

# contact

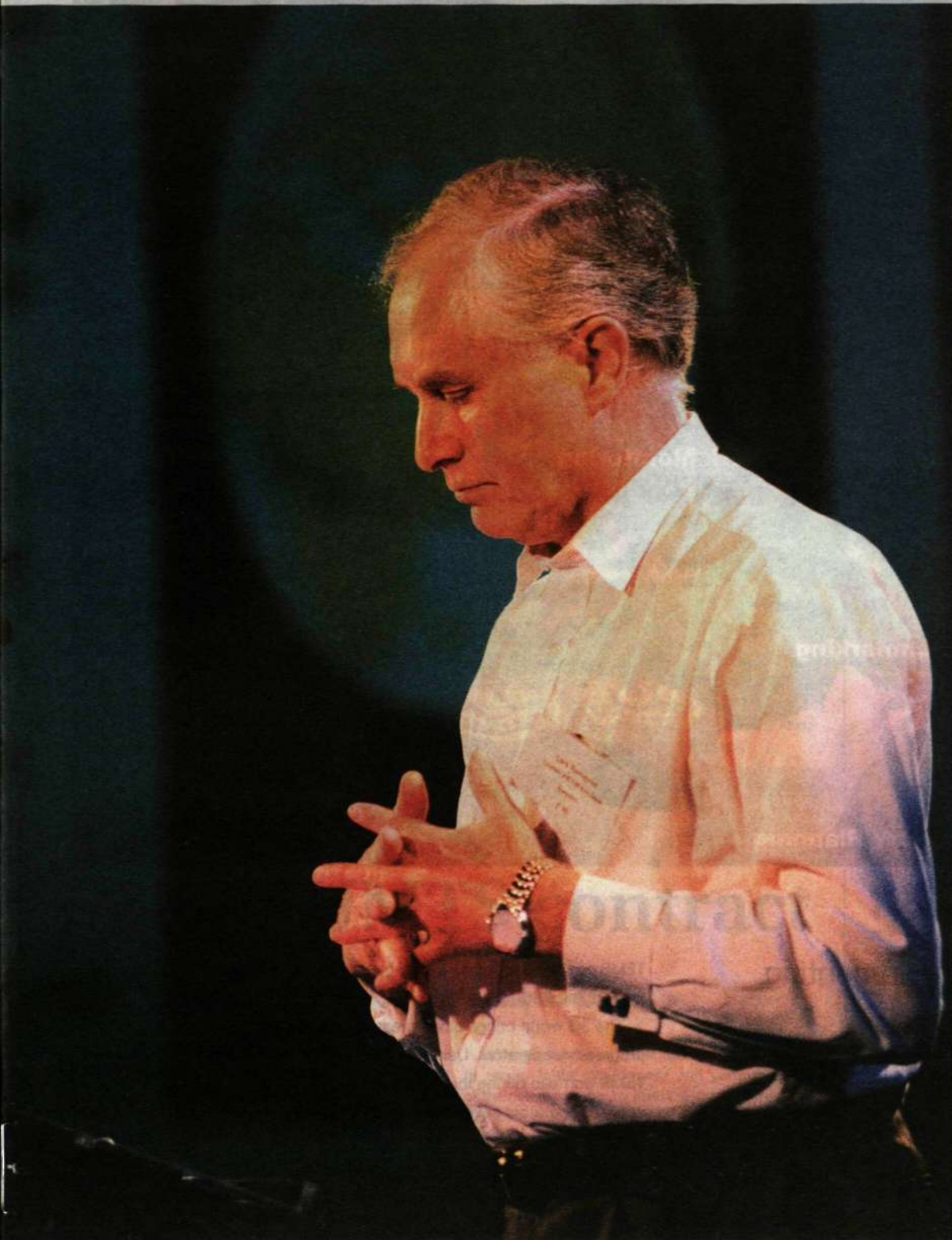


PHOTO: LARS ÅSTRÖM

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PHOTO: ALEXANDER FARNSWORTH

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2002

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# New agreement promotes modem

Sony Ericsson Mobile Communications and Mobile Partners International Ltd (MPI) have signed an agreement to promote PC card business on a Pan-European basis.

This initiative is set to enhance mobile experience for users always on the go, combining Sony Ericsson's cutting-edge products such as the GPRS PC card modem GC75 and MPI's long-standing leadership in the mobile computing solution business.

Sony Ericsson announced on March 5 that it will introduce the GC75 GPRS PC card modem to the European and US markets during the second quarter this year. As a triple band GSM (900/1800/1900) product, the GC75 can be used in over 160 countries.

Using either GPRS, HSCSD or standard circuit switch data, it enables business and private users to earn a cost effective solution to be always on-line, when out of office. In addition, the GC75 is a non-extended card that fits perfectly into a PC card slot, and can remain in the laptop PC when not in use.

## More efficient launch

"The collaboration with MPI enables Sony Ericsson to respond to market demand timely and launch the products more efficiently and quickly. This agreement caters for various mobile computing integration needs that are emerging, as GPRS services spreads throughout Europe," says Gunilla Nordström, corporate vice president of Sony Ericsson.



Gunilla Nordström

Under the terms of the agreement, Sony Ericsson will provide the MPI group with the GC75, starting



The PC card modem GC75.

with rfi technologies AG, a member of the MPI group based in Germany. MPI will then expand the business to the other countries where it operates.

## Big in Europe

MPI is a Pan-European network of value added distributors that covers 14 European countries; Norway, Sweden, Finland, Denmark, Germany, France, Belgium, Italy, UK, Spain, the Czech Republic, Poland, Portugal and Switzerland.

MPI is renowned for its efficient coordination and support activities in the areas of marketing and sales, project management, exhibitions and events, and training that are indispensable to provide effective support for corporate business users.

MARKUS FISCHER  
contact@lme.ericsson.se

# Major UMTS contract from Telefónica

Telefónica Móviles has selected Ericsson as main supplier for the initial roll out phase of its UMTS network in Spain and Germany. The value of the global contract is estimated at about USD 400 million.

In Spain, Ericsson will deploy more than 700 base stations, making the Telefónica Móviles UMTS roll out there one of the largest in the world. The contract covers a three-year period.

"This contract represents the beginning of what will be the Telefónica Móviles' 3G network in Spain and Germany. As such, it has a high strategic value for Ericsson because of the customer's international dimension," said Eduardo Restuccia, executive director of Ericsson's Global Customer Unit for Telefónica.



Eduardo Restuccia

Ericsson is sole supplier for the UMTS launch in Spain. Initial deployment and commissioning of the network is due by June 1, 2002. The operator's full commercial launch will depend on several factors, including volume availability of terminals.

In Germany, Ericsson as main supplier will provide a turn-key project including acquisition, installation and commissioning.

Telefónica Móviles operates in Germany under the Quam trademark. Quam is 57.2 percent owned by Telefónica Móviles and 42.8 percent owned by Sonera.

The contract further confirms Ericsson's position as key supplier of the Telefónica Group as well as its position as leading supplier of wireless networks in Spain, Germany and in the world.

Ericsson has an approximately 40 percent market share in both GSM and in WCDMA globally.

MARKUS FISCHER

## Mobitex network in Brazil expands

The Brazilian pager operator TWW do Brasil S/A has signed a contract with Ericsson to expand its Mobitex network. The order includes 150 base stations. The first phase of the project will be focused on expanded coverage in São Paulo and new coverage in Rio de Janeiro and Curitiba. TWW do Brasil S/A placed its Mobitex system on the 900 MHz band in commercial operation last year and now has 50,000 users. The operator is focusing initially on applications for enterprise customers and machine to machine communications.

## World's first WCDMA call in Japan

The first voice call based on the 3G standard WCDMA R2 was successfully made March 29, in Nagoya, Japan. The achievement was made only two weeks after a POA-team at NRJ (Ericsson Japan) started the WCDMA Total Project R2. The call was completed after 24 minutes without interruptions.

"It's extremely important to show the functionality of these products in real operating environments. The confirmation of functionality is important in fulfilling contract terms and provides leverage that will help persuade customers to introduce the systems as planned," says Anders Priman, project manager of the WCDMA Total Project R2.

## World-class rating for operations in Borås

Ericsson's employees in Borås, Sweden, can take pride in the world-class rating awarded to their operations in accordance with the Probe evaluation method (Promoting Business Excellence). Ericsson in Borås manufactures MINI-LINK radio base stations and is included in the Transmission and Transport Networks business unit. Probe is a measurement tool developed by IBM and the London Business School to evaluate operating methods that distinguish successful companies in the manufacturing industry.

## Redundancies announced in development unit

Ericsson has announced that 165 people will be given notice of intention to lay off at the development unit in Karlstad, Sweden.

The reason is Ericsson's concentration of global development centres in order to improve efficiency of development activities. A reduction of assignment volumes to the Karlstad unit is another reason for the redundancies. The Karlstad unit will still have 450 employees.

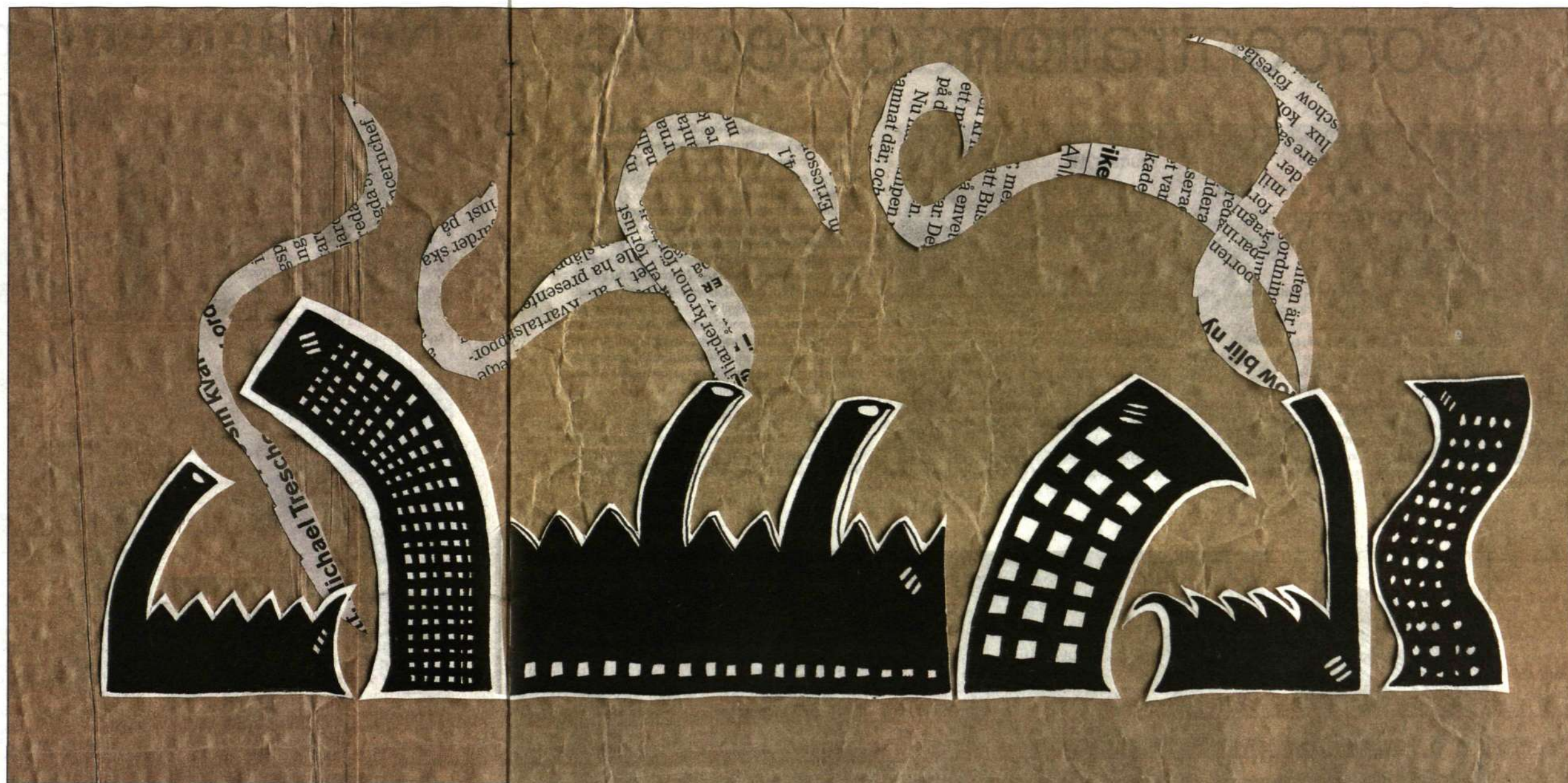
## Growth strategy award to Ericsson Microwave

An international marketing consulting and training company, Frost & Sullivan, has given their Marketing Engineering Growth Strategy Award for 2002 in the World Wireless WAN (Wide Area Network) market segment to Ericsson Microwave Systems AB.

In particular, the award was earned in recognition of the marketing and sales efforts for the MINI-LINK E radio system, which is one of the most commonly deployed point-to-point wireless WAN systems in the world. Wai Sing, research industry manager at Frost & Sullivan, says: "As a result of the exceptional growth strategy demonstrated, Ericsson Microwave's total revenue numbers have held steady in a market that saw a significant shortfall. This is all the more surprising given the relative age of the product line."

An industry struggling with challenges. An organization undergoing changes. When transformation and efficiency-enhancement become part of day-to-day life, it is both frightening and exciting. New initiatives go hand in hand with a paring-down of the product portfolio and a concentration of research and development operations.

Ericsson's COO, chief operating officer, Per-Arne Sandström, demystifies the concepts and explains why the new focused R&D organization does not mean a downgrading of the area. Why fewer products in the range does not mean downgrading the importance of the customer.



Ericsson employees must become accustomed to the winds of change that continually sweep over the company.

ILLUSTRATION: JOSEFIN WM

# Era of change is at its beginning

Ericsson has undergone a major reorganization that has brought many major changes. But it is not time to relax yet. The era of change is not behind us; in fact, it has just begun.

"It is time we got used to a more rapid rate of change. We cannot procrastinate. This is what it means to run a company in today's highly competitive environment. In order to assert ourselves in an increasingly tough market, we must be incredibly flexible and capable of change. Quite simply, we must learn to live with changes as a part of our day-to-day work," says Ericsson's COO, Per-Arne Sandström.

The reorganization was thorough and rapid. Nevertheless, Per-Arne Sandström believes this was better than prolonging the process.

"When we launched the reorganization, we moved rapidly, which was essential to maintain the momentum necessary to stay on course. On the other hand, we fully understand that it made many employees' working lives unnecessarily chaotic. We are reviewing the outcome to ascertain whether we achieved the desired results and whether we could have done better."

However, Per-Arne Sandström is satisfied with the company's new structure. He believes it is a strong organizational form based on clearly defined structures.

"I support the clear distinctions in the new structure



"In order to assert ourselves in an increasingly tough market, we must be incredibly flexible," says Per-Arne Sandström.

PHOTO: ECKE KÜLLER

of business and core units. In our current situation, it is essential to distinguish between the various parts of the organization."

Ericsson and the telecom industry are in the midst of a deep slump, possibly the deepest ever. Everyone is

desperately searching for a sign that "the recovery has finally begun."

## Changes not only due to crisis

However, Per-Arne Sandström emphasizes it is important to understand that the changes Ericsson is currently implementing are not only because the telecom industry is in crisis.

"In circumstances such as these, it is easy to become fatalistic about the industry and believe that the market determines everything – that it's not within the power of Ericsson to turn the business around."

Per-Arne Sandström feels that Ericsson must put its house in order by cutting costs, without eliminating the possibility of subsequent re-expansion. When the recovery begins, it will be important to be in the best

starting position – that is, to have a smooth-running, flexible organization that can quickly give the market whatever it demands.

"We cannot simply sit by and wait for the wind to change. Once the market begins to expand again, we better have our foot on the starting-block, ready to grab market share and grow. Otherwise, someone else will do so at our expense."

## The golden days are over

On the other hand, Per-Arne Sandström earnestly stresses the danger of becoming oblivious to a high growth rate that could again lead to uncontrolled expansion.

"We must realize that the telecom industry's days of wine and roses are over," he says.

The crisis in the telecom industry has also served as a wake-up call for Ericsson. According to Per-Arne Sandström, Ericsson now has a higher level of preparedness. The best examples of this are outside Sweden, in the market areas (MA) and the market units (MU).

"They are more aware of the market breathing down their necks: shrinking margins and revenues show up much sooner there than here, because they are closer to the customers. And I'd really like to commend the market areas and market units, which have demonstrated an enormous willingness to make swift changes. The job now is to get the organization in Sweden delivering the same level of results."

SARA MORGE

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# Concentration to secure

Fewer but more focused. That's the philosophy of Ericsson's concentration strategy for research and development. More energy will be invested in fewer places. Some 20 main centers will comprise the spearhead force of the company's future R&D activities.

During the past 10-15 years, the telecom industry has undergone enormous growth. Ericsson, in turn, has invested strongly in research and development - investments needed to meet market demand. Because of the rapid growth, however, efficiency took a backseat to quantity. The main emphasis was placed on recruiting as many skilled employees as possible within research and development activities.

"What was earlier the battle for many talents has changed today to the battle for the right talents. We have entered a contraction phase. It is essential that we now work with a view toward greater efficiency, instead

of expansion," says Per-Anders Sandström, Ericsson's chief operating officer.

### Reduced costs

Ericsson's investment costs for R&D during recent years have averaged about 20 percent of sales. That figure will now be reduced.

"We are definitely not the only company that is reducing its R&D activities. Our competitors are doing the same. We simply have to adjust our activities to the new market conditions."

Ericsson's large spread of R&D activities has required

substantial administration and widespread duplicate work efforts. To reduce costs and get better value for its money, Ericsson will now concentrate R&D activities in about 20 main centers, which will be supported by several centers of expertise.

"The concentration of R&D activities does not mean we are lowering our priorities in this area, definitely not. Instead, we are trying to gain a greater return on every dollar we invest. Fewer centers will mean reduced requirements in terms of coordination, follow-up and administration. The money we invest in development, accordingly, will go to actual development activities, rather than peripheral support services.

Ericsson has 80 research and development departments today in more than 20 countries. The concentration strategy will eventually lead to fewer R&D centers in a smaller number of countries.

### Activities in all market areas

"The puzzle is now being put together. The countries where R&D activities will be concentrated have still to be identified. It is important to emphasize, however,

# growth power

that we will have research and development activities in all of our three market areas," explains Per-Arne Sandström.

Every main center will be responsible for a product area. The concept is intended to make it easier to secure and develop knowledge if an entire product family can be developed in one location.

Ericsson's efforts to increase the efficiency of its R&D activities at this time should not be interpreted as an expression of a temporary cost-savings quest. Greater efficiency and cost awareness should preferably be etched into the walls.

"The efficiency-enhancement work we are now starting should not be regarded as an isolated undertaking. Efforts to increase our operating efficiency must be conducted at all times. Greater efficiency and cost-awareness must be adopted as key bywords in the future," says Per-Arne Sandström emphatically.



Ericsson is not lowering its priority on research and development. This is a matter of gaining greater value from invested capital, says Per-Arne Sandström.

PHOTO: ALEXANDER FARNSWORTH

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Per-Arne Sandström believes the key to success lays in the ability to open doors to new markets quickly, a capability that is beginning to gain greater momentum.

# New investments despite fewer products

A reduced product portfolio does not preclude new investments. It's all about prioritizing and investing in areas with good potential for market growth. The key to success lies in stronger focus and the ability to quickly identify markets with profitability potential.

"The reduced product portfolio should not be regarded as an indication that we have less to offer our customers. Instead, we will develop products that are just as good, or better, but with fewer basic components," explains Per-Arne Sandström.

### New generation of equipment

Ericsson is now building a new generation of equipment for its systems. All products will eventually be IP-based. The products will be developed based on common platforms, with common hardware, software and common components.

"By establishing common product platforms, we will be able to eliminate duplicate development work and create greater similarities between fixed and mobile systems. It's like a lego box in which the pieces, in this case our hardware and software, can be assembled to make different products," says Per-Arne Sandström.

The introduction of common platforms is also the main reason why Ericsson is now able to reduce its product portfolio. The primary objective is to create a smaller, more uniform product range that will reduce handling costs and increase operating efficiency. According to Per-Arne Sandström, platforms with common components will lead to very substantial reductions in costs for installation, training, development and maintenance - both for Ericsson and its customers.

"We're looking at cost reductions in the range of several hundreds of millions of dollars."

Products that have required major R&D efforts

must have strong market volumes to ensure their profitability. As a result, it's important for Ericsson to only develop products that are important for the company's overall offering and products that offer potential to establish positions of market leadership.

The new portfolio strategy is a matter of priorities - and reducing investments in products approaching the end of their life cycles, such as TDMA and PDC.

"These are profitable areas of activity and, with the measures we are now implementing, we are securing their continued profitability in the future. It is often the case that older technologies reach their peak of profitability just before new technologies make their definitive breakthrough," Per-Arne Sandström explains.

### Market is changing

The fact that Ericsson is reducing its efforts in those areas does not mean that TDMA or PDC will be eliminated from the product portfolio. Ericsson will continue to serve its customers as it has in the past. The demand for new functionality, however, is extremely limited and there are no plans for real new development in these areas.

"The market is changing rapidly, and we have to adapt quickly so that time and money are not invested in products and functionality that nobody wants. We also have to be prepared to move quickly and focus sharply on markets that are beginning to gain momentum," says Per-Arne Sandström.

PHOTO: ALEXANDER FARNSWORTH

SARA MORGE

# Concentration

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# Michael Treschow likes sharp turns

Inquisitive and result-oriented. That's how Michael Treschow describes himself. He is resigning as president of Electrolux to become the new chairman of Ericsson, which he calls the jewel in the Swedish crown.

It was a weekday evening when *Contact* met Michael Treschow at the head office of Electrolux in the center of Stockholm. In just a few days, he would leave the office and his colleagues to enter, for him, a completely new sector of industry. He seemed relaxed as the day of change approached, explaining that he faced a very similar situation five years ago. At that time, he left Atlas Copco, a technology-intense machine and compressor manufacturer, to become president of Electrolux, a consumer products company.

"The differences this time are really quite small, since I am leaving an operative position to become chairman of the Board. In general, however, the advantage of embarking on something new is that I can tackle the job assignment with fresh eyes and ears. I have not become entangled in the myths and dogmas of the industry," he says.

"Then, of course, it will take some time before I familiarize myself with the structure of the industry, the tempo and the culture that exists within a specific industrial sector. I have taken time, however, to try to learn and understand these factors, and I have made strong progress in my efforts to learn more about Ericsson."

## Protection of interests

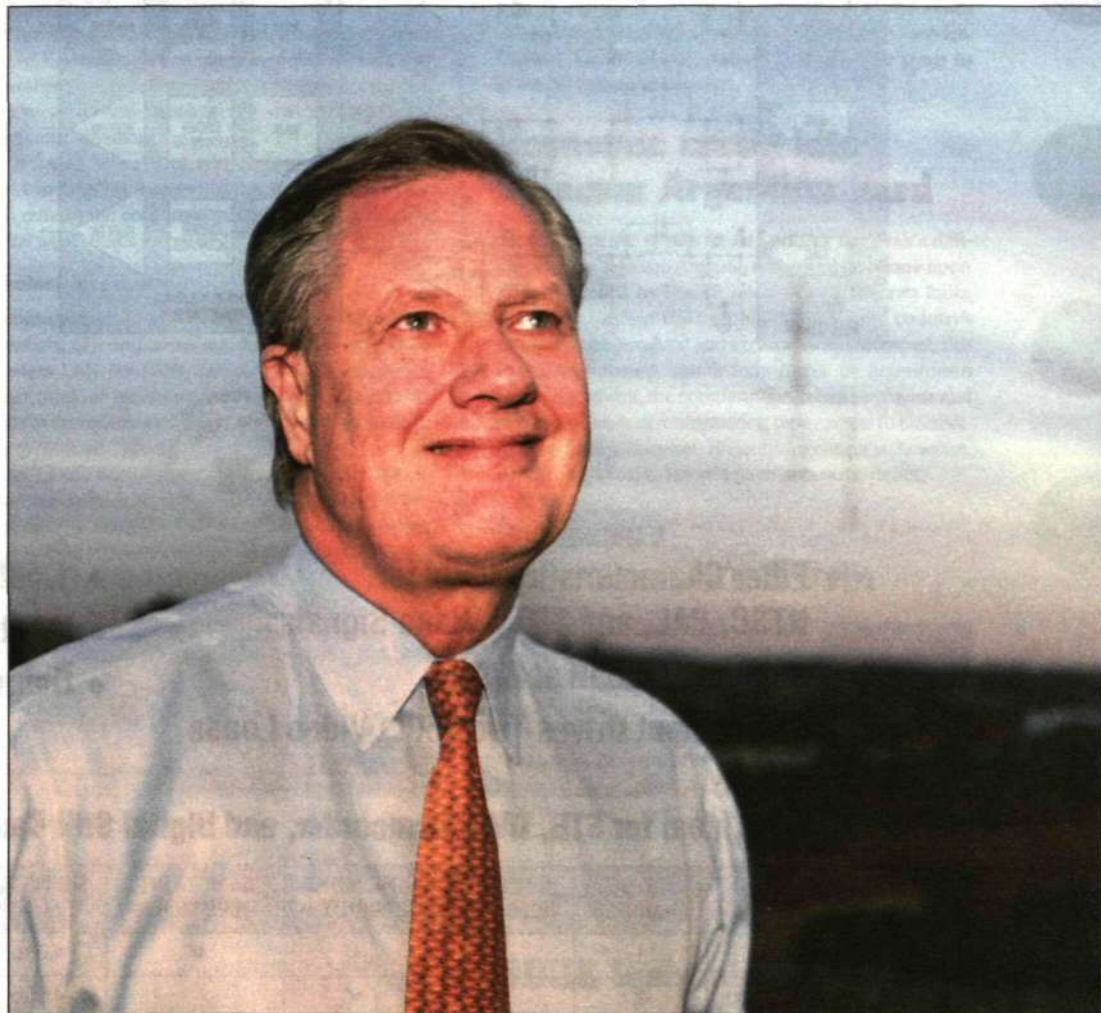
The position as chairman of Ericsson's Board of Directors is largely a matter of protecting the interests of the company's shareholders. Michael Treschow believes this objective can only be achieved through strong cooperation between him, other members of the Board and Ericsson's executive management.

"I will manage the Board's regular activities, particularly in terms of monitoring management's long-term work. It is not my responsibility to become involved in everyday operational activities. However, I hope that I will be able to help reinforce and support the operations when and wherever necessary so that Ericsson can continue to be the success story it has almost always been."

## Continue to lead

He says the questions he will address as chairman of the Board are questions that are important to Ericsson.

"In the long-term perspective, it's imperative that we retain our position as the leading systems supplier to the qualified operators that are now our customers. It is also important for all interests that Ericsson's alliance with Sony becomes the success that we believe and hope it will be."



Michael Treschow is leaving his position as president of Electrolux to succeed Lars Ramqvist as the chairman of Ericsson's Board of Directors. He describes himself as inquisitive and result-oriented, and says that Ericsson has fascinated him for a long time.

PHOTO: GUNNAR ASK

He is convinced that Ericsson will emerge strongly from the decline that has afflicted the telecom industry, adding that the global company has fascinated him for a long time.

"Ericsson may be likened to the jewel in the Swedish crown. I am particularly impressed by Ericsson's development and position in the systems sector in all parts of the world. At times, during business trips in my other executive positions, I have been almost jealous of the company," he says.

## Tough when necessary

There have been certain perceptions of Michael Treschow as a tough man with a heavy hand. Last summer, *Business Week* described him as "one of Europe's toughest turnaround guys." The reporter who wrote the article was alluding primarily to the restructuring program Michael Treschow implemented at Electrolux

from 1997 to 1999, which led to substantial improvements in the company's productivity and profits.

"Whenever I have faced a situation that has required stern measures and changes, I have taken the appropriate actions. But I would prefer not to be regarded as just a tough guy. I am extremely result-oriented, however, and I believe that implementation is more important than all the analytical work that's involved in a process of change.

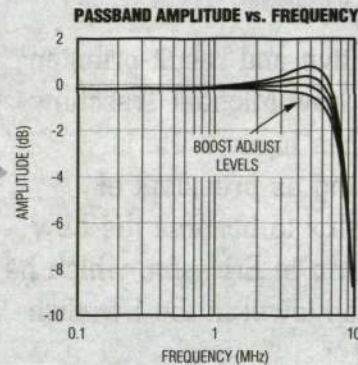
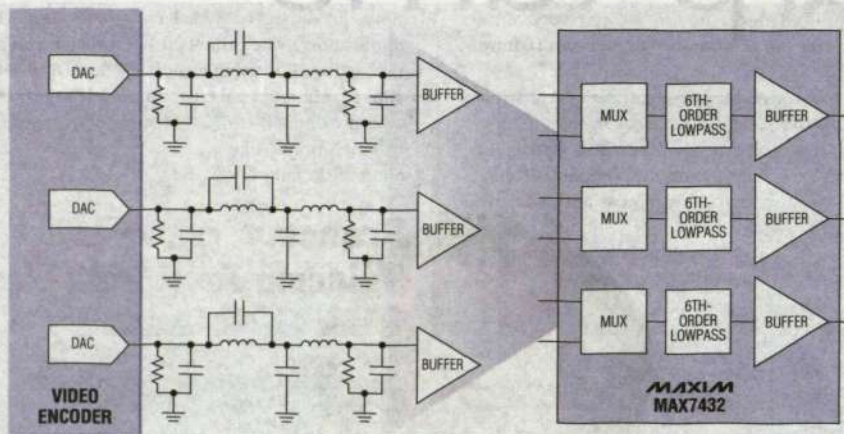
"But we must not forget that work is also supposed to be enjoyable. It's never an enjoyable task to implement personnel cutbacks or discontinue operations, but it's important to maintain a progressive spirit even during hard times."

JENZ NILSSON

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# Strong growth for mobile offices

Mobility is a high priority for most companies. Nevertheless, many are hesitant as they believe it costs too much to be mobile. However, mobile enterprise solutions need not be very expensive, claims Richard Clifford, analyst at Datamonitor, who has researched the mobile infrastructure market.

In a new report, Mobile Enterprise Infrastructure, Datamonitor anticipates particularly strong growth for mobile office solutions. The market will expand by 66 percent per year, from USD 300 million in 2001 to USD 2.3 billion in 2005, according to the analysis company.

"This may seem optimistic, but it will happen in the light of only two to three percent growth in the companies' infrastructure investments," says Richard Clifford.

Mobile infrastructure is included in the total investments and will represent an increasing share of these.

## Use what already exists

The point is that companies can use their existing infrastructure to a rather high degree, at least in the beginning.

"Blackberry and Microsoft are already offering solutions now that do not need to cost very much, although Microsoft's solution is a little more complex and expensive," says Richard Clifford.

Forward-looking mobile operators have realized that the enterprise market could turn into a real goldmine and have therefore initiated cooperation with suppliers of mobile office solutions. For example, TIM of Italy, mm02 of the UK and T-Mobile of Germany have signed agreements with Black-

berry, while parent company Deutsche Telekom and Vodafone have invested in solutions from Microsoft.

## Return on investment important

Richard Clifford makes the strong claim that companies, as a rule, do have money to invest in IT infrastructure.

Budgets have certainly been frozen for a while, but are now slowly being released. However, in order to sell a mobile solution for, say, mobile e-mail, the operator must be able to give the company detailed figures as to how much it will cost and what the company will save.

"If there's no payback within six to eight months, you can forget it. The return on investment - ROI - will remain the corporate mantra for a long time to come now," notes Richard Clifford.

## Wireless investments

Alongside mobile enterprise solutions, increasing numbers of companies are expected to invest in wireless LAN (W-LAN). For this reason, operators must think of including public wireless LAN solutions to complement their current offerings, according to Richard Clifford.

NTT DoCoMo of Japan is one of the many operators that have begun experimenting with W-LAN. DoCoMo is testing various wireless technologies that will form the foundation of the company's next generation of Mobile Internet, "4G."

"A year ago, many people wondered if W-LAN was a threat to 3G. Today, everyone agrees that it is an excellent complement," concludes Richard Clifford.



Richard Clifford

ELIN DUNAS

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## Japan gets its second 3G network

No, it was no April Fool's Day joke - on April 1 Japan's KDDI quietly started up its 3G network in Japan's major cities, giving NTT DoCoMo some competition. DoCoMo's WCDMA network permits download speeds of 384 kilobits per second, whereas KDDI utilizes CDMA 2001 1X technology, an upgrade of CDMA, that has a maximum speed of 144 kilobits per second. At a press conference about the new service, analyst Andrew Seybold said that the underlying technology is irrelevant to users - they merely want to have access to good applications, according to Nikkei Electronics Asia. One such application to be launched will provide the ability to take video clips using a mobile phone and send those clips to other users. It costs an extra JPY 600 per month, or approximately USD 4.5, to subscribe to the 3G service. In June, mobile phone operator J-Phone also plans to enter the Japanese 3G arena.

## Economic crisis hits Telecom Argentina hard

The economic crisis in Argentina has dealt a difficult blow to Telecom Argentina. The mobile phone operator, controlled by France Telecom and Telecom Italia, has debts totaling USD 3.3 billion. Since the country's currency was devalued and exchange rates skimped, this debt has become significantly larger in Argentinean pesos. As a result, the company has frozen payments and is in the process of renegotiating repayments to its creditors, including Ericsson. Telecom Argentina is, however, continuing to make interest payments on its debts.

## No bonus for Motorola's Galvin

Motorola's Chairman of the Board, Christopher Galvin, will not be receiving any bonus for the previous year, nor will he receive a salary increase. The reason is the company's "unsatisfactory financial results". As a result, Christopher Galvin's salary will remain unchanged at USD 1.3 million, but without the USD 1.25 million bonus that he received last year.

Motorola reported its first loss in 71 years last year.



Christopher Galvin

## EDGE technology gains new ground

The EDGE Operators Forum was officially launched at the end of March during the CTIA Wireless 2002 trade show in Orlando, Florida in the US. The group consists of six mobile phone operators and five suppliers: Ericsson, Motorola, Nokia, Nortel and Siemens. Many European mobile phone operators are considering investing in EDGE alongside UMTS. EDGE technology continues to gain ground, not least because Motorola, which previously opposed it, has decided to manufacture telephones adapted to the technology.

## Japan's NTT makes record loss

At the end of May, it will be time for NTT to account for the biggest loss in the history of Japanese business - USD 7.7 billion for the year ending March 31.

That poor showing is due primarily to company restructuring costs and massive write-downs by subsidiary NTT DoCoMo of investments outside of Japan, reports Reuters. Last year, NTT DoCoMo reported a record profit of USD 2.8 billion.

## MOBILITY

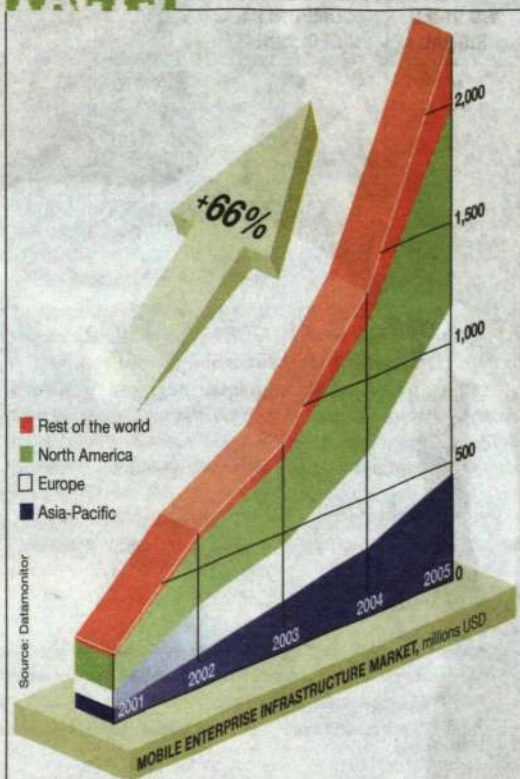
Companies generally make their employees mobile in three steps:

1. E-mail and agenda functions become mobile. The ability to send SMS messages about meetings, for example, or e-mails. These functions already exist now, the most successful being RIM's push-technology, Blackberry.
2. Customer relations and various intranet-based applications become mobile. Initially, this will not be for the consumer market, but for business-to-business employees.
3. Real-time mobile access to business systems. The final step to mobility!

If you would like more information, the report, Mobile Enterprise Infrastructure: The cost of going mobile, is available at:

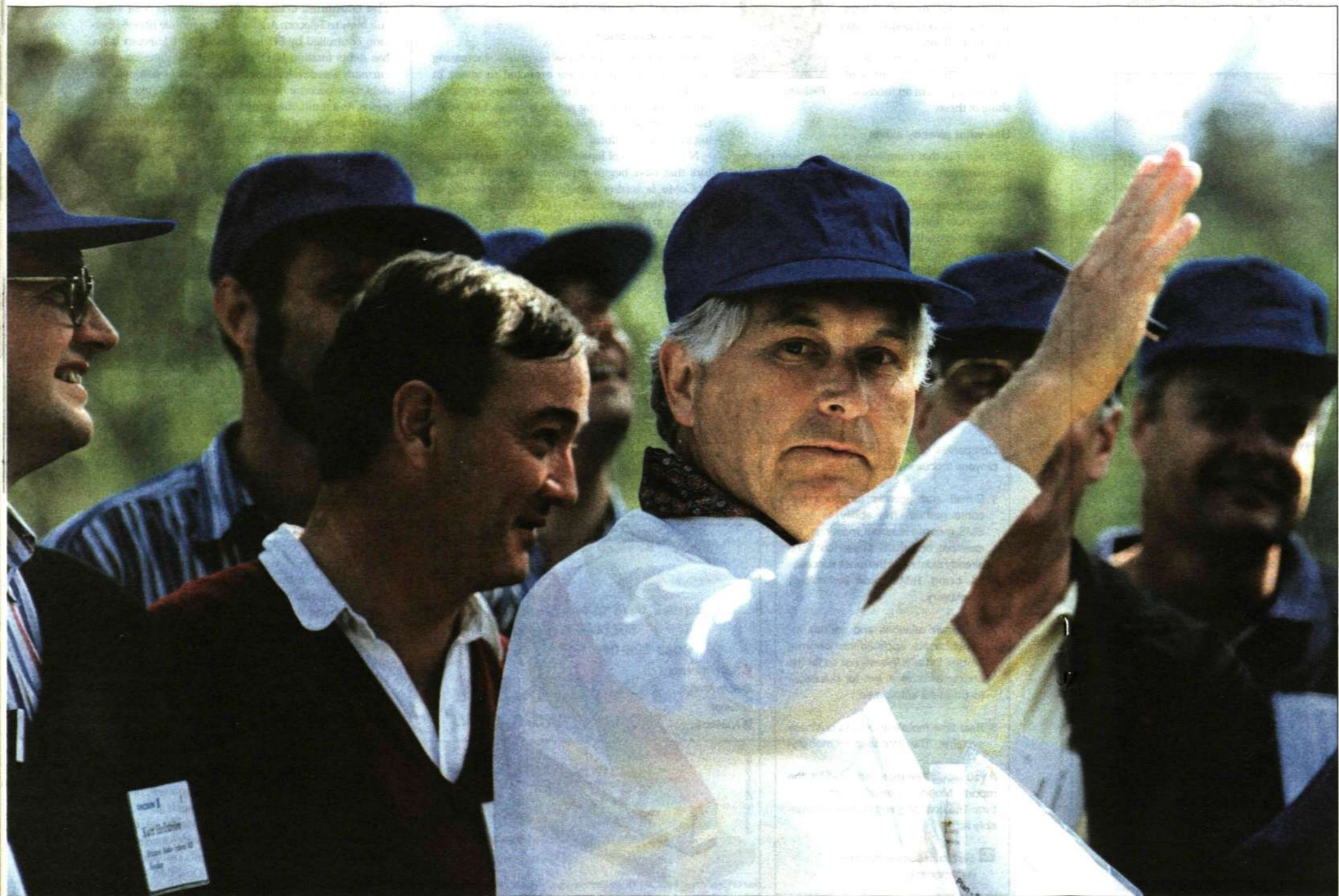
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## FACTS MARKET DEVELOPMENT



After four years as chairman of the Board, Lars Ramqvist has passed the torch to Michael Treschow. This year's Annual General Meeting thus marked the close of the outgoing chairman's 22-year career with Ericsson – almost. As honorary chairman, he is looking forward to devoting further effort to the company he has been involved in managing for over a decade.

# People No.1 for Lars Ramqvist



Lars Ramqvist joined Ericsson in 1980. At that time, he lacked the usual qualification required for a career in the company – a solid background in engineering, including a Master's degree at least. Instead, he was a physicist with a Ph.D in solid-state physics and chemistry. Some years later, this background steered him clear of one of the company's greatest fiascos in modern time – the plan to manufacture personal computers.

The year was 1984 and this is what happened: "It was September, I believe – autumn was approaching. Hans Werthén, who was chairman at the time, had been directed, with the then president, Björn Svedberg, to find two people to place in the management of Rifa (which later became Ericsson Components) and Ericsson Information Systems, the Company's computer initiative. Two men from the province of Dalecarlia in the Swedish heartland were identified as likely candidates – Stig Larsson and myself."

"At a rather lengthy dinner in an elegant Stockholm restaurant, Hans got our names mixed up, with the result that he offered me the job of president of Ericsson Information Systems. I was a little surprised, since I thought my background was more suitable for Rifa.

"Early next morning, Björn Svedberg called to ask how this had come about.

"Oh my God! He offered you the wrong company," he exclaimed. "You were supposed to become head of Rifa."

The confusion was resolved, and Lars Ramqvist obtained the exciting assignment of developing and upgrading Ericsson's micro-electronics operations.

Stig Larsson received the unrewarding job of taking charge of the computer initiative. It was dismantled after only a few years at great cost to Ericsson, and Stig Larsson was recruited to a post outside Ericsson as director-general of the Swedish State Railways.

### One Dalecarlian is enough

In November 1989, it was again time to discuss key appointments. Lars Ramqvist received a call from Hans Werthén:

"Okay, Lars, let's make sure we're talking about the right company," he began, displaying his excellent memory and characteristic light touch. "You're going to be the next boss of Ericsson. The appointment will not become public until the Annual General Meeting in May, but the reason we chose you is simple," he said.

"One Dalecarlian at the top is enough."

Hans Werthén and Lars Ramqvist both grew up in the



Lars Ramqvist was presented as the new chief executive officer and president at the Annual General Meeting in 1990. At the same time, Hans Werthén, right, handed over the chairmanship to Björn Svedberg. In 1984, Hans and Björn appointed Lars Ramqvist president of Rifa – his first top management position in the company.

PHOTO: MARIA PETERSSON

province of Dalecarlia – Lars in the town of Grängesberg, which has fostered many renowned Swedes.

"I was brought up in a staunchly socialdemocratic family," Lars Ramqvist explains. Despite his reputation as a fervent proponent of business, this legacy has affected his actions as chief executive officer of Ericsson. We will return to this theme later in the interview.

### Core concept

Why, then, did Lars Ramqvist become president after Björn Svedberg? He points to two factors:

"After the computer fiasco, I was asked to formulate a new strategy for Ericsson in 1986. The result was the 'Ericsson Core Business Concept.' The strategy was based on refocusing the company on its true core operations and developing a common system platform for wireline and wireless networks," Lars Ramqvist explains.

"We could already see that the future belonged to mobile systems, so it was important that Ericsson be able to offer a comprehensive solution. Since AXE was such a flexible and ingeniously designed switch system, we were able to use our successful wireline telecom switch as the backbone of the wireless networks, too. That was the core of Ericsson's new strategy, and it was very well received by the Board at the time. Also as part of the strategy, Ericsson Information Systems was sold to Nokia and I was directed to implement the sale."

"I was voted onto the Board of Ericsson Radio Systems in 1986 and offered the position of president in 1988, succeeding Åke Lundqvist. Åke and his staff had struggled through some really tough years. They had difficulty making their business ideas understood by a company management that was strongly imprinted with the success of fixed networks in the 1980s."

The Ericsson Management Institute was launched during Lars Ramqvist's incumbency. The 1995 executive meeting held outside Stockholm focused on team-building among Ericsson's 300 highest-ranking executives. As usual, Lars called the shots.

PHOTO: LARS ÅSTRÖM

Lars Ramqvist remembers the period from 1986 to 1990 as demanding, but stimulating and pleasant.

"Ericsson Radio was still very much influenced by the entrepreneurial spirit created by Åke and Ulf Johansson that had made the company a leader in mobile telecom technology. At the same time, the market started expanding increasingly quickly, and there was a great need to develop a strong production apparatus. During those years, we were a team that worked very hard to create a rewarding symbiosis between entrepreneurs and production people. Quality was our guiding principle, and we all felt an enormous satisfaction in our work."

### Exceptions for Ericsson

There are of course several reasons why Ericsson captured the position of undisputed leader in mobile systems, but Lars Ramqvist highlighted some of them in particular.

"We established a strong position in the US with the assistance of General Electric, and won the contract with Mannesmann of Germany for the first really large GSM system."

Where the US market is concerned, it was Ericsson's most important mobile customer in the mid-1980s, the visionary Craig McCaw, who guided the company onto the right path, he believes.

"Craig called me in the spring of 1989 and told me we had to become more American. The politicians there were starting to grumble over the fact that he was purchasing so much from a European company. This was the starting shot of a process that eventually enabled Jack Welch – the legendary chairman of General Electric – and me to negotiate an agreement to launch the joint venture of Ericsson GE Mobile Communications.

"We managed to persuade Jack Welch that for once he should permit the other party in a joint-venture company to hold the majority, and allow Ericsson 60 percent.

"'I'll make an exception, since you guys are still just a one-product company,' said Jack Welch when he reached me later by crackly analog mobile connection from Madrid. At the time, he didn't quite understand the potential of the 'product' we were offering – mobile telephony."

"When I became president in 1990, I asked Åke Lundqvist to move to the US and take charge of the building up Ericsson GE. With a plant in Lynchburg, Virginia, and a development unit at Triangle Park, North Carolina, the company grew into a strong springboard in the largest mobile market in the world at the time. Market share surged from 18 to 30 percent in only a few years."

### Mannesmann mobilization

"Where GSM and Mannesmann are concerned, the glory belongs to Håkan Jansson. It was he who led the negotiations for the contract that more than anything established us in the top tier for GSM. It was a tough contract, involving substantial risks in the form of fines if Ericsson did not deliver on time, but with a fantastic premium if we were successful.



During Lars Ramqvist's years on the Board, it was characterized by a forward-looking and constructive approach, he relates. "We were a marvelously tightly welded team, and during my time we never actually had to vote. And the employee representatives' behavior was also exemplary." The photo shows the Board of Directors in 1997, when Björn Svedberg was still chairman.

PHOTO: SVANTE FISCHERSTRÖM

"This time, too, we managed to mobilize our capacity. And we even succeeded in eventually delivering the mobile phones that Mannesmann demanded to complete the contract. So it was in fact because of the Mannesmann contract that Ericsson carried on with its previously half-hearted mobile phone operations, and even accelerated them."

During the twelve years during which Lars Ramqvist was president and then chairman of Ericsson, telecommunications underwent its greatest amount of change to date. During these years, mobile telephony established itself as the unrivalled dominant force in the market – despite the market slowdown of the most recent one and a half years.

"We thought we were bold in 1990 when we talked about a 15- to 20-percent penetration for mobile telephony. A few years later, when I and a few others raised our sights and predicted a 40-percent penetration, a lot of people simply shook their heads. But even that estimate was too conservative."

Today, several countries have exceeded the 80 percent mark, and here and there 100 percent appears to be within reach. There are over a billion mobile subscribers in the world – more than for fixed networks.

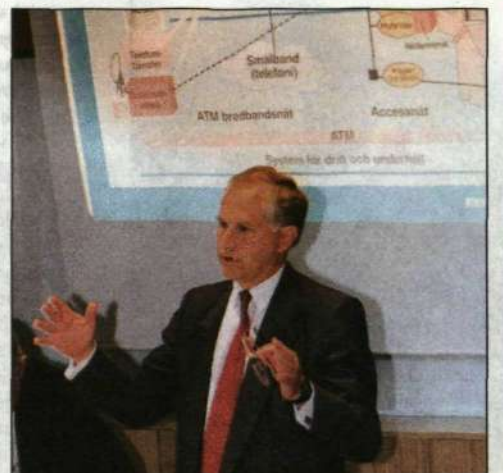
### Unfair criticism

Despite the fantastic growth of the mobile market, in recent years mobile phones themselves became Ericsson's problem child. In Lars Ramqvist's view, the Board must accept the responsibility for this state of affairs. However, mobile phones did play, and will continue to play, a key role for Ericsson.

"The telephones have been important for Ericsson's sales of systems – just how important is no doubt understood by few external analysts. Moreover, for several years our mobile phones were highly profitable.

"Then, we ran into serious delays with the T28 phones – delays about which the Board was not informed until the end of 1998. That's why, when Kurt Hellström became president in July of the following year, his No. 1 task was to get the mobile phones business moving again."

"Later, in 2000 when we suffered a fire in New Mexico and struggled with quality problems related to a few key



The large-scale project involving the AXE-N broadband solution was wound up in 1997. However, the project was not in vain, Lars Ramqvist believes: "The knowledge we gained from that project underpins our current success in packet-switched telecommunications."

PHOTO: ANDERS ANJOU

suppliers, we wound up with a gigantic loss for that year."

Lars Ramqvist believes that some of the criticisms leveled at himself and the Board for the way they handled mobile phones were unfair.

"The Board has in no way inhibited the development of new models. As the Minutes of the Board meetings clearly indicate, the Board actively called for better design, including built-in antennas. We also gave Kurt Hellström our unreserved support in the negotiations last year that led to our new joint venture with Sony."

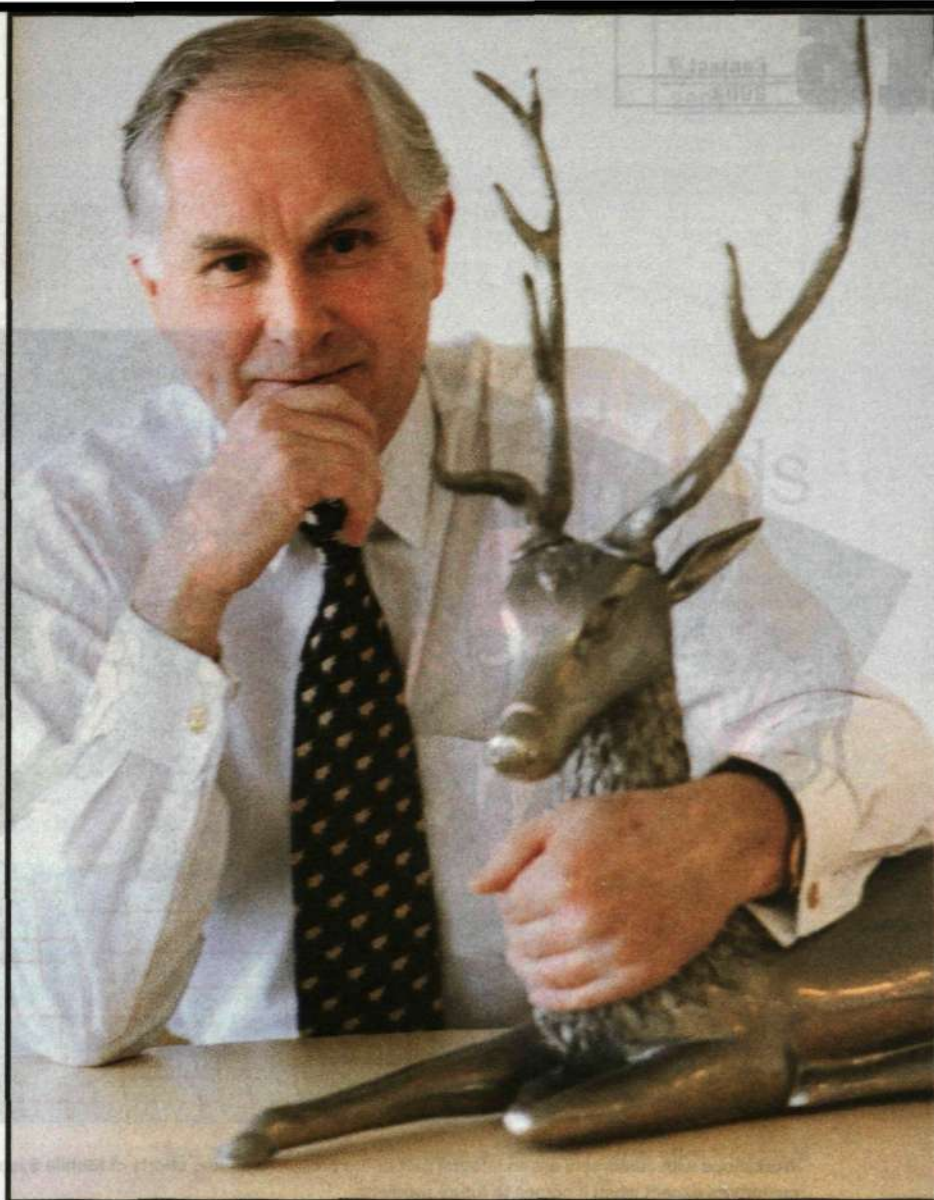
"Personally, I'm proud of what Kurt and his staff achieved last year in the mobile phones segment: a whole new line of models that have been very well received by the market, a skillfully implemented 'back-to-profit' program and the successful merger of Sony's and Ericsson's mobile phone operations. These are all



Lars Ramqvist has acquired many high-level contacts. Here, receiving Zhu Rongji, then Deputy Prime Minister of China, at Ericsson's Head Office in November 1992.

PHOTO: LARS ÅSTRÖM

” *“We thought we were bold in 1990 when we talked about a 15- to 20-percent penetration for mobile telephony. Only a few years later, when we raised our sights to 40 percent, a lot of people simply shook their heads.”*



Since 1994, Lars Ramqvist has owned a country estate south of Stockholm. There, he conducts farming and forestry on a large scale – though it was mainly hunting that lured the Dalecarlian native away from Stockholm.

PHOTO: SVANTE FISCHERSTRÖM

terrific accomplishments that will make Ericsson profitable again,” Lars Ramqvist maintains.

#### Life-preserving string of pearls

Last year, the enormous losses in mobile phones could have destroyed Ericsson. However, the company was able to fall back on realizable assets, as a result of the data-com purchasing strategy – called the “string of pearls strategy” – that was devised in 1996.

The basis of the strategy was that Ericsson, in contrast to several competitors, refrained from making more spectacular acquisitions during the years when the entire IT industry was inflated. Investments were undertaken only in companies that would clearly add value to the company’s strategic core operations. The most successful acquisition was the shares in Juniper Networks in 1997 and 1998.

“In 2000 and 2001, we raked in a total of USD 2.2 billion in capital gains from that acquisition, while at the same time forming a joint venture with Juniper.”

The other fortunate result of the string of pearls strategy was an acquisition that did not take place. Lars Ramqvist explains:

“We wrestled for a long time with the question of whether to purchase Fore Systems. It was discussed at two Board meetings, but we finally decided to abstain. Instead, it was purchased by Marconi, which ended up paying through the nose for the deal, since it was forced into the write-down of a total of USD 500 million in 2001 as a result of the acquisition.”

#### Difficult decisions

Just when Ericsson began to get its mobile telephone business under control again, the world telecom market collapsed in the first quarter of 2001. Lars Ramqvist is happy that he was on the scene and able to respond quickly to the situation, but he admits it required several difficult decisions.

“I have always had a conservative attitude to staff reduction, and tried to avoid it as far as possible. There were several years during the 1990s when we were able to resolve our rationalization requirements by relocating people. Things were easier then, since we were growing and needed a lot of personnel, particularly in mobile operations.”

“At the beginning of 2001, we had built up an organization and a production apparatus that was just adequate to serve our increasing delivery commitments, with volume increases of 30–40 percent. But then the growth ceased, quite abruptly.”

“In this situation there was nothing the Board could do other than give Kurt Hellström and his staff our full support for the response strategy they developed.

“The efficiency-enhancing program that was implemented so quickly in 2001 was actually crucial to Ericsson’s continued existence as an independent company,” says Lars Ramqvist.

#### Right moment to step down

Now, as Ericsson and the industry begin to look ahead to better market conditions, Ericsson is a stronger company. Therefore, Lars Ramqvist feels this is precisely the right moment for him to step down from the chairmanship and the helm of the company

“I’d like to wish my friends at Ericsson the best of luck. It has been a great honor for me to work for this company. Of everything I’ve experienced in the past 22 years, it’s the people – customers, politicians, people in the industry and, especially, the employees – that I will miss most,” he says, winding up our interview.

“However,” he hastens to add, “you’re not completely rid of me yet.”

“As honorary chairman, I’ve promised to help out here and there when Ericsson needs to be represented in various contexts. Kurt Hellström has already assigned me to go to China to meet with members of the Chinese government and other dignitaries to discuss new business opportunities.”

Just before we say good-bye, Lars Ramqvist mentions the scholarship fund named after himself, that the Board of Directors has established:

“It will soon be possible for young people who want to develop their skills in international business administration or telecommunications to apply for grants from this fund. I thank the Board for this generous donation – not on my own behalf, but rather for all the young people whom this fund will support in their future education.”



Lars Ramqvist’s wife, Barbro, has often accompanied on his many trips. Here, we see them at the Olympic Games in Barcelona in 1992.

PHOTO: LENA HYTTSTEN

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Workshops with customers are an integral part of the product planning efforts of Mobile Systems WCDMA and GSM. Through them, it becomes more apparent what customers expect when it comes to future products.

As progress takes us from networks for voice and messaging to multimedia services, a more refined method of product planning will be required in the Mobile Systems WCDMA and GSM business unit. An important component in those new work routines will include cross-disciplinary groups and workshops with customers in order to find out how they see the future.

## New products benefit from

"Currently, developments are being driven by three factors: the experiences of end users, network efficiency and network growth. These factors are placing new demands on how we work with product planning," says Göran Olsson, head of marketing and product planning at Mobile Systems WCDMA and GSM.



Göran Olsson

"Our former work routines functioned well when mobile phone networks were utilized for communication between individuals, whether through voice or messaging. Current developments have, however, meant that we need to further refine our work routines. As the Mobile Internet incorporates Multimedia on Demand – allowing users to select content, including video clips, news and the like – we will need to change how we work with

product planning. Seeing the big picture, which includes both networks and products, has become even more crucial," says Göran Olsson.

### Three main segments

Another new aspect involves dividing the market into three main segments. One of the segments consists of those operators who are upgrading to 3G at a slower pace, while simultaneously trying to earn as much as possible from their 2G networks.

The second segment includes those operators who believe in a rapid migration to 3G.

The third segment includes those operators who are newcomers to the market, also known as greenfielders.

Today, these three segments include the Mobile Systems WCDMA and GSM business unit's largest customers. Together, these operators comprise a very

significant portion of the business unit's sales. A key account manager has been assigned to every customer.

"The basic idea is that these customers should provide a leading role in our product portfolio, although we will of course continue to maintain a dialog with other customers," says Göran Olsson.

At the same time, he emphasizes that Ericsson's marketing units around the world have an important role to play when it comes to future dialogs with customers.

### Workshops point the way

Conducting workshops with customers is a key component in developing this method of operation. Results from these workshops should lead to the correct products being developed. Internal work should then proceed using cross-disciplinary groups, which include business, product and supply managers. Semi-

## dialogue

nars held to date have received very positive responses from customers.

At the same time, as a comprehensive project for product development is being formed, work is also proceeding on marketing plans so that there will be sufficient time to build up demand among customers. Marketing plans are being drawn up to fit the various segments.

"The main difference between how we are working now compared with before is that we must now take a more comprehensive view that includes the entire network as well as applications and terminals. That comprehensive view should also permeate our work," says Göran Olsson.

GUNILLA TAMM

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## Varying demands from customers

"The workshops we've held so far have been very positively received by customers, and they would like to continue working with us in this manner," says Roger Hartonen and Hans Malmberg, who are responsible for product planning for Vodafone and Hutchison respectively.

Hutchison is a so-called greenfielder, a newcomer to the market, whereas Vodafone has extensive mobile telephony experience.

"An important question for Hutchison is how to share 3G networks with other operators. This became clear at the first workshop that we recently held. It included strategists from the customer side together with representatives from Ericsson's product management. Customers are interested in continuing with the workshops and we will be holding them several times a year," says Hans Malmberg.

"Now that we know what Hutchison is expecting from us when it comes to future products, we have to fulfill those wishes," he adds.

"We've held four seminars together with Vodafone. Two were focused on radio technology, one involved parts of the core network and the fourth focused on Telecom Management," says Roger Hartonen.

While Hutchison has its sights set on 3G, Vodafone is also interested in how to integrate 2G with 3G.

"Ericsson and Vodafone have many years of collaborative experience and draw on each other's help in various areas. You could really call this a true partnership," says Roger Hartonen. At the same time, he emphasizes the importance of dealing internally with those customer expectations gathered during customer meetings.

Representatives from Ericsson's local companies participate in all workshops. Both Roger Hartonen and Hans Malmberg emphasize that these employees play a key role since they are close to the customers and are in contact with them on a daily basis.

GUNILLA TAMM



Hans Malmberg is key account manager for Hutchison in regard to product planning. Roger Hartonen has the same responsibility towards Vodafone.

PHOTO: ECKE KÜLLER

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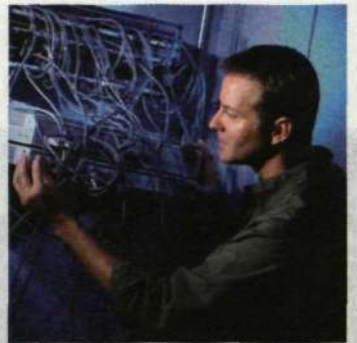
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# Several systems share same indoor network

Ericsson now offers a Combining Unit that combines signals from up to twelve mobile operators across a single indoor network. The first 2G/3G box has already been delivered to a shopping center in Singapore and another is on its way to Portugal.

In order to provide better coverage and quality for mobile networks inside office buildings, shopping centers, airports or the like, a technique known as Cellular Inbuilding Solutions is used.

A mobile phone system is extended into a building by situating a base station inside a machine room (in the building's basement or garage), from which cables or fibers are drawn up to antennas on the main level. Installing an inbuilding network also reduces the mobile phone traffic load outside the building.

The market for Inbuilding Solutions first gathered momentum in Asia, where there are many high-rise buildings and where mobile networks quickly began experiencing problems handling indoor coverage, but now they are becoming more commonplace in Europe as well. The US market lags somewhat behind.

The benefit of using a Combining Unit is that several networks or operators can utilize the same inbuilding network to obtain coverage. Every operator then places a base station in the machine room and connects it to the box. A GSM 900 or 1800 operator can then coexist with a WCDMA operator on equal terms in places such as airports.

"It's enough that two operators share a network to justify installing a box, and the operators are clearly benefiting," says Mikael Hällström, head of the Inbuilding Solutions unit. "And every new Combining Unit can serve up to twelve operators simultaneously, and is capable of handling both 2G and 3G."



Mikael Hällström

## Everything in a box

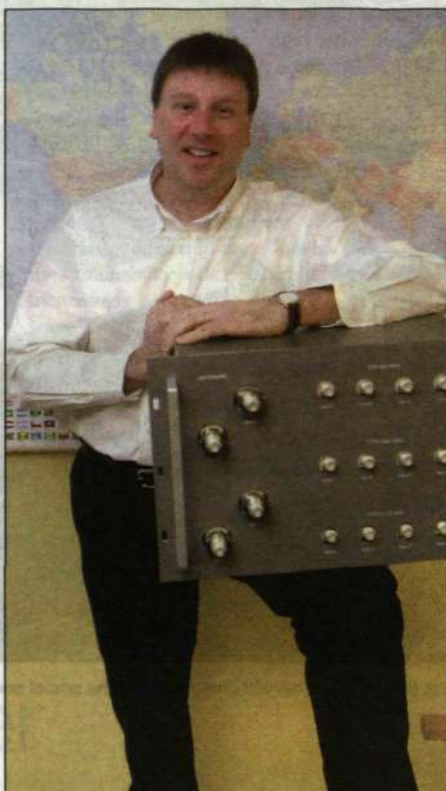
Ericsson's product, whose full name is "3-band 4-port Multi Operator Combining Unit" has several unique properties, including very little power loss.

"The box we see here corresponds to an entire wall of various parts that must otherwise be connected together with cables," says product manager Kenth Höglund at Ericsson's unit for Antenna-near Products. It is verified and ready to hook up to the network."

The multi-operator box described pertains both to so-called passive distributed antenna systems and hybrid solutions with active systems. Inbuilding systems are divided into passive and active systems. The passive ones, which get by without signal amplification and utilize coaxial cables, are less expensive to install and work best when the distances involved are not too great. Active systems with fiber-optics are the only solution for longer distances. They are more expensive but also more flexible and can be expanded later on.

The basic design principle of the combination box is that it has twelve inputs and four outgoing antenna ports. There are four inputs for each of the frequency bands, for example 900, 1800 and 2000 MHz. The twelve signals are combined within the box and sent out to every antenna port with one-fourth power. This means that every antenna port has one-fourth of all twelve signals.

"We do not want to reveal exactly how our solu-



Ericsson's new Combining Unit, here demonstrated by product manager Kenth Höglund, enables up to twelve operators to share the same inbuilding network. PHOTO: ECKE KÜLLER

tion functions, but the heart of the box consists of a few MCMs (Multi Casting Matrix) – units that combine four incoming Tx/Rx signals with four outgoing ports," says Kenth Höglund. "Unlike our competitors, we're able to do that without any real combination losses and with very little power loss."

Each of the four outputs can serve up to twenty floors of a high-rise building, using splitters, and one unit is able to handle several hundred antennas, approximately 100 per output.

The multi-operator box is a relatively small part of the overall system, the bulky parts being the cables, antennas and services. But the box is the key to being able to combine various systems within a single network.

## Ericsson's advantage

"Our Combining Unit is the part that distinguishes our system from our competitors," says Mikael Hällström. "The fact that we were so successful is the result of the significant radio expertise within Ericsson."

The customers are operators, working either individually or jointly in a consortium with responsibility for the coverage within a building. Networks are most frequently installed in existing structures, but it is becoming increasingly common to install them while a building is under construction.

The product was developed at Ericsson and consists largely of Ericsson components, although production is subcontracted out. The Inbuilding Competence Center (ICC) is responsible for the entire solution, and also does all of the fieldwork, builds and dimensions the networks and supplies a complete solution.

LARS CEDERQUIST

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## New GSM base station conquers the world

Ericsson's new GSM radio base station RBS 2206 (RBS 2106 for outdoors) is designed to complement and eventually replace its popular predecessors, the RBS 2202/2102. Already at the start of this year, the first stations for GSM 1900 were being delivered in North America, and now GSM 900 and 1800 MHz stations are in the works for Europe and Asia.

The RBS 2206 is usually described as the GSM station that paves the way for 3G since it is EDGE-compatible and, with its double transceivers, has twice as much capacity in one cabinet as its predecessor had in two. This allows operators to position a WCDMA base on the freed-up site space.



## Now iPAQ can be used as GSM phone

At the end of March, Compaq in the UK released a telephone package that transforms the iPAQ handheld computer into a GSM/GPRS phone with support for SMS and WAP.

The solution is another step towards the integration of telecom functions into computers in the same way that phone manufacturers Ericsson and Nokia are adding computer functions to their mobile phones.

www.allnetdevices.com/wireless

## Seiko translates handwriting to PDAs

Seiko Instruments has developed a system, Smart-Pad, that makes it possible to directly transfer handwritten text or hand-drawn images on ordinary paper, using a SmartPad ink pen, to a Palm or Pocket PC handheld computer.

The written text is transmitted via infrared signals to the handheld's infrared port. The electronic pen is battery-driven and filled with ink. The written text can later be synchronized with a stationary computer.

www.seikosmart.com

## Mobile phone calls without a word

In Japan, NTT DoCoMo is developing a technology for silent mobile phone calls that will allow a person to soundlessly move their lips and have a sensor read lip and chin motions and convert them into sound.

It should be assumed that the person dictating the message must, in some way, know with what the machine will let him say. The product is expected to be ready for launch within five years.

## Free network-based courses over the Internet

Ericsson University is now able to offer all Ericsson employees more than 250 network-based courses. They are free and the offer remains valid through December 2002.

The courses are available on the Internet, which means that the coursework can be done either from home or from work. All that is required is an Internet connection and an e-mail account.

A large number of courses within many different areas are available, such as Microsoft Office 97 or 2000, Microsoft Project, Datacom, General Telecoms and Mobile Telecoms. For more information:

university.ericsson.se/netbased/smartforce.asp



This year Ericsson is publishing a sustainability report for the first time. The report will cover work in the social and socioeconomic areas as well as the environmental area.

PHOTO: ECKE KÜLLER

# Report for the future

There is increasing interest in the work done by companies to improve the environment. The focus is no longer exclusively on water and air but also encompasses the work environment and social responsibility in general. Accordingly, Ericsson's environmental report has been expanded to give a more complete picture of the company's operations.

Sustainability issues are increasingly important for companies. This applies to how companies perform in terms of natural resources and emissions, as well as how they look after their employees and how they conduct themselves in the countries where they have operations – in short, how they assume their responsibilities in an environmental, social and socioeconomic perspective.

While these are in no sense new ideas for Ericsson, this year marks the first time that the company's work in these areas has been compiled into a sustainability report. The report shows that much has been achieved. Here are a few examples:

#### Environment-related results:

- An environmental management system was introduced, with the result that Ericsson received global certification in accordance with ISO 14001 standard. The system is uniform throughout all units worldwide, and includes information about all significant activities that have an impact on the environment.
- During 2001, alternatives to brominated flame retardants were developed for 80 percent of all circuit boards. The alternative substances will be introduced during the current year.

- Lead-free production methods were developed, placing Ericsson several years ahead of its competitors (see adjacent article).
- A database containing information about the constituents in electronic components was introduced. The database facilitates the compilation of content declarations at product level. This has been done in the case of Ericsson's radio base station and control unit for the radio networks for 3G mobile networks.
- Life-cycle assessments were produced for 3G system equipment. They include information about every aspect of the products' environmental impact.
- Ericsson has introduced a recovery and recycling system for equipment that has completed its useful life. During last year, Ericsson took back 180 tons of equipment for materials recovery in Europe. The system is to be offered to customers in other parts of the world during this year.

#### Social and socioeconomic highlights:

- Ericsson has refined and adopted a Code of Conduct that covers all of the company's employees, as well as those of its subcontractors. The rules are based on UN and ILO conventions and cover, among other areas, basic human rights, such as the right to a

workplace free from victimization or discrimination on the grounds of race, gender, age and so forth. The Code also covers working conditions, such as the right to a safe work environment and regulated remuneration.

- The share savings program initiated last year covers all Ericsson employees and is aimed at increasing motivation in personnel.
- Ericsson Response lent a MiniGSM system to the UN to support aid work in Kabul, Afghanistan – the first GSM system in the country. MiniGSM is a system that was specially developed to facilitate communications in rural areas lacking in infrastructure.
- In China, the first students graduated from the Ericsson China Academy, a university program in economics, marketing and telecommunications organized in cooperation with several universities. Through this program, Ericsson is helping to develop the region in terms of corporate management skills and telecommunications.

In addition, numerous local initiatives are under way in various parts of the world:

- In Lynchburg, USA, employees are participating on a voluntary basis in a mentor program to support young people who risk ending up outside the bounds of society.
- In Brazil, employees are collecting money to pay for food parcels for the poor, and Ericsson matches the amount collected by employees.
- In China, Ericsson is supporting the work of the Earth-Friend Brigade to save the Tibetan antelope.

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# Ericsson shows positive results

While it is true that Ericsson made a multi-billion-krona loss last year, the company is achieving positive results in terms of sustainability. This much is clear from the company's expanded environmental report.

"Ericsson is achieving considerable success in its work toward sustainable development," notes Fredrik Aronsson of Ecobalance, who performs sustainability assessments of Nordic companies. "For example, we take a very positive view of the Code of Conduct that Ericsson has updated and introduced to apply to its own employees and those of its subcontractors worldwide. Another area in which Ericsson excels – setting the standard for the entire industry – is the phasing-out of harmful substances."

Ericsson's work on sustainability also earned a top grade from the Dow Jones sustainability company in the US, which last year declared Ericsson the world leader in this area in the communications technology industry.

"Rather than wait for new laws to come into force, we are taking our own initiative. In that way, we can also exert an influence on new legislation, so that it

works well for our industry," explains Lars Bernau, who is in charge of Ericsson's activities in the area of sustainable development. "We also apply the same stringent requirements in countries with weaker legislation."

The proportion of ethical funds in Sweden is 1 percent, while it is 14 percent in the US. However, far from being limited to these funds, the sustainability issue is becoming increasingly high-profile in the finance sector.

"For example, several of the major British banks now have their own analysts who focus on sustainability issues, and some of the major American pension funds are also establishing ethical rules for investments," says Fredrik Aronsson.

The same applies to certain insurance companies. Norway's largest insurance company, Storebrand, for example, has stated its intention to set basic require-

ments regarding the environment and social responsibility that companies must meet before it will invest in their shares at all. And where the major companies lead, other companies follow.

One reason for this trend is that investors cannot afford surprises, whether they concern hidden environmental hazards, inhumane working conditions or some other type of potential scandal that could affect the stock market. Sustainability reports are of crucial importance in this context.

Customers also demand that Ericsson's operations maintain a certain ethical standard, and this can also be a competitive weapon when it comes to attracting highly competent personnel.

"People want the company for which they work to have good ethical rules and conduct itself in a laudable manner in a social context, and these factors are naturally important to us as an employer," concludes Lars Bernau.



Lars Bernau

LARS-MAGNUS KIHLESTRÖM

## Green power with lead-free module

A new lead-free dc/dc converter is a recent example of Ericsson's efforts to phase out harmful substances. It is unique in its kind and has required entirely new solutions to fulfill the demands.

The converter, designated PKD, may not look like much, but nevertheless represents a significant step towards reducing the amount of lead in electronic equipment.

The module converts voltage from a distribution level of 48 volts down to a few low-tension volts to power electronic circuits on a single board.

This type of circuit is being increasingly employed in the next-generation of electronic systems. For this reason, it is of major importance that it is lead-free.

"The unique aspect of this circuit is that it is produced completely free of lead and, in particular, that it can also be soldered into position on the board that it is

to supply without using lead," explains Henrik Sundh, project manager for the PKD module.

Conventional solder contains lead to make the solder soft and easy to fuse. When using lead-free soldering, a higher temperature is required, which places higher demands on the components, for instance, in terms of moisture. Otherwise, the water in the component will expand and there will be a "popcorn" effect inside the circuit.

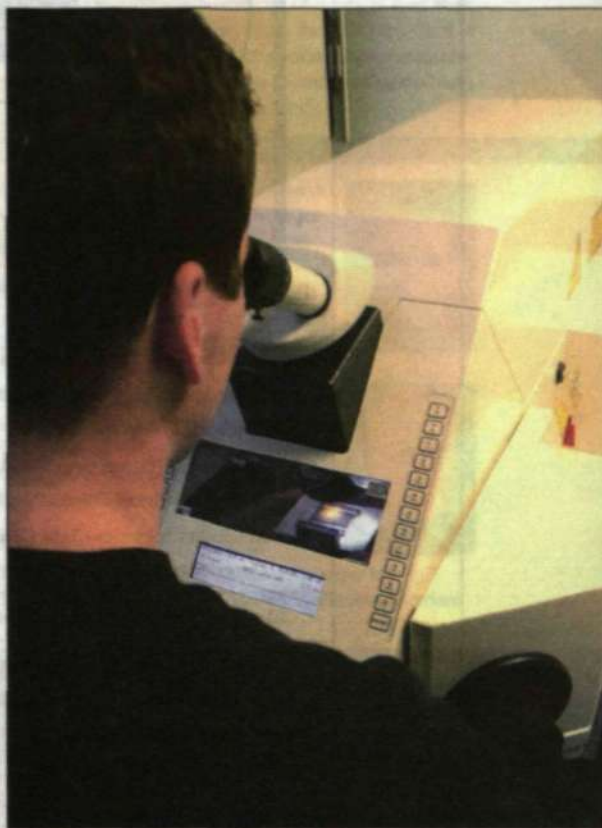
However, an even harder nut to crack for Henrik Sundh and his designers was to make it possible for the module to be surface-mounted without the use of lead solder. Otherwise, a lead-free module would obviously be quite pointless. This was resolved by developing a process in which the module's legs are welded in place by laser technique.

"In this way, the customer can solder the module lead-free, without the legs coming loose because of softening soldering at the other end," explains Henrik Sundh.

The choice was also made to manufacture the circuit board in a ceramic material. This reduces the amount of flame retardant. The amount of environmentally harmful plastic is also reduced.

The development of this new module is partly the result of Japanese demands and future European regulations, the RoHS and WEEE directives.

In Japan, the level of environmental consciousness has always been high, and last year a law that requires manufacturers to recycle their equipment was introduced. In Europe, lead will be completely prohibited in new electronic products in a few years. However, Ericsson has resolved to develop the first entirely lead-free complete circuit board this year and the PKD module is a step in this direction.

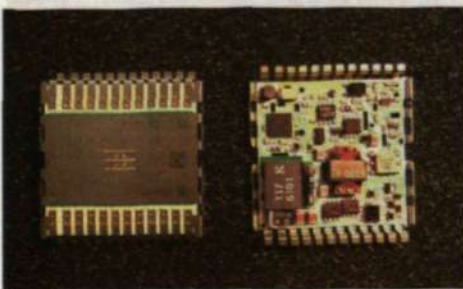


The new PKD dc/dc converter from Ericsson Power Modules is produced completely free of lead. The joints to the mother board are soldered by laser, for example.

PHOTO: ECKE KÜLLER

"Already three years ago, we made the decision to develop a lead-free dc/dc converter. Today, we have a three-year lead on our competitors and they are completely staggered that we have now taken this step," says Patrick Le Fèvre, marketing director at Ericsson Power Modules.

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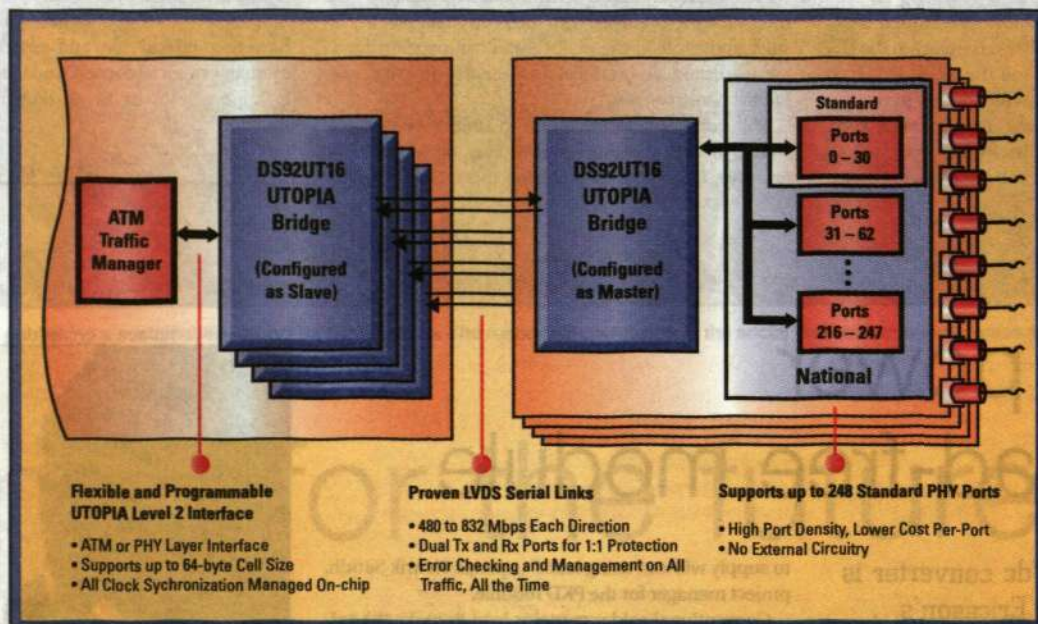


The use of a ceramic board means that the amount of brominated flame retardant is reduced.

PHOTO: ECKE KÜLLER

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 The Sight & Sound of Information



Kurt Hellström receives a bouquet of flowers in New Delhi, India.

PHOTO: SANJAY GUPTA

## Flourishing prospects

Things are looking good for the Mobile Internet market in India. The latest addition to the Ericsson Mobility World family is a new center on the first floor of Ericsson's Bhikaji Cama office in New Delhi. Kurt Hellström was there to cut the ribbon and receive a guided tour of the facilities, and Sanjay Shar-

ma, general manager of Mobile Internet Applications & Solutions gave an update on the many partnering projects that are already underway at the center. In the picture Abha Kukreja, engineer at Ericsson, presents Kurt Hellström with flowers while Jan Campbell, head of Ericsson in India looks on.

## Comprehensive recycling plan

Maria Hüge Brodin, of the University of Linköping, has been conducting research in conjunction with Ericsson about how best to organize logistics and transport for the recycling of used products. She recently defended her doctoral thesis, a comparative study of paper and electronics recycling entitled, "Logistics Systems for Recycling – on the Influence of Products, Structures, Relationships and Power".

"One important conclusion that I reached was that recycling logistics cannot be viewed as a separate aspect, but must be integrated into a company's overall logistics system," says Maria Hüge Brodin, who will continue to conduct research for Ericsson.

inside.ericsson.se/sustainability

## Keeping thumbs on their mobile phones

Mobile phones, Gameboys and handheld computers are changing the way we use our hands. This is according to a study by Warwick University in the UK, which involved young people under the age of 25 in nine major cities. According to the report, young people are using their thumbs to press keypads, while older and less experienced users push with their fingers.



"One of the characteristics of humans is that their thumbs function differently than their fingers. That is why it is so interesting to see the younger generation instinctively choosing to use their thumbs as fingers," says Sadie Plant, who conducted the study.

## new assignments

Effective May 1, 2002, **Enrico Leonardi** is appointed key account manager for Syria Telecom (STE), and will also be country manager of Syria. In this capacity, he will be part of the Extended Management Team of the Market Unit Middle East.



Effective May 1, 2002 **Staffan Pehrson** is appointed president of Ericsson Hungary and country manager. He will succeed **Istvan Fodor** who enters into retirement.



Effective May 1, 2002, **Antoine Nehme** is appointed key account manager for Mobilecom in Jordan, and country manager of Jordan.



### from the archives

Although complaints about lack of manners on the part of mobile phone users are often heard today, a 1953 *Contact* article shows that telephone etiquette, or a lack thereof, is not a new phenomenon. Here are some of the most repulsive examples – the shouter, the mumblor and the beauty queen. *Contact* suggested that you speak clearly and with a friendly tone of voice.



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Elsie Henriksson has been involved with organizing Ericsson's Annual General Meeting for the past decade and has been in charge of practical preparations since 1996. Planning for the Annual Meeting is a year-round activity, and as soon as it is finished, Elsie Henriksson and her colleagues begin preparations for the next one. PHOTO: GUNNAR ASK

## Meeting the challenge

Cinnamon buns and security fences. For many Annual General Meeting participants, one might be more important than the other. Nevertheless, it is Elsie Henriksson's job to ensure that both are in place when the meeting begins.

The time is 2:30 p.m. on the day of the Annual General Meeting. Wandering the corridors of the Stockholm Globe Arena is Elsie Henriksson, project manager for Ericsson's AGM. She talks virtually nonstop on her mobile phone. Just hours away from the arrival of thousands of shareholders at the Globe Arena, in Stockholm, one would expect to find her a nervous wreck – instead she exudes harmony and contentment with her job.

"Most of the job has already been done, and we have a fantastic group of people working on this. Now all I can do is hope that everything goes according to plan," she says happily.

Her extensive experience undoubtedly plays a role in her calm. She has been involved in organizing Ericsson's Annual General Meeting for the past decade and has been in charge of practical preparations since 1996. As soon as this year's meeting is finished, planning for next year's event will begin for Elsie Henriksson and her colleagues.

### Two major tasks

Planning the AGM consists of two main parts. One involves legal aspects including ensuring that the meeting is in compliance with the Swedish Companies Act in terms of registration, notice of the meeting, agenda and so forth. The other involves the practical aspects, which are Elsie Henriksson's responsibility, and include everything from booking the meeting facility and arranging refreshments, functionalities, sound, lighting and other

equipment, to ensuring the safety of the Board members and meeting participants. Security aspects, in particular, have become much more stringent in recent years.

"Naturally, this has to do with the greater degree of interest in Ericsson in general. This interest is reflected in the fact that the number of meeting participants has doubled in recent years," she says with a smile as she recalls a particularly hectic year as project manager.

"In 2000, we had planned to hold the meeting at the Victoria Hall in Älvsjö. But just a fortnight before the scheduled date of the meeting, we realized that we had received so many registrations that we would have to quickly find a different venue."

### Few large facilities

That was easier said than done considering that there are few facilities in Stockholm that can handle 4,000 people, especially at such short notice.

"First I said to myself, 'we should really have booked the Globe Arena' and then 'well, why not call and check'. Incredibly, the facility was available and we worked overtime to deal with the new situation," says Elsie Henriksson with a laugh.

Ever since then, "booking the Globe" has been very high up on her list of things to do.



LARS-GÖRAN HEDÍN  
corporate editor

## Honoring those who deserve it

The other day, I conducted my third interview with an outgoing chairman of Ericsson. Hans Werthén, Björn Svedberg and now Lars Ramqvist – a triumvirate of talented business leaders who have followed the traditional career path at Ericsson, moving from president to chairman of the Board. Recently elected Michael Treschow is a break with that trend, however. While some view this as being healthy for the company others criticize it. I have no intention of entering into that debate. No, the point I would like to make is quite different. When discussing what the new chairman will mean to the company and what the outgoing one has accomplished, we should not forget that there are other factors that are truly decisive in a company's success.

That Ericsson shares have grown in value by more than 1,000 percent since the early 1990s has nevertheless had quite a bit to do with how the telecom industry has developed in general – and with how Ericsson managed to capitalize on this development. I do not want to play down the importance of strong, decisive senior management. At the same time, however, I would like to remind people that it is the efforts of many individuals that explain why this company has become a leader in the telecom world. The determination to act on an idea that can improve something, or a clever business concept on a smaller scale, can be just as important as a strategic decision made at the senior management level.

Just one example is enough for everyone to understand what I am talking about. When Åke Lundqvist and a few people around him were working to develop Ericsson's first modern mobile phone system, they initially did so without management's approval. They secretly used leftover development money on the AXE side to develop radio technology. There is no need to elaborate on what their determination and passion for their work has meant to Ericsson.

In saying this, I do not mean to encourage rising up against management. Instead, if possible, I would like to inspire all of my colleagues to continue to take personal responsibility for constantly improving our operations and becoming more efficient. If we receive clear signals from the top about what is expected of us, then I believe that we will all do our utmost to live up to those expectations – and perhaps even surpass them.

### the ericsson b share



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