5 per cent economic growth sur-

passed the inflation rate (8.2 per cent) for the first time ever. Chile is viewed favorably among international credit rating institutes and is one of Latin America's most competitive nations

Given Chile's newfound prosperity and its per capita income of nearly USD 5,000, it is only natural that its 14 million inhabitants would demand high-quality telecom

Privatization of the telephone monopoly was considered in 1987, but it was the Telecommunications Policy Act of 1992 that really got the ball rolling.

In October 1994, Chile implemented a multi-carrier system, allowing users to select the company of their choice for both domestic and international long-distance calls. This, according to the International Institute of Wireless Communications, "has created a feeding frenzy among the nearly dozen licensed operators" in Chile. As of December 1997, the Chilean market for international long-distance was dominated by Entel (33 per cent of the total), followed by Compañía de Telecomunicaciones de Chile or CTC (21 per cent, Chilesat (17 per cent), BellSouth (11 per cent) and VTR (10 per cent.)

Chile's market for telecom equipment and services is expanding at 20-25 per cent a year, or nearly three times the economic growth rate. Between 1993 and 2000, CTC alone will have spent USD 2.6 billion to install three million new phone lines, with Entel spending USD 441 million and CMET another USD 350 million. The Chilean phone network is already 100 per cent digital, with carriers tripping over themselves to install synchronous digital hierarchy (SDH) fiberoptic networks from one end of Chile to the other.

#### **Testing ground**

"It's one of the most open systems in the world," says Dean Alexander, director of Grant Thornton International's business center in Santiago. "Chile is being used as a testing ground for liberalization of the telecom industry. There are six or eight carriers providing long-distance service, and it's very, very competitive."

But the real battle is being fought in the cellular arena. Ericsson's biggest customer in Chile is Startel, owned by Telefónica of Spain. Andrew M. Geisse, former executive president of Startel, says the company has already given Ericsson USD 97 million worth of orders for cellular infrastructure, and will spend a total of USD 300 million with Ericsson over the next three years.

Startel already has 200,000 cellular, 60,000 paging and 8,000 trunking customers, and is Chile's first nationwide digital cellular network. Its growth has been phenomenal since Startel's establishment in June 1996, but it hasn't been easy.

"Chile is extremely difficult for RF technology because of the multiple mountain ranges and the length of the country," explains Geisse.

#### Solution with the best value

He says the mobile network is gradually

moving towards using Ericsson D-AMPS equipment because it is the solution with the best value. What the customer wants is good service and high voice quality. Customers don't care as much about the kind of technology used as the suppliers seem to think.

"However," Geisse adds, "when we evaluated the different technologies out there for our particular license and frequency, we had two choices: TDMA or CDMA. We chose TDMA because at that time, not only was TDMA ready and more developed, but CDMA terminals

were substantially more expensive." Startel's success is mainly attributable to

customer access to inexpensive telephones. In addition to Startel, Ericsson recently signed a contract with Chile's Entel to supply infrastructure for a GSM 1900 cellular phone network - the first major contract for a GSM system anywhere in Latin

"It's not that Chile is particularly suited, but that it is perhaps the most deregulated country in the world - certainly in Latin America," says Sune Gustafsson, project manager for GSM infrastructure in Chile.

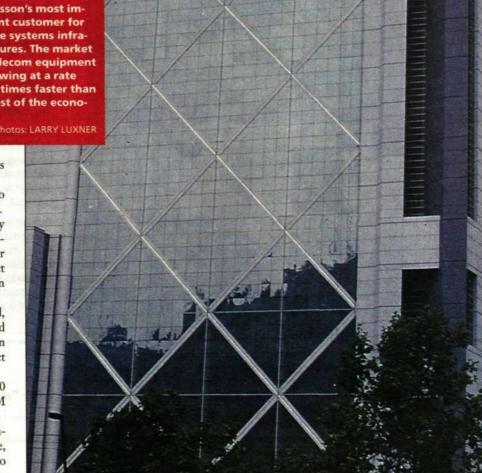
Some 190 persons out of Ericsson's 400 employees in Chile work with the GSM

When asked why GSM has not been implemented in this part of the world before, Sune Gustafsson replies that this is due to the prevalence of the 800 Mhz standard in Latin America, which has traditionally followed the U.S. in defining frequency stan-

LARRY LUXNER

The head office of the Chilean operator CTC clearly resembles a cel lular phone. Startel, CTC's mobile division, is Ericsson's most important customer for mobile systems infrastructures. The market for telecom equipment is growing at a rate three times faster than the rest of the econo-

Photos: LARRY LUXNER



■ Footnote: Contact no. 20/1997 contains an article by Gunilla Tamm about Entel's GSM

It can also be found on our Web site "Inside Ericsson." http://inside.ericsson.se/

### Speaking Out at CeBIT '98

#### March 19 - 25, 1998, Hannover, Germany

As part of Ericsson's overall approach to CeBIT '98, a series of 23 co-ordinated lectures will be presented. In addition to visiting the two Ericsson stands at the fair, the targeted audience is also being invited to attend the Corporate Lecture series in the TCM Convention Centre, Room Frankfurt.

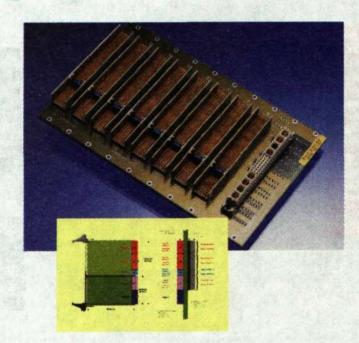
The lectures are aimed at illustrating some of the new and exciting developments taking place in the world of telecommunications and what Ericsson has to offer to meet these challenges. Each lecture is 30 minutes long, is free of charge and is held in English with simultaneous German translation. The comprehensive programme is designed to encourage the audience to select and attend the lectures that interest them most.

For further information, please contact the Project Leader for Ericsson's Corporate Lectures at CeBIT '98, Annelie Hellström. Memo: LME.LMEANNE. E-mail: annelie.hellstrom@lme.ericsson.se. Phone: +46 8 719 5563 (ECN 850 95563). Fax: +46 8 719 0880 (ECN 850 90880).

Friday Mar	ch 20th	
10.00-10.30	Driving Global Markets: Establishing a UMTS/IMT-20 Standard for Third-Generation Mobile Communication	SECURITION OF THE PERSON NAMED IN COLUMN
10.40-11.10	AXE and the Networks of Tomorrow	Staffan Åstrand
11.20-11.50	Enhanced Video Conferencing Solutions for Intranet and Internet Environments Thomas F Angle	
12.00-12.30	ATM for Enhanced Network Capabilities	Gert Öster
12.40-13.10	Efficient Handling of IP Traffic in Public Backbone Networks – Multi Protocol Label Switching Loa Andersso	
13.20-13.50	High-performance ATM Switching	Bengt Lagerstedt
14.00-14.30	Access Networks Using PTP (Point-to-Point) and PMP (Point-to-MultiPoint) Microwave Radio Hans Herbertss	
14.40-15.10	Flexible and Scaleable Managed Transport Network Solutions  – a Fast Pay-Back of Investment for Operators Using Carriers  Carrier Network  Tage Routuvaara	
15.20-15.50	Managing a Chaotic Reality with Telecom Management Systems & Services  Per-Erik Gustafsson	

16.00-16.30	Ericsson's Service Solutions for Network Operators – a Way to St.  Competitive  Lawrie Baker & Antal		
16.40-17.10	GSM Radio Network Optimization Using Ericsson's New OSS		
	Features	Anna Rimhagen	
17.20-17.50	Optimizing Flexibility and the Cost of Transport Capacity:		
	Optical Networking the Ericsson Way	Magnus Grenfeldt	

10.00-10.30	Wireless Local Loop - a Technology Deployed World-v	vide	
		Ron Johnston	
10.40-11.10	Achieving Commercial Success by Introducing GPRS i GSM Network	n Your Existing Lisa Englund	
11.20-11.50	Wireless Information Access – How Wireless Data Car With the Increase in Internet/Intranet Communication	Help You Cope Per Stein	
12.00-12.30	Dynamic Allocation of Applications and Future Mobile Wireless Devices  Joakim Nelson		
12.40-13.10	WAP – Internet Applications for Mobile Users	John Darroch	
13.20-13.50	Wireless Messaging Solutions for Value-Added Applications  Bengt Didner		
14.00-14.30	Unified Messaging: Adding Subscriber Value to Your Networks Patrick Kane		
14.40-15.10	Are You Getting the Most out of Your Call Centre? – Migration from Inbound ACD to Integrated Contact Centres Malin Johansson		
15.20-15.50	Out Searching for the Right Solution? How about Managed Services?  Jonathan Smith		
16.00-16.30	Successful Implementation and Launching of Intelligent Network Services Mats Wennerberg		
16.40-17.10	Evolution of Multimedia Services on Copper	Arun Bellary	



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#### Local involvement seen at Ericsson childrens' party

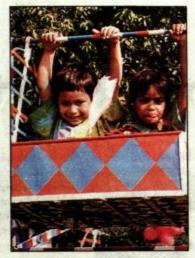
The fresh, green lawn was full of children in brightly colored clothing and childintia care workers in beautiful saris. The night before, carousels, climbing towers, miniature chairs and tables had been put out. Between lunch and playtime, a magician put on a show. The delicious smells of vegetable and meat stews tickled the nose, giving a completely different picture of Ericsson in India.

Tommy Eriksson is a member of the executive management at Ericsson Communications and his wife Liz is a nurse, but right now

she is busy taking care of the family's four children. Two of the children were adopted in India during a previous visit to the country.

When Contact payed them a visit, they had, together with other Ericsson families, invited all or 80 of the children from the orphanage where they once adopted their daughters to a garden party.

"The drawbacks of life in India are the traditional views of women. the strict caste divisions and the difficulty in getting practical things to work properly. Positive aspects include all of the friendliness in society and, once one has adjusted, the different concept of time. One learns to focus on those things that are truly important and not waste energy on small things," says Liz while she tries to keep track of



Living abroad places special requirements on initiative and involvement. Some of the overseas employees' families invited all 80 children from a nearby orphanage to a party.

which children want meat stew and those who prefer vegetarian.

**BRITT-MARIE WIHDÉN** 





Katarina Sidén (left) has overseen the task of starting up a production line for optical signal boosters, at the Microelectronics division in Kista.

Photo: ANDERS ANJOU

#### **Production philosophy** is Katarina's thing

She's worked at Ericsson Radio and Ericsson Components. Katarina Sidén's specialty is the construction of new production lines, overseeing everything from equipment investment planning to production facility design to making sure that production actually works. Now she has been given the task of starting up a production line for optical signal boosters at the Microelectronics unit in Kista.

Monday I'm sick, and there are only four days left until the inauguration of the new optic amplifier production line.

On Friday we got the goahead to install the equipment in a larger and better-looking facility, which will also be more appropriate for the inauguration ceremony.

Tuesday Yet another day in bed (help!), but I know that Per and Henrik, who are very familiar with the design and the equipment, will make sure that everything gets installed

We have talked a lot about the Japanese philosophy of production, with which I was involved at Ericsson Radio in Gäyle. I have recounted how well it worked there and that productivity increased by 50 percent, as did enthusiasm and involvement. The philosophy is based on production teams of 4-8 people who have shared responsibility for all aspects of production. The [manufacturing] equipment is positioned in a circle so that people are close to each other.

Wednesday Back to work. I went directly to the production area where they had, just as I had hoped, installed all of the equipment according to the plans. It looked really nice. The equipment worked well and production was once again under way. All that was left were the finishing touches to convey a professional image.

Before coming here, I didn't know about these exciting products, products for tomorrow's multimedia communica-

At the Ericsson Components optoelectronics unit, components are being manufactured that transmit, receive and amplify optical signals

during the transmission of data, images and sound via fiber optic cables. I have never before met so many creative and enthusiastic people gathered at one place. It is a joy to get up and go to work in the morning.

Thursday Today is D-Day, a very suspenseful day. The inauguration begins at three-

Some thirty people arrived at the production facility around three o'clock. A customer from Ericsson Telecom cut the ceremonial ribbon. Jan Söderström, manager of the optics unit, gave the inaugural speech. Magnus Öberg, from transportation networks at Telecom, representating the customer, cut the ribbon and said that this was a step towards the goal of Ericsson Inside, where the entire transportation network is built upon Ericssonbased products and know-how.

We toasted with champagne and ate hors d'oeuvres.

During my presentation, I told a little about my own background and the theories behind the layout and the flow of materials. It was important to emphasize that the operators themselves will be responsible for customer contact, logistics and quality. By placing the equipment in a circle, the production sequence will flow in a logical order.

Friday All of us in the production unit have received high praise. It was a nice day. The operators overseeing the new line are all skilled, hand-picked technicians: Walter Canales, Carl Elofsson, Randy Crosson, Henrik Olsson and Per Lahti. Being an operator here is an attractive occupation with a future, backed by a sound philosophy.

Now things are underway!

#### Canada first to offer new service

■ Ericsson Virtual Office (EVO) is a new service developed by Ericsson Communications in Canada, and launched internally in December. This new service enables employees canada to hook computers up to the company network without having to use a modem on the fixed network or with a mobile phone. Instead, the computer can use the Mobitex network, the mobile network or CDPD technology. In Canada, EVO uses the Cantel Mobitex network, which has national coverage.

Brad Matchung, who takes care of Ericsson Canada's major customers, was one of the first to have a chance to try out the technology.

"It is a pleasure to use EVO and Mobitex. Now I can keep in touch with colleagues and customers wherever I happen to be in the country, without having to continually hunt for a telephone jack," Brad says.

☐ For more information about the Ericsson Virtual Office, see Web sites: http://www.emc.ericsson.se/preview/ products/md/evo.htm

http://www.emc.ericsson.se/business/ mobiledata/evo/whitepaper.htm

#### Design award for broker telephone

Ericsson's telephone for stockbrokers and financial consultants has received the Norwegian Design Council's award for good design.

The Design Council explained their choice, pointing out that, among other things, the text shown in the colored display window gives informative and easy-toread information to the user. The telephone has a simple and efficient design.

"For brokers, the telephone is their most important work tool, and ordinary telephones do not have the special func-

tions that this user group needs. Customers demand that their brokers always be available. They find it unacceptable to get a busy signal. That is why brokers must be able to handle many calls at once," says project manager Øivind

Nyegaard at Ericsson. The new telephone can

theoretically handle up to



The Ericsson-developed broker telephone CTT11K can handle up to 250 connections at once.

250 active connections at one time. The user can listen to 14 of these calls at the same time through separate loudspeakers, but can only speak with two at the same time. The telephone also automatically forwards calls to preprogrammed numbers, i.e. to a mobile phone or home number, if the broker does not answer.

More than 40 people in 12 countries have been involved in the development of the special CTT11K Key Terminal.

#### Germany thinks again

Ericsson's traditional hierarchical organization in Germany is being replaced by a düsseldorf structure which is more project-oriented and with a closer focus on the customer.

The reorganization program, which started last summer, is headed by Karl Alsmar, the new president. Ericsson's company in Germany made a profit of about DEM 1.2 billion last year. So why rock the

"We want to be a market leader, but we also want to make changes. We have to think of the future. Our customers are looking for more than technology - they also want advice, support and a personal approach," Karl Alsmar explains.

In addition to a new organizational structure with less bureaucratic methods, Ericsson will soon be moving into a completely new building in Düsseldorf, on the other side of the street.



http://inside.ericsson.se/cebit

#### **Ericsson in Canada**

## **Emerging from Nortel's shadow**

ual is definitely a positive trait that reflects favorably upon

us. On the other hand, there may be a measure of bureaucracy where decision-making is concerned that is not as

The other part of Ericsson in Canada is Ericsson

Communications Canada, which is located in Toronto and

is the national sales office. There are 350 employees, with

branch offices in Vancouver on the west coast and a few

The company focuses mainly on sales of mobile tele-

phone systems and private radio systems. It also sells mo-

bile telephones, but to date, Canadian mobile phone den-

"Business will definitely increase when more people ob-

tain mobile phones. At this time, no one can explain why

there are so few subscribers in Canada," says Bryan Barry,

manager of Ericsson in Canada since October of last year.

ous mobile systems. AMPS/D-AMPS, GSM 1900 and IS-

95 are all available in the country. This creates confusion

for consumers when faced with a decision.

One explanation could be the confusion between vari-

"Our organization here in Canada has grown by some

300 percent during the past five years. We must now be-

come a more solidly based company and must expand our

presence into other market segments, such as the Internet.

pared to expand our operations," says Bryan Barry.

We are still too dependent on a small number of

customers within a single sector, which today is

under severe price pressure. While we are

pleased with our success to date, we must be pre-

Towards a more solidly based company

sity is only about 13 percent.

Ericsson is doing extremely well in Canada. Last year was Ericsson's most successful year financially since its Canadian operations began 45 years ago. Despite this fact, Ericsson is a relatively unknown company for most Canadians.

Art McCabe, corporate communications manager at Ericsson in Canada, says, "We live in Nortel's shadow. The Canadian telecom giant is to Canada what Ericsson is to Sweden. Therefore, we have to make an ex- that could provide us Art McCabe tra effort to create awareness of our name with the publicity we and trademark through, for example, image needed," explains Art McCabe. campaigns and sponsorship activities."

One way to create visibility is to support the Canadian national freestyle ski team. Ericsson signed a three-year sponsorship

There are two main units of Ericsson in

Canada. Ericsson Research Canada is located in

Montreal with about one thousand employees. The company is involved in research and

development of software design for the D-

ments come directly from Mobile Systems'

business unit for American standards.

Cantel.

AMPS standard. A large portion of the assign-

Ericsson Research began operations in Montreal in 1986

with only 50 employees. The location was chosen in con-

junction with a major order from the Canadian operator,

"Ericsson's rapid growth in Montreal is partly due, of

course, to the growth of the entire industry, but the geo-

graphical location is also a factor. Within a 120-kilometer

radius, there are 12 relevant universities, of which four are

located in Montreal," relates Sven Borgström, who heads

the operations in Montreal. "This enables us to easily re-

cruit qualified employees. Ericsson is now the seventh

largest R&D company in the province of Quebec and sec-

ond in the industry only to Nortel."

Sven Borgström sees both the

pros and cons of being a Swedish

"The prevailing culture at

company in Canada

than it is of

Sweden. Respect and con-

the company is probably

more typical of Ericsson

contract last year. In addition, Ericsson is also the main sponsor as of this year of an annual world-cup Mont Tremblant,

north of Montreal. "We were looking for a sport that could be associated with Ericsson - a sport

**Ericsson in Canada** 

Canada's national freestyle ski team is among the best in the world. Ericsson is also a world leader in its field. Ericsson's values - respect, perseverance and professionalism - are also shared with the national team and the sport as a whole. Other reasons for sponsoring the sport include its televisibility and the fact that it is a rather original type of event to which the company can invite customers and other guests. In addition, many of Ericsson's mobile telephone customers are interested in skiing. All of these factors led to the decision to support freestyle skiing.

#### Show goes on despite weather

The weather gods were ruthless during this year's world cup championships at Mont Tremblant. Large areas of Quebec lost power for several days due to freezing rain and ice storms. More than three million people had no power when the storm was at Montreal. its worst. The ski area was also without

electricity during parts of the competition. Nevertheless, this did not stop the organizers from going on with the show.

"The competition took place without disruptions. The organizers truly did an excellent job. Unfortunately, only two-thirds of Ericsson's invited guests could make it to the event. But those who did had an unforgettable experience," says Jennifer Hillborn, who together with Art McCabe, led Ericsson's sponsorship project.

Many people are needed in order to hold a world cup event. About 250 people volunteered to help with everything from slope preparation to keeping the photographers at a safe distance from the contestants. Some 30 volunteers came from Ericsson in

PATRIK LINDÉN

### **Montreal** a pioneer in open systems

development center in Montreal serves as a successful example of both points.

Ericsson in Montreal is collaborating with Rational, a consulting firm, to develop new software for mobile telephony switch-

"We are at the forefront within Ericsson when it comes to joint development with standard development tools and open systems," says Sven Borgström, manager of Ericsson's R&D company in Montreal. "It's rather unique within Ericsson,



but what it's really about is catching up with the rest of the industry.

"We must rethink everything within Ericsson. Many still consider us to be an industrial company, when what we really are is a software company. Hardware and the various devices we sell are becoming commodity products, while software and services are the areas in which we can earn money."

#### Positive experiences.

had mostly positive experiences. I believe that our cooperation with Rational is one of the most important events of the past ten years for development of switching products within Ericsson."

PL

Software culture and open systems are two of the ten critical points in Ericsson's 2005 vision. It requires that Ericsson approach software companies and begin to take advantage of standard software development tools to be able to compete as telecom and computer technology become increasingly interlinked. Ericsson's research and

Michael Gallagher is responsible for Ericsson's role in the joint development venture with Rational. He explains, "We have a unit consisting of 30 people from Rational working in our premises. In Montreal, we are a test site of sorts for joint development.

Someone must get the ball rolling and so far, we have



Freestyle skiing received a more official status as a sport during the 1980s. Sponsorship money was particularly important in making the sport more visible. Many of the athletes who are not skiers from the start have a background as gymnasts or divers. At Nagano this year, it will be the third time freestyle skiing has full Olympic status. It was previously only a demonstration sport. Photo: PATRIK LINDÈN



**Caterina Faralle from** Ericsson in Montreal was one of the 30 or so Ericsson employees who volunteered to help out during the Freestyle **World Cup at Mont** Ericsson was the main

#### For Caterina, freestyle was a change of pace

"I wanted to try and experience something new," says Caterina Faralle about why she was a volunteer during the Ericsson-sponsored Freestyle World Cup in Mont Tremblant, Canada.

For the past eight years, Caterina Faralle has worked in the library at Ericsson Research in Montreal. Her job mainly concerns technical documentation, but she also keeps track of industry magazines, CD-ROMs and videos for employee reference.

Caterina worked for the event organizers from Tuesday through Sunday. She received her salary as usual during the weekdays, however, volunteers paid for their own travel and lodging expenses.

"The days were very long. I've done everything from helping with accreditation of the athletes to keeping the media behind the guardrails, and made use of my different language skills (English, French, Italian and Spanish)," Caterina relates. "I stayed with eight colleagues from Ericsson at the hostel in Mont Tremblant. During the past week, I have met many new people and had a lot of fun. I plan to volunteer next year as well."



Craig and Tanya Young were members of Canada's national team and participated in the Winter Olympics in 1992. Now they work as a link between the freestyle athletes and the sponsors. They were the ones assigned to explain the sport to Contact's roving reporter. Craig insists that the sport involves very few injuries, even though, as a spectator, one has difficulty understanding how anyone survives at all. All of the athletes are in very good shape and, thanks to the steep hill, the landing is relatively soft after the jump.



Nathalie Fortier and Trond Fidje from Ericsson in Montreal worked as volunteers for three days during the Ericsson-sponsored Freestyle World Cup event at **Mont Tremblant.** 

"We have been assigned to the task of handing out chocolate bars to the spectators - a rather pleasant job. It is also fun to be able to help make Ericsson's name better known in Canada," say Nathalie and

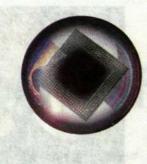


about Ericsson in Canada, check out the Web sites listed below.

■ http://www.lmc.ericsson.se is Ericsson Research Canada's site on the intranet

http://www.emc.ericsson.se is Ericsson Communications site on the

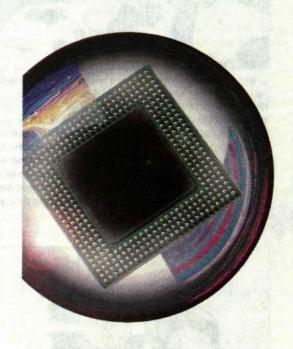
■ Information about Ericsson in Canada is available on the Internet at http://www.ericsson.se/CA/

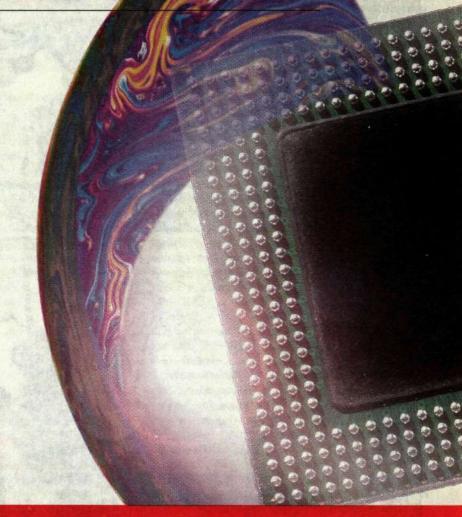




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ITILL FLORE

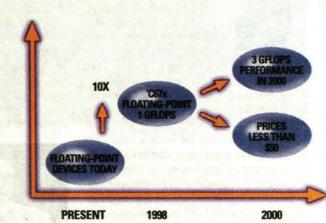






# ANNOUNCING 1 GFLOPS TECHNOLOGY.

One GFLOPS performance is coming, and it's closer than you think – thanks to floating-point DSP technology from Texas Instruments. When the first of these new floating-point DSPs begins sampling in the second half of 1998, the TMS320C67x will be the world's most powerful 32-bit floating-point DSP. With 1 GFLOPS (1 billion floating-point operations per second) performance, the 'C67x will provide 10 times the processing power of any other floating-point DSP on the market.



And for the first time ever, fixed and floating-point DSPs will be code compatible. As a member of the 'C6x generation of DSPs from TI, the 'C67x will be code compatible with the 16-bit fixed-point 'C62x DSPs. Which means you can start developing code for the 'C67x immediately, using currently available 'C6x fixed-point tools.

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SPRE1621CT118R 15-1437S

THE WORLD LEADER IN

DSPSOLUTIONS



#### column

#### Well equipped for new challenges

n many areas 1997 was a record. In commercial terms, we reinforced our strong market position, despite increasingly keen competition. We achieved a major technical victory when our solution for the third generation of mobile telecom systems won favor in both Europe and Japan. The WCDMA standard may now become a world standard. Our production units have also demonstrated their vitality and flexibility. The volumes handled have increased. and lead times and stock levels have been heavily cut back. Last, but not least, we achieved highly satisfactory profits and a really strong cash flow.

The total number of subscribers in the world was more than 200 million at the end of 1997, representing an increase of almost 50 percent. Asia experienced the fastest growth, with Japan and China leading the field. China is now our largest single market in terms of order bookings.

The trend in Europe has also been highly satisfactory, particularly in the case of established operators, who are steadily expanding their GSM networks. North America is the region where growth is slow at the moment, and Ericsson's position weakened when Q-CDMA started to get a real foothold in the market. Developments in Latin America were much better, particularly in Argentina

Our own growth is currently around 25 percent, measured in Swedish kronor, but this is largely due to our substantial sales in dollars at a time when the dollar has been gaining ground. In dollar terms, we have only grown by 10 percent - which is a much lower rate than before.

In order to cope with the rapid expansion of the past few years, responsibilities and tasks have been gradually delegated lower down in the organization and we have devoted considerable effort to improving internal processes. This has many advantages but, at the same time, it has given us an organization with too many decision-making levels, a stronger internal focus but a weaker external orientation, some sluggish tendencies and some unnecessary bureaucracy. Our environment is changing at an increasingly rapid pace today, and we now have every reason to shift our focus to achieve greater sensitivity, quicker reactions, a higher degree of cost efficiency and a stronger emphasis on services and applications.

Our vision of mobile communications as a mass market for wireless services is the successes we have achieved, we are resolutely determined to continue to be the world leader in our industry, with the largest proportion of satisfied customers, the most highly motivated employees and the highest level of

STEN FORNELL **Executive Vice** President and Chief Financial Officer **Mobile Systems** 

profitability.



One hundred years ago, the national symbol of Argentina was the gaucho cowboy, sipping hot yerba mate from a silver flask as he looked out over the vast rolling pampas of wheat, cattle and endless blue sky.

## Argentina olé, olé, olé!

oday, Argentina's icon might well be the cellphone. Since 1991, neary two million people from La Quiaca in the north to Ushuaia in Tierra del Fuego, have signed up for wireless telephone service, marking a revolutionary telecom transformation in a country where only five years ago, people were

lucky just to complete a call across town. Metropolitan Buenos Aires now boasts one of the higest penetration rates in Latin America. If the legendary gaucho were alive today, he'd probably be using a cellphone too, now that competing carriers are suddenly racing to set up wireless networks in the still-underpopulated Argentine interior.

Ericsson Argentina S.A., with an estimated 400 million in 1997 revenues, is a key player in that race, says President Rolando Zubirán.

#### **Explosive growth**

"Wireless growth in Argentina has been explosive, close to 200 percent a year," Zubirán told Contact during an interview in Buenos Aires. "In December 1996, there were 650,000 mobile subscribers. We are estimating the market will end up at 2 million customers. The overall cellular penetration rate has risen from just above 2 percent to nearly 6 per cent."

Asked why cellular is taking off like a

rocket here, Zubirán says "the economy is quite stable and growing very fast, at around 8 per cent, and the telecom industry has a multiplying factor."

is the President

in Argentina.

Another reason for this explosive growth, he points out, is the fact that the caller - not the recipient - now pays for cellular calls.

"Many potential subscribers were skeptical because of the high costs of placing and receiving calls. Now that they don't have to pay to receive calls, they're signing up," he said, adding that vet a third factor is the opening of the market to new PCS operators. "This has motivated the incumbent carriers to launch a promotional campaign

to catch as many subscribers as possible, to get hold of the market." Zubirán joined

Ericsson in his native Mexico and has spent the past year in Argentina, where he oversees 400 Ericsson employees. He says it's been a very exciting time for him. In the past Ericsson

snared three orders totaling USD 193 million to double the capacity of existing analog AMPS and digital D-AMPS wireless

networks in Argentina. The orders are from Miniphone, which covers the Buenos Aires metro area; Telecom Personal S.A for northern Argentina, and Telefonica Comunicaciones Personales (TCP) for southern Argentina.

#### Number three

Together, the three form the Personal unication National Network, which provides 800-MHz services to nearly a milsubscribers, including all towns with at least 500 inhabitants and the main national routes. Roaming deals among the three will soon let subscribers continue to use their phones as they travel throughout Argen-

"In the wireless market, Argentina is now No. 3 in the Americas, after the United

#### **NEWS FROM MOBILE SYSTEMS**



States and Brazil," says Zubirán. "Yet cellular phones are not substitutes for a fixed line. The offer of fixed lines in Argentina

has improved substantially." Yvon Ferrette, former engineering and operations director at (CCPI) Telecom Personal, says his company has invested nearly USD 300 million to set up its Band-A cellular network across a 1.275million-square-km stretch of northern Argentina. The network consists of 780 cell sites, 25 switching centers and four operational and maintenance centers.

"Ericsson is the leader in cellular equipment. When it comes to technology, it is the best in the world, given Ericsson's complete knowledge of design, manufacturing and implementing a cellular network," says Ferrette. "Here in Argentina, they use AXE, the same hardware they use for basic

#### Open market

Ericsson's AMPS cellular technology is also used by TCP, the Band-A concession in southern Argentina. The Ericsson IS-136 network is fully digital, providing high-capacity, enhanced features and expanded services in conjunction with network operators France Telecom, Italy's Stet and Telefonica de España. For Ericsson, the CCPI and TCP contracts are worth a combined USD 200 million.

Zubirán says Ericsson has enjoyed "tremendous growth" in the handset area as well. "Two years ago, we had less than 4 percent market share. This year, we'll end up with 20 percent," he said, estimating

Nokia's current share at 30 percent and Motorola's at 35 percent, down from 50 percent only a few years ago. "I think they misread the market," Zubirán says of Motorola. "They are focusing all their resources on CDMA, and abandoning D-AMPS and IS-136.

Asked about Argentine cellular technologies of the future, Zubirán says that "in terms of standards and regulations, the market is quite open to any of the three technologies: TDMA, CDMA or GSM. He adds that "there are two reasons to go digital. One is capacity; there are more subscribers on the same frequency band. Also, with digital, you have access to more sophisticated services which depend on the maturity of the user."

LARRY LUXNER

#### **News from Mobile Systems**

■ All employees who work with Mobile Systems in Sweden receive a supplement to the Swedish Contact. Some of the articles in this supplement are also valuable information for people working outside Sweden. To ensure that this information is spread internationally we will occasionally include special pages in Contact, marked News From Mobile Systems.

#### **GUNILLA TAMM**

Editor, Business Area Mobile Systems E-mail: gunilla.tamm@era.ericsson.se

### **Latin America heats up**

There were almost 9 million mobile telephone subscribers in Latin America on July 1 last year, and more than 42 percent of them made their calls on equipment supplied by Ericsson.

"Latin America is a large market which is becoming increasingly important for us. The key countries at the moment include Argentina, Brazil, Mexico and Chile," says Åke Persson, Mobile Systems' Vice **President Marketing and Sales.** 

D-AMPS is the digital system which dominates the Latin American market, and



fected by the Asian crisis so far - annual economic growth is 4-6 percent, which is relatively satisfactory. Growth is particularly healthy in Brazil and Chile.

Telephone density in Latin America is

network. There is a long waiting time for a fixed line and, as a result people increasingly prefer to buy a mobile telephone.

Mobile phones have become cheaper, and prepaid services have made it easier for the operators to ensure that they get paid.

#### Special situation

"In Brazil, the situation is rather special since a second frequency band is now being set up - the B-band, for which 10 licenses will be allocated," Åke explains. Many of the major international operators are tendering for these contracts, which are often very expensive. Four licenses have been awarded so far.

At the same time, regional "A-band" operators will also be affected when the state-

rather low, with 10-20 percent of the popu- owned Telebras Group is privatized later GSM supplier in Chile. More than 20 new lation connected to a conventional fixed this year. This is expected to lead to higher licenses will be granted in Latin America growth in the old mobile telecom network, and greater competition. Three operators within Telebras recently contracted Ericsson to extend and digitalize their AMPS networks.

> In other words, Brazil has considerable growth potential but there is currently some uncertainty due to the licensing scenario. Matters will probably become clearer within the next few weeks.

#### GSM on the way

Licenses are going to be allocated for 1900 mHz in several Latin American countries, and this opens up opportunities for introducing GSM. This has already happened in Puerto Rico, and Ericsson was chosen as a

prior to the year 2000. Argentina, Venezuela and Mexico City will be first off the mark.

Latin America is interesting, not only for Ericsson but also for the other major suppliers. Nortel, Lucent and Motorola are all active in the market.

The CDMA systems technology has had some success in Latin America, and has been selected by an increasing number of

"Ericsson has a strong position on the Latin American D-AMPS market. Now that GSM licenses are being granted, the ability to offer equipment for both systems is a strong point in our favor," Åke con-

#### how is it going?



**Peter Olson** Vice President of the new **Fixed Radio Access business** unit at Mobile Systems.

It feels quite right that we changed over from Infocom Systems to Mobile Systems on January 1, because it means that we now have access to radio expertise in our new business area in perfectly natural way. We also need to coordinate our strategies with other systems units at Mobile Systems, for example the development of third generation systems. Cooperation should be particularly fruitful on the product development side.

#### · How many people do you

At the moment we have 320 people in Sweden, in Sundbyberg. By the end of the year, there will be more than 400 of us. In all, the business unit has 800 employees - we also have personnel in the Netherlands, Denmark, Italy, Britain and the US. We have 225 people in Enschede in Holland. Most of our staff outside Sweden are working on develop-

#### · What products are you working with and what are your key mar-

We take care of all products which involve radio access to fixed telecom networks, in contrast with our colleagues in the other systems units who are concerned with radio access to mobile networks. Our most important markets are in Latin America, Eastern Europe and Southeast Asia, although things are a little uncertain there at the moment.

#### · What is the most important task this year?

Establishing operations as a complete business unit in Mobile Systems, with a business-oriented role. Previously, our operations were fragmented, since we originally come from three different companies: Ericsson Telecom, Ericsson Radio Access and Ericsson Business Networks.

#### · Have you worked for Mobile Systems before?

Yes, I was responsible for what was the former Markets and Operations for Eastern Europe, the Middle East and Africa.

**GUNILLA TAMM** 

## **Mobile Systems** begins production in São José dos Campos

Mobile telephony is in its infancy in Brazil. The number of subscribers is expected to increase from today's 3.2 million to 9.7 million by 1999. In order to manage the anticipated demand, the Mobile Systems business area started production in February of radio base stations in the plant at São José dos Campos, while the production of mobile phones at the plant will be five-fold this year.

New Brazilian import laws will mean considerable tax reductions and customs exemptions on, among other things, electronics produced in the country. Ericsson's decision to begin manufacturing radio base stations domestically may reduce equipment costs by 40 percent.

"Local radio base manufacturing is necessary in order to be able to compete in the Brazilian mobile telephone market. Preparations have been under way since last autumn and the first deliveries were made in February," says Janir Aloísio dos Santos, plant manager at São José dos Campos.

#### Large plant

The 500 square-meter plant facilities previously housed manufacturing operations that Ericsson had in a joint venture with General Motors. Ericsson also manufactures mobile telephones and AXE equipment in the same industrial complex. A total of 630 employees work for Ericsson at the plant site, plus an additional hundred or so in the affiliated companies Matec and Informat.

Mobile Systems currently employs about 100 people in logistics and production at São José dos Campos. Models 884 and 882 of the radio base stations for D-AMPS/AMPS are assembled at the new

"We will have our own manufacturing of

terface (CRI). Circuit board manufacturing, own repair center in order to offer better however, has been outsourced to Solectron," Janir Aloísio dos Santos explains.

Production is mainly designated for the Brazilian market. The principal customers world's major telecom suppliers to begin opare the state-owned Telebras operators but, erations in the country. NEC of Japan, with the ongoing privatization of the B- Nortel of Canada and Lucent and Motorola band, the entire telecom industry is expect- of the U.S are among those who have extening enormous growth of mobile telephony sive production plans for radio base stations

"I am very optimistic. We have 22 customers at present, and are in a favorable po- production. sition to obtain many more, especially since we are a strong name in Brazil with a long

> Ericsson began manufacturing mobile phones in Brazil in the spring of 1997, using expertise from the master plant in Lynchburg, Virginia in the U.S. The new plant produced 300 000 mobile phones in 1997, most of which were for the D-AMPS standard. The majority of the terminals were exported to Argentina, but this year a boom is expected in the Brazilian market.

The large investments in mobile telepho-

ny in Brazil have attracted several of the

in Brazil. Several large manufacturers of ter-

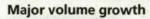
minals are already represented with local

is today the largest supplier of mobile systems in Brazil. Ericsson, however, has only

10 percent of the market for mobile termi-

nals, where Motorola is dominant.

With a 40 percent-market share, Ericsson



customer support."

Plant manager José Ricardo Franchito says, "Last year, the challenge was to begin factory operations; this year, we are supplying our own market. In 1998, we plan to increase production to 1.4 million mobile ter-

Production takes place around the clock. There are 200 employees at present, but by year-end the number should increase to 500. In addition to larger volumes, new products will be put into production.

"The most difficult challenge will be competing with other companies for technically competent personnel who speak English, which is necessary for direct contact with Lynchburg," José Ricardo Franchito concludes.



ger of the new radio base factory in São José dos Campos, about 120 kilometers northeast of São Paulo.

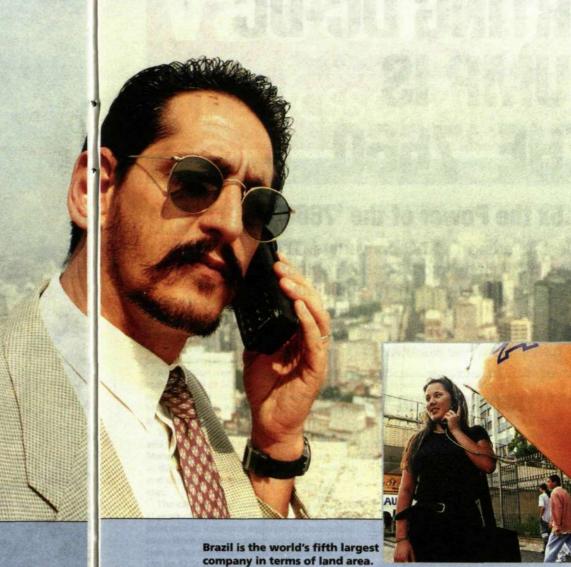
history of manufacturing in the country," says Janir Aloísio dos Santos.

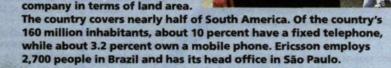
#### Many competitors

He continues, "Good delivery times and good prices are essential if we are to get the radio transceivers (TCB) and the switch in- B-band orders. We are also creating our

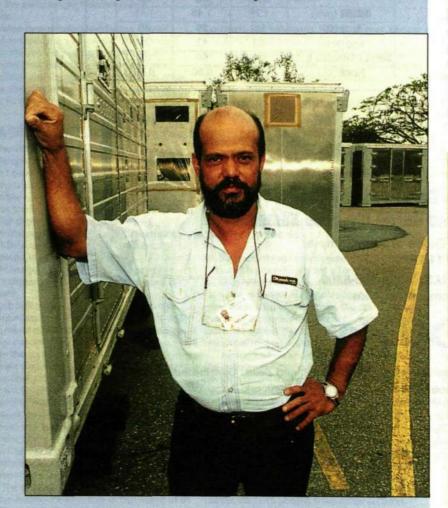
The next step is the privatization of Telebras, the state-owned operator, which is expected to begin during the second half of 1998. Telebras currently has 26 regional mobile telephone operators on the A-band. They will disappear in conjunction with privatization, as the licenses are divided among nine new areas. A couple of the Telebras ophave taken longer than expected, however, erators have already begun digitalization of their AMPS systems, while others will most The consortium containing Telia of likely await the impending privatization. Sweden, which has submitted the highest For Ericsson and other telecom suppliers, bid for the region, has been charged with there is a huge market at stake, which soon-

#### **NEWS FROM MOBILE SYSTEMS**





Five-fold volume increase. José Ricardo Franchito, manager of the ile telephone plant in São José dos Campos, views 1998 as an portant year for Ericsson's establishment in the Brazilian mobile nony market. In São José dos Campos, Ericsson has manufacturing operations for all three business areas. Ericsson's first factory in the city was established as early as 1955.



Complete equipment. Steel containers with complete equipment for radio base stations are sent from the plant in São José dos Campos. The supervisor of mounting of containers, Nelson Lorena, displays equipment destined for the Amazon.



Mobile Systems' RCUR research department played a key role in the WCDMA standardization process. Six people were rewarded for their contributions. Here flanked by RCUR's manager, Erik Örnulf and Mobile Systems' Vice President of Technology Jan Uddenfeldt. From the back row: Magnus Persson, Fredrik Oversjö, Johan Sköld and Mats Nilsson. Front row center: Mikael Gudmundson and Erik

#### The standardization mission

Mobile Systems' research department (RCUR) has played a key role in the WCDMA standardization process - both in the ETSI standardization body in Europe and in coordination with ARIB in Japan.

Six people who have been responsible for much of the work were recently awarded shares in Ericsson.

"As the result of a prodigious effort by all concerned, RCUR has fought on the front lines for the WCDMA technical solution. Today, we are rewarding people who have taken personal initiatives to push this project through to completion," Jan Uddenfeldt, Mobile Systems' technical director, explained at the award ceremony in early February.

The three stars of the show were Erik Dahlman, Johan Sköld and Mikael Gudmunsson, who each received SEK 25,000 in Ericsson shares. Fredrik Ovesjö, who works at ETSI, and Magnus Persson, who set up a simulation environment for the new system at Kista, each received shares worth SEK 10,000. Mats Nilsson, who is responsible for technical strategies for systems of the future also received an award.

The standardization process was primarily a question of technology, but in the final stages it also called for diplomacy and compromises. The outcome was of strategic importance for Ericsson's future business.

Erik Dahlman was working for a consensus between Europe and Japan on the European UMTS standard. In his turn, Johan Sköld applied his considerable technical expertise and his systems overview to benchmarking competing technical concepts at ETSI, while Mikael Gudmundson chaired the "Alpha Group" for broadband CDMA proposals at ETSI from the summer of 1997 onwards.

The Alpha Group did not agree on the winning WCDMA proposals until Sep-

"We managed to reach agreement after an all-night session at Kista with the representatives of 20 companies, in which we, Nokia and the Japanese manufacturers were particularly active," Mikael Gudmundson explained

They then used their technical expertise to provide convincing data about the cost of extending the network and its capacity, thus winning the operators' confidence.

**NILS SUNDSTRÖM** 

#### The long road to WCDMA

■ The research unit at Mobile Systems has been working with CDMA technology for the third-generation mobile system since 1989. It all started with the joint efforts of ten companies and organizations in an EU project called CODIT

CODIT established that the new generation of mobile telephony technology would have 5 MHz of bandwidth (just like today's WCDMA system). Since the work in the project framework was not as fast as Ericsson had hoped, the company decided Microsoft's CEO Bill Gates visited to build its own wideband testbed based Kista in early February and received on the CODIT project's findings.

In the autumn of 1996, the research unit presented a vehicle-mounted exhibition, demonstrating WCDMA as an access dio interface for the future mobile telemethod. The test system, which is unique, has generated extensive international attention and has been used in about 150 demonstrations for important customers.

purpose of developing a standardized ra- ETSI is now history.



a demonstration of the vehiclemounted test system from Jan Färjh. Photo: NILS SLINDSTRÖM

phony system in Europe. Ericsson, Nokia and Siemens participated in FRAMES.

The discussions laid the foundation for today's complete solution in the UMTS Joint research with other companies standard. The fact that Siemens later supcontinued in the FRAMES project, with the ported another radio access method in

## **Major telecom investments**

All of the major players in telecomerators - are represented in Brazil as this gigantic market becomes deregulated and privatized. During an eight-year period, an expected USD 83 billion will be invested in the country's telecommunications, IT and cable TV.

Economic growth, political stability and an extensive privatization process have spurred investments in the Brazilian telecom sector. In 1997, Brazil became Ericsson's fifth largest market and forecasts for 1998 indicate that it could be a breakthrough year for making formal mistakes in the application. er or later will take off with a blast. mobile telephony, even though activity is

slow at the moment. The process of auc- months and has brought the remainder of munications - from suppliers to op- tioning licenses on the AMPS/D-AMPS the licensing to a halt. system's B-band has been under way for one year. International consortia are investing multi-billion dollar amounts for the licens-

The country has been divided into ten regions, and licenses for the first four regions have been finalized. Negotiations for the strategically important state of São Paulo delaying the entire process.

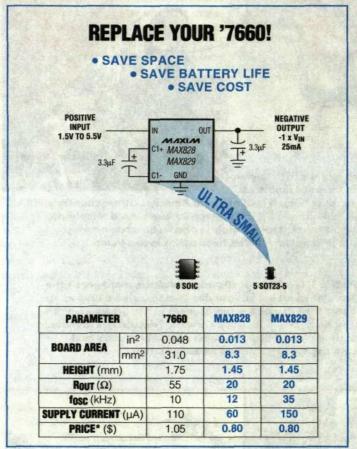
The issue has been in the courts for several

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Use the MAX828 where low power consumption is critical. The higher-frequency MAX829 fits smaller spaces and low-noise audio applications (because its switching frequency is above the audio range).

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## vacancies

#### AT ERICSSON

■ This is a selection of vacancies within the Ericsson corporation. They are published in the electronic News system, which is being updated once a week.

For further information about advertising here, send a memo to LME.LMEJOB.

#### Contact No. 2 1998

#### in sweden

Ericsson Radio Systems AB, Customer Services RMOG, Marketing Sales Support

#### **SECTION MANAGERS**

 In order to meet the increasing requirement on GSM system focus and the Customer Services related to this we are seeking for Section Managers.

As a section manager you are responsible to make a team of 5-8 people succesful in line with the goals set. We are divided into 3 teams Middle East/Asia Pacific/China, Europe/Africa and The Americas.

You will be responsible for managing sales and tender support to Business

Managers/(M)LC/KAMs as well as introduction of the service portfolio, sales/product seminars and to make sure that financial targets are met.

The candidates should preferable have several years of experience from Customer Service sales and /or operator experience. Leadership experience within a sales/marketing organisation is also preferable. Your formal education can be M.Sc and /or B.Sc or similar.

Contact: Robert Melkersson +46/8 7641405 ER-AC.ERAROME Application: Ericsson Radio Systems AB KI/ERA/LY/LHC Lena Axhamre-Hellberg 16480 Stocholm

#### Ericsson Telecom AB

THE INTERNET GROUP –
SETTING THE PACE IN CYBERSPACE
The newly formed Internet Group, within
Public Networks, will establish Ericsson as a
leading vendor of IP-related products and services in the areas where Telecom meets
Datacom

We develop new products and work in new ways where speed is a key word. The Internet Group is divided into a number of Product Companies (that own the products and drive the projects) and Competence Companies (that develop the competence of the staff). We are now looking for a

#### MANAGING DIRECTOR

 for the virtual Product Company that develops IP Telephony products and services (company hasn't been namned yet).

Job description: The Managing Director is responsible for the company's profitability, based on the business plan. The company includes functions for; Product Marketing, Product Management, Systems Management, Product Development Customer Support, Installation etc.

The Managing Director is fully responsible for the company's operations. He/She reports to a board.

The job will initially require a focus on customer intimacy and product leadership. As the market matures the focus will drift towards operational execellence.

Today the company includes roughly 50 people and we foresee a quite dramatic expansion over the next year (not only in Sweden). The people are today provided mainly from the Internet Group's Competence Companies.

Company description: The company's product portfolio today consists of three main products; Phone Doubler TM, Etalk TM and Phone Doubler TM 800. The company's customers can be found among public operators. Both traditional Telcos, ISPs and also Next Generation Telcos. The company's wanted position is to become the number one vendor in the world of IP Telephony solutions.

Qualifications: A strong vision of what you want to do with this job. Management experience. Sound Technical knowledge about Telecom and Datacom. Business minded. Excellent communication skills.

Entrepreneurship. A positive attitude to change is a must.

Contact: Staffan Lindholm Chairman of the board memo ETXT.ETXSTL +46 8 7195176 or Fred Skogli Member of the board memo ETXT.ETXFRED +46 8 7191021 or Ann-Charlotte Sturesdotter-Francis Human resources Manager memo ETXT.ETXASTU +46 8 7197186

Ericsson Radio Access AB, Kista

#### MANAGER SOFTWARE DESIGN

The business segment RBS - Radio Base Stations - develops and manufactures various types of base station products for a number of different cellular mobile telephony systems.

High performance and cost effective design are some of our distinctive features on this rapidly growing market. RBS is a decision making, result focused unit, characterised by flexibility in an international environment.

New radio design technique such as wideband, multi channel and multi standard techniques, using fast DSP's, will very soon change the architecture of the RBS making it more generic and more cost effective.

Our R&D organisation RSAIB/U (app. 100 people) which successfully has developed high quality, cost effective radio base stations since the mid 1980:ies, is now taking a new step into tomorrow's technology.

• We are looking for a new manager responsible for the software design unit, today around 15 people. You will report to the R&D manager and be part of the R&D managing team. You should have long experience of mobile systems, project management, integration or SW/HW radio design. You should be a good leader of the unit, enjoy fast results with high quality and fluent in written and spoken English. You should have a Master Degree or similar education.

Contact: Eric Sandberg, R&D Manager, phone +46 8 757 1730 Anna-Greta Eriksson, Human Resources, phone +46 8 40 45369 Application: Ericsson Radio Access AB RSA/HPS Pia Bolmgren Box 11, SE-164 93 STOCKHOLM e-mail: pia.bolmgren@rsa.ericsson.se

Ericsson Radio Systems AB, Kista

#### REGIONAL TOOLS SUPPORT OFFICE MANAGER

Tools Support is responsible for the support of radio network tools. The applications (PC & UNIX) that the support unit are responsible for are EET, ENPT, IPOS, and MARCO and are used as support systems for the planning of mobile telephone networks.

• We are looking for a Regional Tools Support Office Manager (RTSO) for a long term assignment in Malaysia. As a RTSO Manager you will have the responsibility for budget, salaries and competence development of the staff. The manager is expected to prepare resource forecasts and follow-up on these as well as supply resources for the customer services in the Asia.

The successful candidate should also have the following qualifications: Managerial experience. Commercial interest. Genuine interest in developing and motivating people.

The RTSO manager should have a technical university degree, a good knowledge of the Ericsson product portfolio with a focus on Radio Network services. You should have a good experience of mobile telephony, preferably in the areas of both switching and radio. Frequent customer contacts put requirements on your commercial skills and on your ability to cooperate with people from other cultures. You shall be able to lead and motivate a team of engineers within the area of front line support services. It is preferable that you have international experience working. As a person you need to have a strong result orientation, and good communication ability. You should

also be self-motivated, flexible and speak fluent English.

**Updated February 23** 

Contact: Tille Tsiouras, phone + 46 8 404 7263, ERAC.ERATETS or Kristina Johnsson, Personal, phone + 46 8 757 1449 Ansökan: Kerstin Almblad, LV/HS Ericsson Radio Systems AB S-164 80 Stockholm

Ericsson Radio System AB, Kista

#### DEPARTMENT MANAGER -BUSINESS DEVELOPMENT

Business and Technology Development is the unit with the Business Unit "Cellular Systems - American Standards (RMOA)" that is responsible for the Evolution of D-AMPS into the future, including Third Generation Services, IMT2000 and Open Systems as well as Applications and Architecture based on TCP/IP.

Within this unit we have formed a department, Business Development, with the overall responsibility for the RMOA Product Portfolio and IPR Portfolio. With these responsibilities follow also the responsibility for RMOA R&D budget as well as the co-ordination of overall Standardization Strategies within the Business Unit

 If you find this interesting and believe that you have the qualifications to be the Manager of this department and are ready to take the next step, please do not hesitate to contact us for more information.

Contact: ERA/ATC Håkan Eriksson , ERA.ERA-HEN, +46 8 585 305 50 Vice President, Business and Technology Development Application: Ericsson Radio System AB, AH/H Marianne Molin 164 80 STOCKHOLM

Ericsson Telecom AB, Business Unit Public networks

#### **BUSINESS MANAGER**

For Intercompany Business Co-ordination China I Asia located in Stockholm.

 We are looking for a market and commercially oriented individual that want to be a part of our team to successfully develop and implement Intercompany business relations for China and possibly additional markets in Asia.

Your main responsibilities will be:
Commercial relations with our local companies.
This require a knowledge of the various local business situations, as well as knowledge in the business framework that applies within Ericsson. To in co-operation with the companies improve the efficiency of operations. To support the companies within the Business Unit's organization.

We believe that you have: A personal enthusiastic attitude, team working skills and a desire and drive to exceed expectations. Experience or interest in acquiring additional experience in the areas of sales, marketing, finance and/or logistics. Good communication skills in English, preferably also knowledge in other foreign languages. University degree or equivalent in technical and/or economical areas.

Contact: Intercompany Business Co-ordination Christina Westerlind, +46 8 719 3230 ETX.ETX-CHER Claes Elmén, +46 8 719 8489 ETX.ETXCEX Marketing Far East Jan Hellgren +46 8 719 1870 ETX.ETXHEGE Johan Sandberg, +46 8 719 3244 ETX.ETXJHSA Application: Public Networks; Global Marketing, Human Resources Ylva Löfstrand memo: ETX.ETXLYL

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

#### SENIOR SERVICE ACCOUNT MANAGER - ENTERPRISE SERVICES

Ericsson Business Networks AB is a global supplier of complete, integrated information networks for speech, datacom and multimedia in fixed and mobile applications.

Business Unit Enterprise Networks in Nacka Strand develop, sell and support communication solutions to different customers, from smaller companies at one location to multinational companies with offices connected in a world-wide network. Our solutions contain everything from traditional telephony to advanced data communication.

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

• Within Service Sales, you will have the responsibility for establishment and development of Service Sales in Local Companies. There will also be opportunities for you to work with Direct Sales activities. As a service account manager you will have responsibility for developing Service Sales within your markets, in co-operation with Local Company management. The work entails frequent international contacts and travel.

Qualifications: You have a proven track record of sales and/or marketing. Probably you have an academic degree in business management or equivalent. You possess a high level of communication and customer relation skills. Fluency in written and spoken English is required.

We encourage applications from both men and women.

Contact: Bengt Åkerström +46 8 422 1537 EBC.EBCBEAK or Ulrika Kumlin (Human Resources) +46 8 422 1573, EBC.EBCULRI Application: Ericsson Business Networks AB, EN/H Ulrika Kumlin S-131 89 Nacka Strand, Sweden

Ericsson Telecom AB, Stockholm and Denmark

#### MARKETING MANAGERS – MULTI-SERVICE ACCESS, PUBLIC NETWORKS

The deregulation of the telecommunication market is leading to increased market demands for generic access products, and in order §o meet our goal of doubling sales every year we are looking for a number of new colleagues to join Multi-Service Access (MSA).

MSA is a product line unit within Business Unit Public Network, with responsibility for fixed generic access products i.e. access products that may be connected to any type of switching system including AXE.

We have a very strong product portfolio and are amongst the market leaders within the areas of copper enhancement, V5 access, xDSL multimedia and access management. As a multinational organisation we have marketing & sales people located in Stockholm, Denmark, Austria and New Zealand, in addition we have points-of presence in key markets such as Brazil, Indonesia and USA.

• Currently we have positions open in Business Line Access Nodes, located in Stockholm and Denmark, and within Total Solutions including Access Network Management Systems, located in Stockholm. Within both groups you will be working with all aspects of the marketing & sales process, including identifying new requirements and solutions, business case analysis, portfolio marketing, proactive business launches, tendering and contract negotiation.

In order to fit into MSA you must be a highly flexible person with a positive approach to the ever changing market, and you should appreciate working in a project oriented environment. You should be fluent in English and most probably have a marketing or sales engineering background with a number of years experience from a similar position.

Further information may be found on our web

http://www.kk.etx.ericsson.se/webnet/MSA/

Contact: Holger Prip, Access Nodes, ETX.ETX-HOP, +46 8 719 0336, mobile: +45 4010 9049 lan Bloomfield, Total Solutions & ANMS, ETX.ETXI-ANB, +46 8 719 6658, mobile: +46 70 557 4079 Catarina Larson Åstrand, Human Resouces, ETX.ETXLCAT, +46 8 719 0836

Ericsson Telecom AB, Public Networks Customer Services

#### WWW/CUSTOMER SERVICES, INTRANET EDITOR

 WANTED: An intranet editor with excellent communicative skills and experience from the intranet media.

You appreciate working in a team, are curious and can take the initiative to secure relevant, updated information. All to create an active and attractive web-site. Do you want to know more?

Contact: My Spangenberg, memoid ETXT.ETXMYS, e-mail:my.spangenberg @.ericsson.se Application: Gabriella Gerdin, TB/ETX/PN/CS, marked "Intranet editor".

Ericsson Radio Systems AB Analogue Cellular Systems, Kista

#### **RESOURCES FOR TACS**

The revitalisation of TACS sales in China, our biggest market now totally, conc orders in general, requires a Sales Support Team to be established, of four people. Two of these are to be based in Sweden at ERA/LA/T and the other two on long term contract in China. Of course these based in Sweden have to make business trips to China The contract period for the first two is estimated to appr 9 months.

The restructure of RMOG in the Diana project, implies a change of responsibility, where LAIT will get an extended role, specifically in the sales support process.

#### RESOURCES NEEDED; MARKETING AND SALES (2 PEOPLE)

• Main duties; Establish a market activity plan for the assigned markets. Support the account manager in the execution of the plan and participate in the customer dialogue. Prepare customer Business Cases. Analyse new business opportunities. Feed customer requirements to product management.

Competence Required; Experience from Mobile telephony (preferably TACS) Marketing & Sales General understanding of Mobile Telecom Operatorsí business. General Ericsson knowledge Overall Telecom Market knowledge. Fluent in written and spoken English.

Personal qualifications; Good social competence, Action oriented.

#### **PRODUCT MANAGEMENT (2 PERSONS)**

• Main Duties; Establish the assignment specifications with the main requirements for TACS further development. Handle demanded changes in requirements for development projects in progress. Prepare the basis for development decisions. Evaluate and establish product development programs. Pricing and prepare product info. Launch of new products.

Competence Required; Experience from Mobile telephone (preferably TACS) development or Product management. Else the same as for MARKETING AND SALES positions (see above)

Personal qualifications; Good social competence, action oriented and analytic. In general can be added that we prioritate internal (ERA) candidates

Contact: BO LANGEMARK +46 8 585 30649 MEMOID; ERAC.ERABALK Application: ERICS-SON RADIO SYSTEMS AB KI/ERA/LDHS BRITT GUSTAFSSON, 164 80 STOCKHOLM FAX + 46 8 404 5311

Ericsson Radio Systems AB, Kista

#### PRODUCT MANAGER – SWITCHING SYSTEM

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

The product unit CMS8800 Product Management is responsible for product management and sales support for applications. switching and data products as well as overall responsible for the CMS8800 product line. Within this product unit, the section responsible for Switching Systems is now looking for several persons who are willing to take on new challenges with us as product managers within the following areas: APZ, Adjunct Processor, IO, GSS, ESS, APT Devices, Echo Cancellers, Transcoder, DMH/Charging, STS, AMC, Application Modularity, EasyPack - Switch Configurations, Dimensioning, Processor load. As a strategic product manager your responsibility is to make sure that CMS8800 has a competitive and profitable switching product port-

● You will define new solutions and products within Switching System, work out business cases to influence the development of any needed new products, and enhancements to existing products. You will also make customer presentations and support product introduction of new solutions and products. The job involves some traveling within Asia Pacific, North and South America and Eastern Europe.

The ideal candidate has a M.Sc. or B.Sc. in CS

or EE and experience with switching technology, especially in the field of cellular communication. He or she should be familiar with AXE products. Fluency in English is required, Spanish or Portuguese is a plus. The person we are looking for is self-motivated, ambitious, out-going and mature.

Contact: Tomas Dahlberg, phone +46 8 757 25 46 email: tomas.dahlberg@eraericsson.se Application: Ericsson Radio Systems AB, AH Anette Spångberg, 164 80 Stockholm

#### international

**Ericsson Research Canada** 

Come to Montreal, we don't have the weather but we have the opportunities

#### MANAGER, APPLICATION SYSTEM VERIFICATION (ASV)

• We are looking for a motivated, experienced manager to head the ASV Section. Presently the team is composed of 15 engineers. This is an ideal opportunity for someone who wants to get exposure to the latest, leading edge development techniques that are being pioneered by Ericsson with the AXE Joint Development Initiative (JDI/AXE).

Good communication skills are vital, and a command of the English language is mandatory.

Reporting to the SNP Integration & Verification Manager, this position will have the following primary responsibilities:
Management of all ASV activities including subcontract management for markets in South America and Oceania; Proactively participate in the I & V process team and take responsibility for process improvement in ASV, including any reengineering . of the existing process to cover the introduction of JDI/AXE; Development of methods and tools; Competence development.

The requirements for this job are: - A minimum of 6 years AXE10 development and/or verification experience; - Comprehensive knowledge of ASV or ST; - Good understanding of new verification certification techniques (i.e. statistical usage testing etc-) - Previous management experience is an asset.

Montreal is a fun place to work and the ideal candidate will be able to apply himself to this role as well as have an enjoyable stay.

Contact: Marc Rackett (LMCMCRT) extention 5593

#### **DESIGNERS/TESTERS**

 We are looking for designers/testers with 3-5 years experience on the AXE, preferably with cellular knowledge/experience. Experience with Rational Rose/Clearcase would be an additional asset.

The perfect candidate is someone who enjoys and is highly motivated to code complex blocks/functionalities, and/or to ensure best test coverage. We are expecting someone who has initiative, is dynamic, creative and at the same time adheres to process, is organised and can plan well.

LMC LDC is moving into the next generation of software development using the Rationale toolset. Our Joint Development Initiative (JDI) in cooperation with Rational will be piloting Ericsson's next s/w development environment, so of you're interested, please send in your resume.

Contact: Janice Wong (LMCJAWO) extention 7951

Ericsson Caribbean, Puerto Rico

#### CELLULAR RF-NETWORK DESIGN AND OPTIMIZATION MANAGER

• The candidate will be responsible for all cellplanning and network optimization activities in the Ericsson Caribbean market area. Customer support in RF and optimization issues. The establishing of network design competence center. Marketing and sales support and budget & forecasting for services provided

The requirements are: Technical University Degree. At least 2-3 years experience in Cellplanning and Optimization. Good knowledge of the Ericsson product portfolio focusing on network design. In-depth experience of mobile telephony in the areas of switching and radio. Commercial skills and ability to cooperate with people from other cultures Good teamleading and communication skills. Fluent in English and Spanish Good knowledge of: EET, Ericsson Engineering Tool, TEMS, Ericsson Test Mobile System, MS-office package, especially Excel.

Contact: PEDER ASPLUND (EUS.ERAPAD) -Phone: 1+787-758-1770 Ansökan: Carmen Nadal, Human Resources Administrator Ericsson Caribbean, Suite 1910, 654 Muñoz Rivera Ave. San Juan, P.R. 00918-4141 Fax: 1+787-758-1776 -Memoid: EUS.ERACLNR\ E-Mail: eus.eracInr@memousa.ericsson.se

Ericsson Caribbean, Puerto Rico

#### SERVICE MANAGER MOBILE PHONE AND TERMINALS

• Main responsabilities will be: Provides product engineering support services to both internal and external customers. Coordinates all activities related to the Ericsson Service Policy within the territory. Evaluates, trains and authorizes new Service Centers. Accurately and timely disseminates product information bulletins. Gives technical presentations and training to Service Centers Personnel. Coordinates deployment of new products.

Requirements: Bachelor or Master Degree in Electrical Engineering. At least 3 years of telecom experience with working knowledge of cellular systems technology. Willingness to travel. Excellent presentation, written, interpersonal and organizational skills. Fluent in English and Spanish.

Contact: Araceli Gavilanes, (EUS.EUSARAC)
Application: Carmen Nadal, Human Resources
Administrator Ericsson Caribbean, Suite 1910,
654 Muñoz Rivera Ave. San Juan, P.R. 009184141 Fax: 1+787-758-1776 Memoid: EUS.ERACLNR E-mail: eus.eraclnr@memousa.ericsson.se

**Ericsson Data Services Netherlands** 

#### **EXPERIENCED ACCOUNT MANAGERS**

 Within the Business Unit "Distributed Computing (DC)" we are looking for an Account Manager to sell IT-services to our (Ericsson) customers in the Benelux.

Within the Business Unit ""Business Support (BS)" we are looking for an Account Manager for the complete product- and service portfolio of this unit to the (Ericsson) customers in Europe. For the time being SAP R/3, I-net and Call Centers are emphasized.

Objective: The Account Manager is responsible for relations management and sales of the Ericsson Data solutions and services to the local Ericsson offices, but also their customers.

Responsibilties: Ambassador of DSN and the Ericsson Data Group. Building, maintaining and co-ordinating of customer relations. Creating and co-ordinating new opportunities. Generating turnover within the account area of his/hers responsibility. Monitoring contracts and payments. Drawing up account plans.

Job requirements/competence requirements: Is aware of relevant market developments on the ICT-market. Commercial drive. Is able to communicate as business partner on strategical level. Has good social skills. A few years experience as Account Manager in busines-to-business. Academical thinking and working level.

Contact: Bertil Rosvall, Business Unit Manager DC, tel. 246018 or Sylvie van Roozendaal, Business Unit Manager BS, tel. 246041. Application: José Katier, Human Resource Manager.

Ericsson Radio Systems AB - Ericsson (China) Ltd.

#### PROJECT MANAGER – REMOTE LOADING CHINA

• In our strive to help our Chinese operators in becoming operators of world class in a few years, we are introducing On-line support/Remote loading. This is necessary for us in order to support the enormous growth in the installed base and to be able to handle the Mega-networks in China. This project is part of one of RMOGs most important projects this year. We are now looking for a project manager to facilitate this.

The project will be carried out very close to the customer locally in CHINA, involving various parts of the Ericsson China organization.

You are a person with project management and co-ordination skills, self-driven and result oriented. As you will be part of an international environment and project team, you must have an open personality, good communication and co-operation skills. You should be able to motivate, inspire and guide the project and you would not hesitate to take active part wherever needed.

Knowledge about OSS and/or AXE will come in handy. Fluency in English is a must.

The position as a project manager will be a SHORT TERM ASSIGNMENT, approx 9 months duration, in China. It should be started soonest possible.

Contact: Ulf Ewaldsson, phone +46 8 404 9527, memoid: ERAC.ERAULEW (LD/MC) or

Yvonne Persson, phone +46 8 404 6774,memoid: ERAC.ERAYPEN (LD/M) Application: Ericsson Radio Systems AB KI/ERA/LDH Britt Gustafsson, 164 80 Stockholm, fax: +46 8 404 5311

L.M. Ericsson A/S, Copenhagen, Denmark

#### MANAGER FOR GLOBAL BUSINESS MANAGEMENT

Ericsson in Denmark has been given the responsibility for "Product Unit Network Services and Control" which is world-wide responsible for a number of network and service solutions within the tele and data communication. Among other things it is operating with solutions for so-called intelligent net and solutions which enable the steadily increasing liberalisation of the net of the teleoperators.

• For the management of our Business Management department we look for an experienced manager, who share this vision of our work: We want to be the leading supplier of network services based on our own AXE system and on open platforms. Moreover, we wish to be in the front line and show the way in the marketing and development work.

The manager of Business Management is part of the management team of the Product Unit and responsible for marketing with special focus on profit in the individual customer relations. You have to build up a completely new department and lead six Business Managers as well as secure their continuous development. Moreover, you will be responsible for the budget of the department.

Your qualifications are: Experienced manager, great knowledge of marketing, sales and consultancy from the IT or telecom business, out-going, analytic, ready to change, communicating fluently in English in writing and verbally, ambitious, able to work under pressure and able to follow up on lots of different tasks and at the same time catch new ideas in passing. You should be a business-oriented engineer or a technically oriented B.Com.

Contact: General Manager Claus Brask Thomsen, +45 33 88 42 75. Application marked "9817 latest 980227: L.M. Ericsson A/S Personnel Department 8 Sluseholmen DK-1790 Copenhagen V

L.M. Ericsson A/S, Copenhagen, Denmark

#### CUSTOMER-ORIENTED BUSINESS MANAGERS

• We are looking for a number of Business Managers, who are going to have the total responsibility for a number of markets. In close co-operation with Ericsson companies worldwide. It will be your job to market our products, elaborate market plans and participate in the elaboration of customer tenders. Moreover, you will be responsible for supervision of the customers' and competitors' movements in the market. Finally, it is expected that you will be working as a sparring partner for the management in connection with the business development and market strategies.

It is important to us, that you will soon be able to create results. For this reason you need to have following human competencies: ability to make use of others' knowledge, even though you often work on your own, ability to do a lot of things at the same time without loosing yourself in details, be out-going, inspire confidence, be result oriented, goal oriented, effective and business oriented, be capable of working across demarcations.

We anticipate that you are a technically oriented economist or a business oriented engineer. You have 3 - 5 years of experience from a similar position, preferably in the IT or telecomline.

Contact: Marianne Horstmann on +45 33 88 36 91. Application marked "9814": L.M. Ericsson A/S, Sluseholmen 8, 1790 København V, Denmark

Ericsson Business Networks, U.K.

#### APPRENTICE IMPLEMENTATION ENGINEERS

● The Implementation Engineers are responsible for ensuring implementation and commissioning of solutions meet customers needs and their total satisfaction.

Applying the technology offered by the entire portfolio of Consono, MD110, Call Centre Applications, DNA, CTI, Data and Mobility. The Systems Engineers will work closely with all other areas of Business Networks and become the key link between Ericsson and the customers representatives.

Requirements: Suitable candidates must have a strong and proven track record of commissioning MD110, including voice and data integration and have a sound and demonstrable knowledge of Windows NT and LAN/Networking environment and protocols.

It is important that you are proactive and take initiative without supervision, based on site/at home the individual must be prepared to work where and when required.

We have the best products, we need the best people.

**Application:** MaryAnne Morgan-Degray, HR Advisor ETL/Z etl.etlmemn@memo.ericsson.se

L.M. Ericsson A/S, Copenhagen, Denmark

#### BUSINESS-ORIENTED PRODUCT MANAGERS

• We are looking for a number of Product Managers, who independently are going to have the global responsibility for new as well as existing products and solutions. You are going to have the responsibility for elaborating product strategies, product plans and agreements for your own product areas. Besides, you will be responsible for data sheets, have the contact to sub-suppliers and contracts into which "Product Unit Network Services and Control" enters. Finally, the Product Manager has currently close contact to the markets, so that the technical competence is constantly upto-date.

Besides being a good teamplayer with personal format and a natural power it is important that you have the human qualities: innovative, able to see the future products and cut through as the specialist you are, see a challenge in pursuing technical knowledge in your product areas, objective and careful in your work, capable of working on your own and under pressure. Technically we imagine that you are a business-oriented engineer. You have 3 - 5 years of experience from a similar position, preferably in the IT or telecom business.

Contact: Marianne Horstmann on +45 33 88 36 91. Application marked "9815": L.M. Ericsson A/S, Sluseholmen 8, 1790 København V, Denmark

L.M. Ericsson A/S, Copenhagen, Denmark

#### QUALITY-CONSCIOUS SYSTEM DEVELOPERS

 As one of our many new system developers it will be your job to specify, design and test complex systems. We work process oriented with software development and follow the guidelines for CMM and TQM.

You have 250 competent developers and testers in our design centres in Denmark, Sweden, Croatia and Mexico as your colleagues. We work closely together in teams in an informal tone, but have high expectations to each other. Initiative, responsibility and persistent effort are code words in our working day.

As it is important to us that you have a professional attitude towards the job and that you will fit into Ericsson you have to have the following human qualities: quality-conscious and result oriented, innovative and creative, able to keep your "fighter spirit", even though things aren't always going your way, able to work on your own and in teams, appreciate and fit into an open environment, where we listen to each other. Technically we imagine that you are engineer, computer scientist or similar. You have experience from a similar position with tele and data communication, routing in the data net, protocols (TCP/IP) and high-level programming language and SDL/UML.

Contact: Mai Kirknel on +45 33 88 35 21 or Kim Hansen on +45 33 88 36 41. Application marked "9815": L.M. Ericsson A/S, Sluseholmen 8, 1790 København V, Denmark

Ericsson Telecommunications Romania S.R.L - ETR

#### 1 OSS SUPPORT ENGINEER

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

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

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

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

Contact: Walid Alsheikh, phone +40 1 336 5705, memoid ETR.ETRWAAL or Ulrika Martinius, RMOG Resource Agency, phone +46-8-404 2565, memoid: ERAC.ERAMSSS Application: Walid Alsheikh, memoid or fax +40 1 336 5708

Ericsson Taiwan Ltd

#### **OSP ENGINEER**

● JOB PURPOSE: We are looking for a Product Engineer to promote Operations Support Products and Solutions to the Customer, and to develop local product knowledge for both Customer engineers and ERT staff. Primary product is Ericsson's OSS (Operations Support System). Some support work with BGw (Billing Gateway) is also required.

RESPONSIBILITY: Determine and analyse business opportunities for Ericsson and customers. Manage and maintain CME 20 OSS Product information. Participate in regular meetings with customers covering new products, services, customer concerns and functional requirements. Prepare MRD's (Market Requirement Descriptions). Assist with commercial offer preparation. Make presentations to local Ericsson staff and customers on CME 20 OSS and BGw products. Provide RMOG with regular updated information on the local market conditions. Support Sales & Marketing Department on technical issues. Create and maintain a market specific feature list for OSP. Advise customers on the impacts of new product packages for their third party systems.

QUALIFICATIONS: University degree with major in EE, computer science, or equivalent. At least 2 years design or sales/marketing experience in telecommunications or electronics field, and experience in radio communications field. Specific OSS experience. Good technical knowledge in telecommunications. Knowledge of CME 20 (although this can be developed). PC literacy; particularly Microsoft Word, PowerPoint, and Excel. UNIX proficiency. Negotiating, commercial skills, and decision making ability. Able to communicate concisely in writing and verbally in English. Mandarin and Taiwanese are preferable.

Contact: ERT.ERTGELU Genevieve Lu, Human Resources or ERT.ERTJED Jim Dyer, Dept. Manager - Engr'g. & Prod. Mgm't.

**Ericsson Radio Systems AB, Sundbyberg** 

#### INTERNATIONELL KONTRAKTSJURIST/ RÅDGIVARE

 Cellular Systems GSM, NMT, TACS, Business Management Direct Markets, New Accounts -ERA/LP/A, erbjuder en mycket intressant befattning f\u00f6r en kvalificerad jurist.

Vi marknadsför och säljer mobiltelefonsystem direkt till nya kunder i länder utan kvalificerad lokal kompetens, huvudsakligen i Afrika, Mellan Östern, Central- och Östeuropa, dvs. Vi säljer direkt till operatörerna från Sverige.

Detta betyder att kontraktsjuristen är direkt inblandad i förhandlingar med våra kunder avseende: Leveranskontrakt. Supportkontrakt. Koordinering av offert- och avtalsvillkor i våra offerter. Statement of Compliance för begärda avtalsvillkor. Juriststöd under förhandlingar. Andra juridiska frågor.

Den rätte sökanden har jur. kand eller motsvarande och minst 3 års arbetslivserfarenhet, helst inom affärsjuridik och internationella affärer i någon högteknologi bransch. Flytande engelska är ett absolut måste, medan något annat språk, t ex. franska är en fördel. Erfarenhet från kontraktsförhandlingar värdesätts mycket. Du kommer att arbeta i en extremt stimulerande och dynamisk miljö, och inom ett område av affärsjuridik och strategi som för närvarande växer och utvecklas, vilket för rätt person kan innebära en stor utmaning!

Kontakta: Magnus Forslund, Contract Manager Memo: ERAC.ERAMAFD, phone +46 8 404 73 26 Per Wistrand, Regional Sales Operations Manager, Memo ERAC.ERAPWIS, phone +46 8 404 87 74 Göte Hedblom, Human Resources, Memo: ERAC.ERAGGHE, phone +46 8 585 314 79 Ansökan: Ericsson Radio Systems AB SG/ERA/LP/HA Siw-Britt Johansson 164 80 Stockholm

Ericsson Guildford UK Cellular Systems Sector, Business Development Group

#### SENIOR PRODUCT MANAGERS

The sector based in Guildford work with the number 1 UK cellular operator, Vodafone Ltd. Vodafone currently operate an extensive ETACs, and GSM network with 900 Mhz and 1800Mhz spectrum. In the UK market place Vodafone compete with three other operators and in 1998 auctions for UMTS bandwidth are planned, introducing further competition and opportunities. Ericsson is the dominant cellular infrastructure supplier towards this customer, with emphasis on improving market share through the provision of total solutions and best in service performance.

 We are looking for suitable proactive individuals with 3-5 years of Product Management

experience in CME 20 BSS or SS or related disciplines.

You will be responsible for developing:
Customer relationships throughout Vodafone.
New business opportunities inside and outside
of your current discipline. Handling existing
business requirements. Ensuring the account
team reach agreed targets and goals.

You must have a strong personality, flair and initiative, customer focus, and be a team player. You must also be able to cope under pressure with one of Ericsson's most technically driven customers.

Application: Ian Hoddle BSS Role + 44 1483 30 5701 ETL.ETLIHE or Adrian Saunders SS Role + 44 1483 30 5871 ETL.ETLANSA

**Ericsson Radio Systems AB** 

Our success is based on our customers' success. Together, we are contributing to development in countries with a strong growth. Ericsson Radio Systems AB is looking for

#### CUSTOMER PROJECT MANAGER TO ISRAEL

FOR SUPPLY OF A GSM MOBILE TELEPHONE SYSTEM.

• Are you a customer project manager? Do you have international experience? Are you business-minded and flexible? Are you interested in technology? Can you get people to build a GSM system? Have you done this before?

You should possess qualifications that make it easy for you to motivate, inspire and guide the project and to create synergism in the team. You are experienced and recognised as trustful leader by the team and by the customer. You would not hesitate to take active part wherever needed.

Your task is to define and run the implementation project. You are responsible for organising, planning, ordering/initiating, follow-up and finishing all activities to fulfil the contract and budget and in accordance with the customers and our own expectations.

The position is in Israel on a 1-2 year contract. The first phase consist of switches and 500 base station sites incl. civil works in a very aggressive roll-out.

At Ericsson Intranet you will find methods, tools and competence profiles for customer project manager; http://www-rmog.ericsson.se/process/projman/

Contact: Sven Jungmar +46-8-7573281 or Henrik Moberg +46-8-7572919. Application marked "Project Israel" latest 980315: Ericsson Radio Systems AB, SG/ERA/LP/HA Siw-Britt Johansson, SE-164 80 STOCKHOLM, e-mail: siwbritt.johansson@era.ericsson.se

Compania Anonima Ericsson, Caracas, Venezuela

#### **2 FIELD SUPPORT ENGINEERS**

• The customer support in Venezuela is looking forward to a challengeing and interesting future, with new service contracts and the opening of the telecom market in year 2000. To meet up with the comming assignments we have to reinforce our support organization team, in the fixed network area, with 2 new qualified members. This is an opportunity for a 2 year contract to enjoy, apart from an interesting jobb, an excelent climate and the Caribbean "around the corner".

Main tasks: field support activities like TRanalysis, trouble shooting on site, ASM, ASR. Currently we have 4 different AS's that will merge to 2, Transgate 3 and Local 6.

We are looking for System engineers, B.Sc. or M.Sc, with more than 4 years of AXE experience, trouble shooting skills, MHS knowledge and that have the ability to pass on their know how to the local staff. Knowledge in areas OPS, IN, ISUP is wellcome. Spanish is an advantage but not a must.

Contact: CEV/OS/XC Staffan Skold, phone +58-2-2730131, memoid CEV.CEVSTSK or CEV/OSC Franco Cretone, phone +58-2-2730270, memoid CEV.CEVFCE. Application: CEV/OS/XC Staffan Skold, memoid or fax +58-2-2385162

**Ericsson Data Services Netherlands** 

#### SENIOR ICT-PROJECT MANAGERS

 We want to further strengthen our Business Unit "System Integration Project Management". Therefore we are looking for several senior ICT-project managers.

The project manager has to manage complex ICT (Information Communication Technology) projects in close cooperation with Ericsson Telecommunication (ETM). Our customers are mainly the current and new Telecom Operators in the Netherlands.

As a senior ICT-project manager you'll get all opportunities to make your projects a success. Tasks include project and resource planning as well as budgeting and subcontracting. Your success depends for a great deal on your capabilities to inspire and motivate your colleagues and your ambition to exceed expectations.

To manage the complex and extensive projects you need a good experience with project management, 5 to 10 years. Moreover you need to have some experience within the ICT-environment. A Bachelor or University is a must.

Contact: Arie van der Hoek, Business Unit Manager "SI project management", +31 161 246218, memoid DSN.DSNARHO or José Katier, Human Resource Manager, +31 1611 246300m memoid DSN.DSNJOKA. Application: Ericsson Data Netherlands B.V. P.O. Box 209 5120 AE Rijen The Netherlands

#### Ericsson Eurolab Deutchland, Aachen, Germany

The EED/X/D is the department within Circuit Switching Systems (CCS) system house for system level activities. CSS is responsible for the Switching Systems node in CME20 and CMS40 mobile networks. Here at EED we have the overall Circuit Switching Systems responsibility for CME20 & CMS40. Due to further expansion we are looking for people to work in the system management as

#### SYSTEM MANAGEMENT ENGINEERS, "CIRCUIT SWITCHING SYSTEMS"

 We are working with the following mobile applications: GSM 900, 1800 & 1900 systems.
 Global and regional satellite network applications. Studies about GSM MSC evolution.

System Management focuses on a range of system level tasks which are necessary to ensure progressive development of Ericsson's CME20 & CMS40 switching nodes. This work involves a broad range of activities including RS writing, system investigations, standardization and system level tasks related to system dimensioning and platform management.

Please refer to the department homepage in the www for further information about the department's activities

"http://www.eed.ericsson.se/services/eed-x-d/Welcome.html"

Suitable candidates possess a relevant engineering degree (e.g. telecommunications, electrical, or software engineering) with a minimum of 3-5 years of AXE development or testing experience, and preferably at least 2-3 years of experience in system-level technical development or testing. Experience with GSM or other mobile telephony development is advantageous, but not absolutely necessary. Good analytical skills are essential.

Good cooperation, verbal and written communication skills are important human skills. Experience in working in close customer relations would be advantageous. If you have questions and/or are interested, please refer to your colleagues:

Contact: Pieter van Rijnsoever, tel: +49-2407-575-172, Memo: EED.EEDPVR, Andreas Thuelig, tel: +49-2407-575-246, Memo: EED.EEDANT, Doerte Kaulard, tel: +49-2407-575-163, Memo: EED.EEDDKA (Human Resources).

Ericsson Telecommunications Sdn Bhd, Kuala Lumpur, Malaysia

#### MANAGER FOR NETWORK DESIGN, CUSTOMER DIV. MUTIARA

Mutiara is one of Ericssons' largest GSM 1800 customers. Since the launch of their network in 1995, Mutiara has been expanding rapidly on a network supplied solely by Ericsson. The network now has 200,000 subscribers and is facing the next stage of network development.

Mutiara also has operations in International, transport, fixed and data networks, so the job is certainly not limited to CME 20.

 Requirements for the job; Good knowledge of GSM products, an ability to work well with people of varied cultures and a willingness to work with all areas that a young, dynamic network operator needs to deal with (from customer services to transmission planning) are all prerequisites.

Strong customer focus is a necessity. Your role will be to head a department which has been built up over 3 years, and to develop it further to handle the challenges that will exist in a competitive market.

Contact: Jan Signell, General Manager, Customer division (Mutiara Telecom), Ericsson Telecommunications Sdn Bhd. Memo ECM.ECMJWS (cc to ECM.ECMSIVS), TEL + 60-16-2200485

## contact

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

At the end of February, the Grammy Awards were presented to a number of American entertainers in the music industry. The awards ceremony was broadcast to 1.5 billion people in 190 countries. In addition, the winners were reported in real-time over the Internet with both sound and pictures, otherwise known as Webcasting. Ericsson in the U.S. was responsible for ensuring that this technology functioned.



Bob Dylan won no less than three Grammies at this year's awards ceremony: Album of the Year, Best Contemporary
Folk Album and Best Male Rock Vocal Performance.

Photo: FLT-PICA

## Ericsson at the Grammies

xcept from that Ericsson was responsible for the technology at the Grammy Awards, Ericsson also participated in the preparations for the gala by providing mobile telephones and cordless phones.

It was anticipated that the Web site

would receive three million hits.

Internet users worldwide could get a behind-the-scenes look at Radio City Music Hall, where the gala was taking place. All of the nominees were on the Web site, complete with background information on both the artist and the Grammy Awards Ceremony.

Karl Dahlin at Ericsson in the U.S. viewed the Grammies as an excellent opportunity to show what Ericsson can offer in terms of Internet technology. Ericsson was a turnkey supplier of all of the ceremony's Internet services. Ericsson's role in the Grammy Awards is a prime example of the convergence between the telecom, datacom and media in-

There are a total of 92 different prize categories. Sean "Puff Daddy" Combs won the category for Best Rap Performance by a Duo or Group for "I'll Be Missing You." Puff Daddy also took home the award for Best Rap Album.

Album of the Year was awarded to old-timer Bob Dylan for "Time Out of Mind." The same album also won Best Contemporary Folk Album and Best Male Rock Vocal Performance.

Visit the Grammy Award Web site to find out who the winners were for all 92 categories. It also contains information about Ericsson's contribution to the ceremony and other interesting tidbits.

PATRIK LINDÉN

■ The Grammy Web site can be found at: www.grammy.com

#### end line

## **Ericsson** everywhere

ricsson is hard to miss these days. The company's logotype with the three "sausages" has probably never received as much exposure as it has lately. As this issue of Contact goes to print, the "Make yourself heard" campaign is in full swing. Financed by the mobile telephone gang's generous advertising budget, this campaign is - to the best of my knowledge - the largest campaign ever to make Ericsson's name better known throughout the world. Those of us who do not belong to the group of aces who develop, manufacture and sell our mobile phones have every reason to say a word of thanks to our colleagues at Ericsson Mobile Communications. The purpose of the "Make yourself heard" campaign is not specifically to sell telephones, but rather to act as an indirect sales tool for everyone behind the scenes.

After only eight years with the company, I have nonetheless had the opportunity to closely follow developments within Ericsson's marketing communications. This is a genuine case of "before" and "after." That is, before the success of mobile telephony and after. Or before the consumer marketing focus and after. The world in which Ericsson used to market its products has changed considerably, to one in which we are now fighting to win consumer purchasing decisions. Over the past five years, Ericsson has gone from dealing with a hundred customers (namely, state-owned monopolies) to several hundred million customers. It's no wonder that the company name is much more visible today - in James Bond films, on billboards, in newspapers, on TV, hot-air balloons and freestyle skiers' jackets, at the Grammy Awards and whatever else marketing people

Not only is more money needed for marketing in this new market than in the old one. New decision-makers have also entered the scene, creating a new and much more market-oriented culture than was prevalent in the Ericsson I joined in 1990. The change feels very refreshing.

Of course, there are negative aspects of this newfound fame, as well as the massive advertising. The other week, I tried to take a break from work by heading to the Swedish wilderness up north during my children's school vacation. But not even there could I avoid seeing the attractive billboards with smiling faces and the Ericsson logotype. Driving through Sweden these days is like a slalom race between billboards. Every five minutes, I heard my children exclaim from the back seat, "Look dad! There are the three sausages again!"

I headed for the mountains on my crosscountry skis to get some peace of mind. But alas, every three kilometers I was reminded of civilization. It's hard to turn off your mo-

bile phone once you've become accustomed to it...



LARS-GÖRAN HEDIN