contact

PHOTO: GUNNAR ASK

Stockholm severely affected by layoffs

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PHOTO: GUNNAR ASK

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PHOTO: ECKE KÜLLER

Services that make 3G profitable

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no. 9
May 16, 2002

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Task force to promote telecom

The Swedish Government is planning to appoint a task force, which is to include Ericsson, to investigate how the outlook for future opportunities for the telecom industry might be improved.

The instigator of the task force is the Swedish Deputy Minister for Industry, Mona Sahlin. According to Mona Sahlin, the telecom industry is too important for Sweden for the state to stand by passively when the industry is struggling with weak demand, as is currently the case.

"I am convinced that we must find fast, clear-cut forms of cooperation within the telecom industry, the operators, the service suppliers and the public sector.

"The reason is the enormous importance that the telecom industry currently has for the country's growth," says Mona Sahlin in an interview on Swedish radio.

According to Monika Lövström, political IT expert with the Ministry of Industry, the task force will represent telephone operators, the National Post and Telecom Agency, the Swedish Competition Authority and Ericsson.

The task force will discuss and investigate ways in which the industry and the state might jointly improve the future outlook for telecom companies in Sweden. The idea is that the group will pass on advice and suggestions to Mona Sahlin when she prepares to introduce a bill for new telecom legislation later this year.

Ulf Pehrsson, who is in charge of Ericsson's relations with the public sector, welcomes Mona Sahlin's initiative and confirms that Ericsson will agree to be part of the task force.

"Ericsson has been in close communication with Mona Sahlin since the autumn. The appointment of the task force is the result of this communication," says Ulf Pehrsson. He then adds:

"We consider it a benefit to be involved and actively influence these issues, and we are hoping it will lead to concrete action and results."

Ulf Pehrsson

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Swedish Deputy Minister for Industry Mona Sahlin is behind the initiative to start the action group, the aim of which is to establish forms of cooperation between the telecom industry and the public sector.

PHOTO: TOBIAS RÖSTLUND/PRESSENS BILD

Rights Offering affects communications

In its report on the first quarter of the year, Ericsson announced that the company is to implement a Rights Offering. The issue process is expected to continue until the end of the third quarter. During the process, all employees must be particularly mindful about any statements, and avoid making forecasts.

"It is important that all shareholders receive the same information, and that communications from Ericsson are coordinated. If the rules governing new issues are not respected, the entire process could be delayed," says Nina Macpherson, corporate legal advisor for Ericsson.

She explains that employees who receive questions from customers and suppliers that involve the Rights Offering and Ericsson's financial position must not provide any information beyond what is stated by the company in its first-quarter report.

Nina Macpherson

Employees must not make any forecasts or statements about the future, either, during the period in which the issue is being prepared and during its implementation. Employees may not offer further comments on the new issue, and all questions from the media must be referred to the company's external relations department. Questions from investors must be referred to Investor Relations. Generally, communications rules will not affect employees' day-to-day business contacts.

There are no restrictions on communications concerning Ericsson's products and services, communications on new contracts, and the marketing of products and services.

Rights Offering is an offering of common stock to investors who currently hold shares which entitle them to buy subsequent issues at a discount from the offering price.

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Hello there...

PHOTO: JASNA GLAVAS

Gordana Kovačević, who was awarded the "Business Woman of the Year" prize by the Croatian business magazine Zaposlena." Each year, the magazine nominates about ten women who have contributed to the Croatian society or business life in a positive way. Gordana Kovačević is vice president at Ericsson Nicola Tesla.

Congratulations, how does it feel to win this prize?
"Very nice, thank you. I see the award is not only for me, but also for all my colleagues at Ericsson Nicola Tesla. The prize will motivate us to continue our hard work."

Why did you get this award?
"It has been assigned to me for everything I have achieved during my long career within Ericsson, especially my contribution to customer solutions and the development of our relations with customers in Central and Eastern Europe."

What does it mean for you personally to get this award?
"During my entire professional life I have strived to set high standards and high goals for myself and my team. I'm also happy to have achieved this, while combining it with a harmonious family life."

Why is this prize important?
"I think that this award contributes to more women daring to rely on their own competence and capacity. It shows that almost everything is possible. It is very important for Ericsson in Croatia to be visible in society and among its customers and partners because of its main corporate value – competent people. This means a lot."

What other women are nominated this year?
"Among the eight women that are nominated this year are: the minister of justice, a well known author, the president of the Committee for National Defense and an editor."

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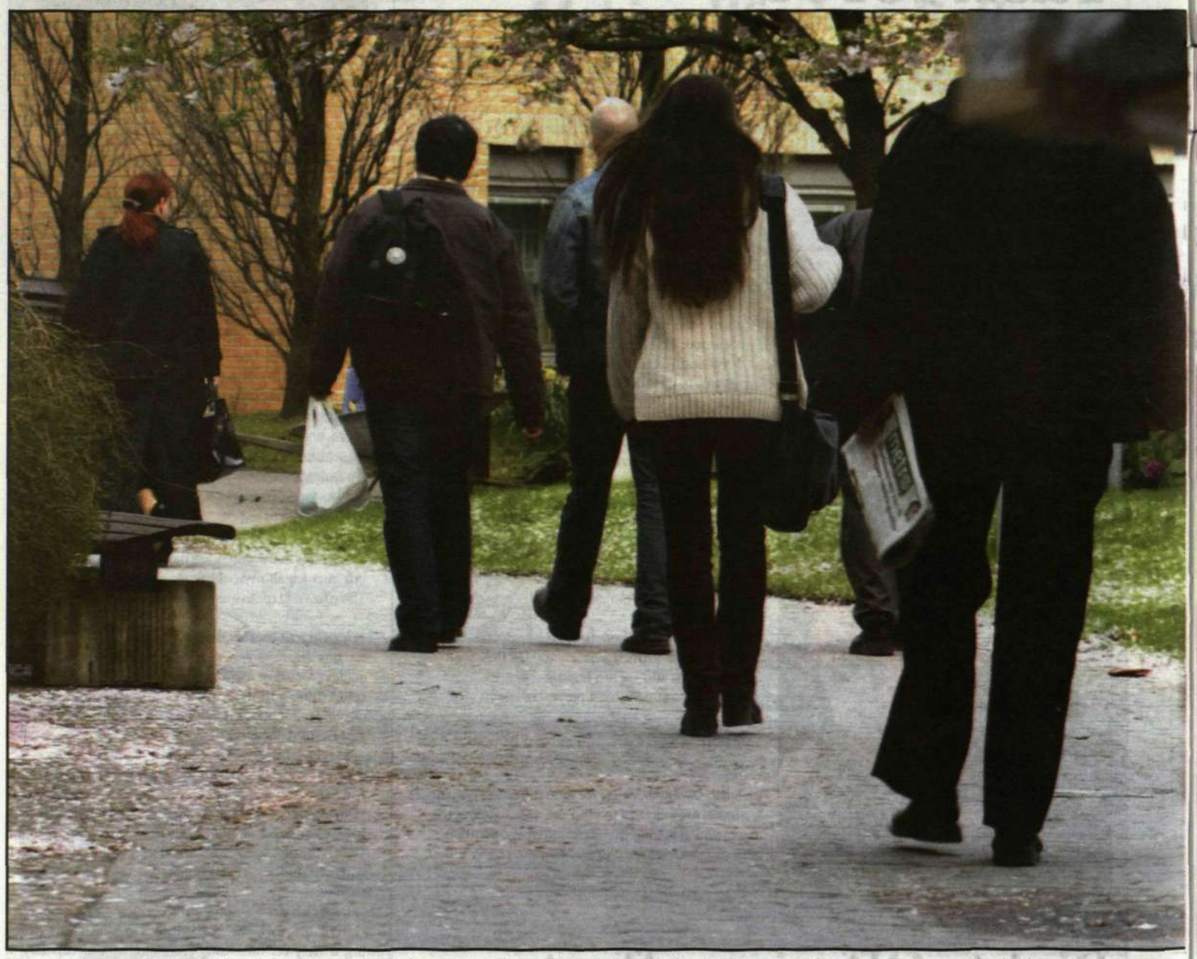
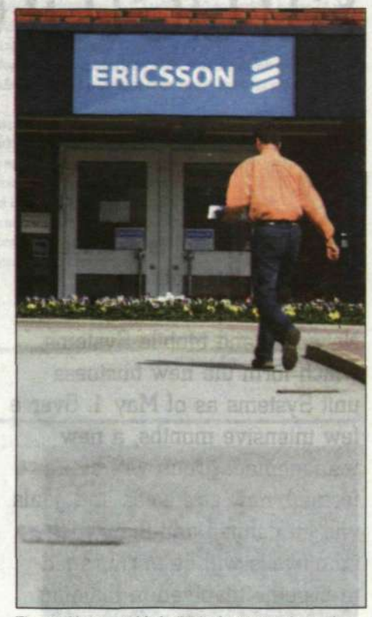
Ericsson expands China CDMA contract

Ericsson is expanding its CDMA contract with Unicom in China. The expansion will involve seven of China's provinces – Jiangsu, Anhui, Sichuan, Yunnan, Henan, Heilonjiang and Lianoning. Ericsson's total CDMA solution includes equipment such as wireless switches and control units for base stations, as well as service and training. Ericsson and China's Unicom are also jointly testing CDMA 1x. Ericsson's CDMA 1x product portfolio is based on the company's global 3G platform for switching, radio, IP, services and applications.



The economic downturn in the telecom and datacom industries is forcing Ericsson to reduce costs. Over 4,200 people in Sweden are being issued redundancy notices, including 3,500 in the Stockholm area.

PHOTO: GUNNAR ASK



The goal is to provide individual notices prior to the start of summer vacations on July 1. Before that happens, the company and unions will be negotiating how to implement the layoffs.

4,200 employees in Sweden given notice

Redundancy notices issued by Ericsson will affect over 4,200 employees in Sweden. A majority of those are in the Stockholm area, where some 3,500 people are affected.

The redundancy notices issued on May 3 and 6 are part of an ongoing review of Ericsson's organization that will result in 20,000 fewer employees by the end of next year.

The background to the cutbacks is primarily the need to save SEK 10 billion this year, approximately USD 1 billion. Notices have been issued affecting all employment categories, including union contract employees, administrative employees, salaried employees and managers.

A total of 3,500 employees are affected in the greater Stockholm area. This figure includes a previously announced reduction of around 600 people at Core Unit Supply (CSUP), including the facilities in Kista and Nynäshamn.

Another 200 people at CSUP have been given notice in Gävle and 40 in Katrineholm. In addition, 400 Ericsson employees in the Gothenburg area in western Sweden and 100 people in Karlskrona have been issued redundancy notices.

During the next stage of the process, the company will negotiate with unions over how layoffs will proceed and what conditions shall apply.

Maintainning mix important

"Of course, the Security of Employment Act will apply. In addition, decisions will have to be made regarding maintaining the appropriate mix of employees within the company. It is important that we retain the necessary expertise so that we can continue to be successful in the future as well," says Carl-Gustaf Leinar, human resources director for Ericsson in Sweden.

"This is nothing that we're rejoicing about. Obviously, people are worried about it. At the same time, we also appreciate the necessity of making cutbacks in order to reduce costs and regain a balanced budget," says Åke Svenmarck, chairperson of the Swedish Association of Graduate Engineers' local union in northern Stockholm.

"Our position is that they should first decide on what the new organization should look like. After that they can negotiate about who should be a part of it," says Åke Svenmarck.

Individual notofication

Carl-Gustaf Leinar emphasizes the importance of handling information in an appropriate manner so that employees do not have to worry needlessly or find out what is going on through the newspapers. He also points out the importance of ensuring that it is a speedy process.

"We want to do this as quickly as possible, and it is our goal that everyone receive individual notification prior to the start of summer vacations. At the same time, it's important that this is done carefully and thoughtfully," says Carl-Gustaf Leinar.

As part of that effort, managers within the line organization will receive support of various kinds in order to fulfill their duties in the best possible manner.

"It's important that managers are able to provide a good explanation as to why an individual has been selected for layoff. We've learned that lesson from previous rounds of layoffs. You have to remember that most managers in the company are used to working in an organization that has been expanding for the past decade. They are not that familiar with dealing with cutbacks."

Åke Svenmarck agrees:

"We've pointed out that a valid reason is very important for those employees who have been affected. A layoff must not turn into a major catastrophe. Last summer, layoffs were not handled well, in my opinion. This year, however, the necessary elements are in place for them to be handled much better."

In addition to the current redundancy notices, approximately 250 people were given notice earlier this year in Linköping and Karlstad.

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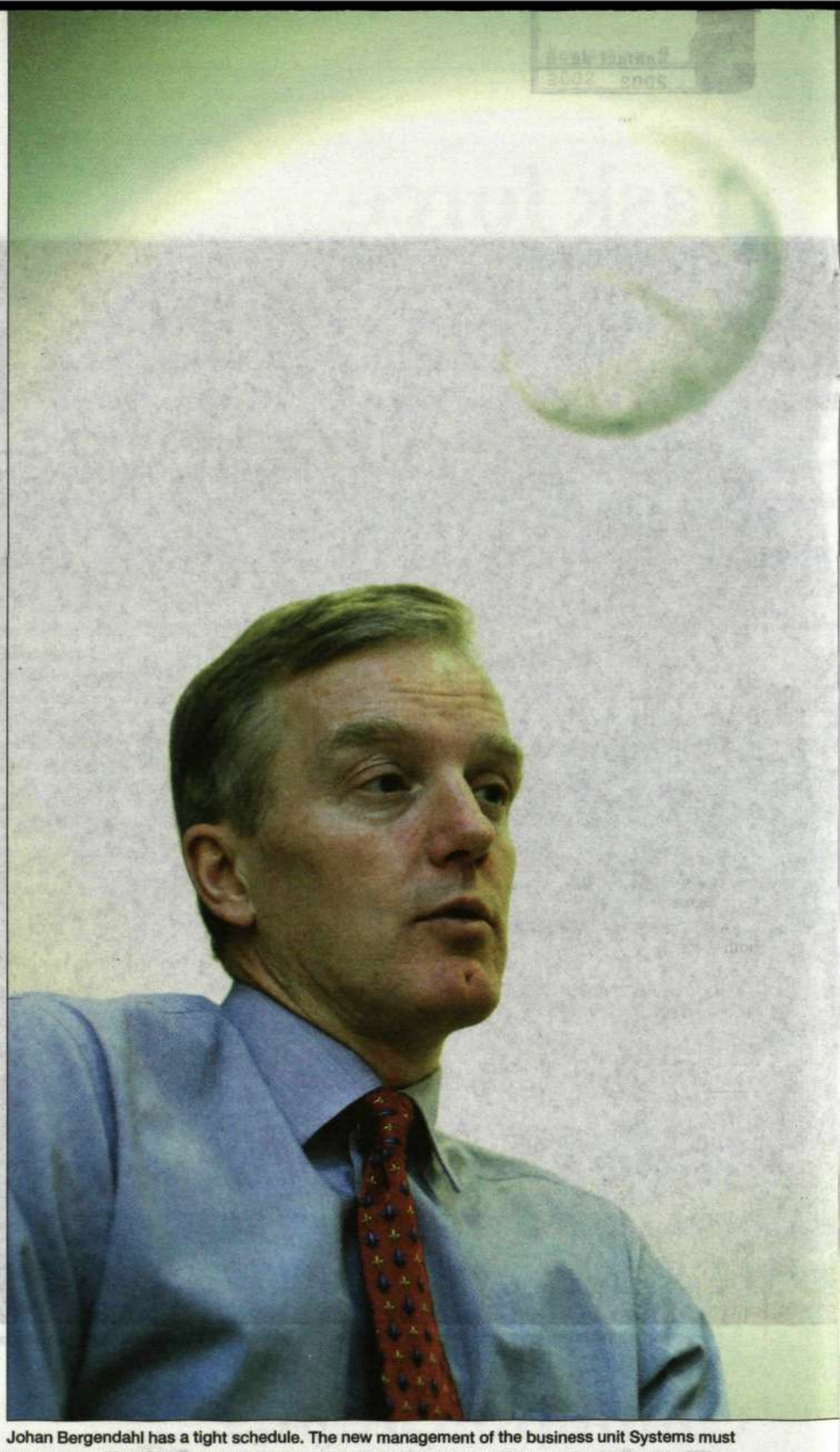
Creating a new structure

Johan Bergendahl is overseeing the task of integrating the business units Multi-Service Networks and Mobile Systems, which form the new business unit Systems as of May 1. Over a few intensive months, a new management group will be formed, new strategies and goals will be defined and the employees will be encouraged to become involved in building a partially new Ericsson.



Johan Bergendahl has a tight schedule. The new management of the business unit Systems must begin its work by mid-May and the roles and division of responsibility must be decided by July 1. The foundations of a new culture for the unit should have its basic form by the fourth quarter of this year.
PHOTO: GUNNAR ASK

"There are three main reasons for the formation of the new business unit Systems," explains Johan Bergendahl. "One is that Ericsson wants to meet the customers' need for integrated solutions for fixed and mobile networks. In addition, a merger facilitates the joint development of new platforms and structures. Last, but not least, a joint business unit will also lead to reduced costs and increased efficiency."

Other benefits are that Ericsson's sales organization can turn to a single unit in all types of issues and the risk of having a too diffuse marketing message is reduced.

The integration efforts have already begun and will be implemented in three phases. By mid-May, Johan Bergendahl will ensure that the new management starts up its work and that the roles, decision-making processes and division of responsibility are clear.

Phase two involves negotiations with the union organizations and informing personnel who are to be laid off by July 1 at the latest. Johan Bergendahl emphasizes that the operations that will be reduced in size or disappear were already identified prior to the merger. During this phase, the goals, visions and strategies for the new business unit will also be established and refined.

The third phase in the integration process involves creating and establishing a new, common culture for the business unit.

"The new culture will build on cooperation and modesty. All individuals must work with the best interests of Ericsson in mind. There are many people who believe that this will be the most difficult task, but I disagree. Using broad and open communications and with managers who practice what they preach, I am convinced that everything will work out fine," continues Johan Bergendahl.

The objective is that the foundations of a new culture should have its basic form by the fourth quarter of this year.

But how are employees expected to cope with undergoing yet another reorganization?

"This is no easy process, but if we ensure that we have effective cooperation with the unions and that we handle those who are laid off in a professional manner, it will be a positive start. It will then be extremely important to communicate the new goals and the new strategy clearly in order to motivate our employees to become involved in building the new unit," emphasizes Johan Bergendahl.

It is as yet unclear whether the new business unit will be located at one or several sites in Stockholm, a decision will be made shortly. Johan Bergendahl does not need to reflect for long about how he feels about his new role.

"I want to be involved in influencing the new business unit's development and ensure that this turns into something positive. It's a matter of deciding – I want to be part of building the new Ericsson," he says.

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Optimism and concern among employees

Martha Thernsjö and Sture Lantz both work at the new business unit Systems. They foresee many benefits of the merger, but also feel concern regarding elements of the integration process.

"Ever since 1994, various leaders in the telecom industry have been telling us about the importance of the integration of fixed and mobile networks – the creation of seamless solutions. It is positive that Ericsson has opted to take the lead and demonstrate that we take this seriously by implementing this merger," says Martha Thernsjö, who works with *market communications at the new business unit.*

Martha Thernsjö

In her marketing efforts, she wants to provide sales staff with the best tools and ensure uniform messages in, for example, campaigns.

"At the next Engine roadshow, for instance, employees from both fixed networks and mobile will be present," she explains.

At the same time, Martha Thernsjö also feels some uncertainty about the merger.

"First of all, I don't know whether I will have a job after June and this fact alone is difficult. If I can continue to work, I don't know if I will need to review some of the work that I have done over the past few months. In addition, it is difficult to go through yet another reorganization," she says.

Sture Lantz is responsible for business operations at the business unit Systems. He believes that the greatest challenge at the moment is to retain the best of both units during the merger process.

"I am involved in certain aspects of the integration process. It is difficult but important work. It is important for both units to be sensitive and modest," he says.

"When the merger is complete, the internal cooperation between the business units and market units, for example, will be *simpler, which will save time and money. In addition, I believe it* is important for the employees to learn to put the general interests of Ericsson first," comments Sture Lantz.

Sture Lantz

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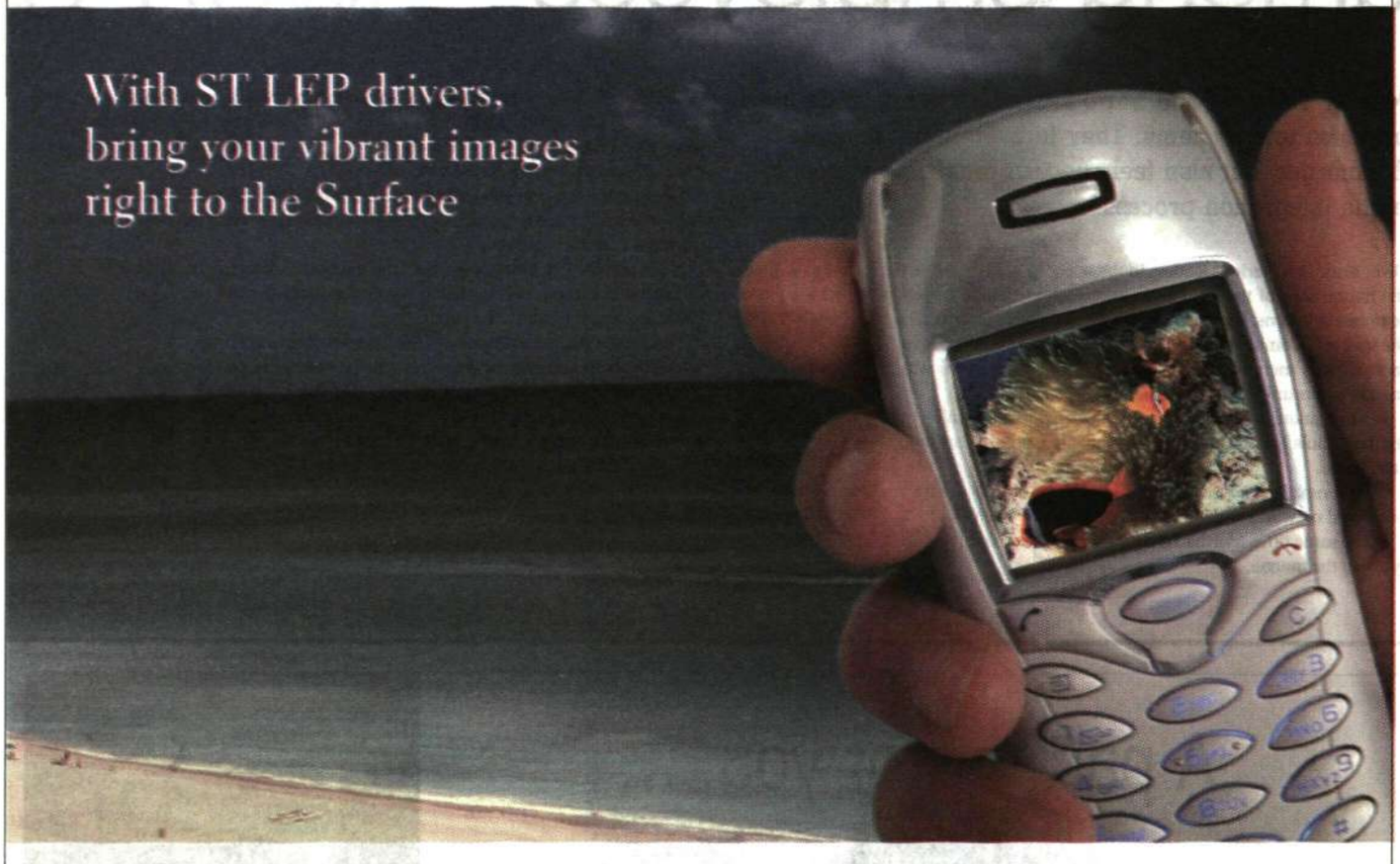

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Since May 1, Karl-Henrik Sundström has been head of the Global Services business unit. He believes that Global Services is on the right track and is satisfied with the service contracts signed with operators to date. At the same time, he emphasizes the importance of the unit providing exactly what it has promised the customers.

PHOTO: PELLE HALLERT

Global Services has a new manager and new product lines, but the business unit's goals and strategies are the same.

"Our most important mission is to deliver what we promise our customers," says Karl-Henrik Sundström, who succeeded Bert Nordberg as manager of Global Services on May 1.

"Actions speak louder"

Karl-Henrik Sundström is energetic and driven. He referes several times during the interview to the importance of getting things done.

"You can talk forever about what you can and should do. But customers want to see results, and the competition in the service sector is so intense that there is no margin for error or delays," he says.

The new manager of Global Services has worked for Ericsson for the past 17 years. Essentially, he is an economist, with a master's degree from Uppsala University. After working for a few years in various financial positions with increasing degrees of responsibility within the corporation, he was named president of Ericsson in Australia in 1999 and, two years later, assumed responsibility for the entire ANZA market region (Australia, New Zealand and Pacific island nations). Some skeptics might wonder what an economist and former market area manager can possibly contribute to an organization that derives its revenues from technical service and support.

Not completely green

"Although this is a new role for me, I understand the business potential that service offers, and I am not completely green in terms of this area's technical content."

Ericsson in Australia initiated an intensive service program last year to focus the attention of the country's leading operators, Telstra, Vodafone and Hutchison, on Ericsson's local service organization.

"One of the strongest contributing factors to our success in winning the 3G contract with Hutchison in Australia was the attraction generated by our local support and service organization," he says.

Energetic, impatient and inquisitive – that's how Karl-Henrik Sundström describes himself. His experience as president of Ericsson in Australia and market area ANZA taught him that actions speak louder than words.

Karl-Henrik Sundström is taking over a business unit characterized by strong momentum. The rough years, when efforts were focused on trying to make operators understand that Ericsson was also able to offer first-class support and service for their telecom networks, are nearly over now. Several important service contracts have already been signed, and the most recent interim report shows that sales in this area now account for 24 percent of consolidated sales.

"Bert Nordberg did a fantastic job with Global Services over the past five years. Ericsson has the highest market presence by a broad margin today, in terms of service units in all parts of the world. My job, naturally, is to make sure we maintain our position and achieve even greater success in our business activities."

He has no plans to change anything in the business model and strategies that have been established within Global Services for this year.

Satisfied customers the key

"All signs indicate that we are on the right track. We shall pursue our service growth program in the different market units as planned and continue to review our personnel to make sure we have the right skills in the right places."

He emphasizes the importance of continuing to operate Global Services as a team effort.

"Our most important mission, by far, is to deliver what we promise our customers. Satisfied customers will be extremely important, perhaps the key factor, in our efforts to continue to expand and secure more service contracts."

When the first-quarter interim report was released, an announcement was also made that product lines such as AXE classics, TDMA and PDC were approaching the end of their product cycles. The products will now be transferred to Global Services to secure their continued profitability.

"I consider this another confirmation of Global Services' ability to derive maximum benefits from mature products. Practical aspects of the transfer are now being formulated and we anticipate being able to announce them in the near future."

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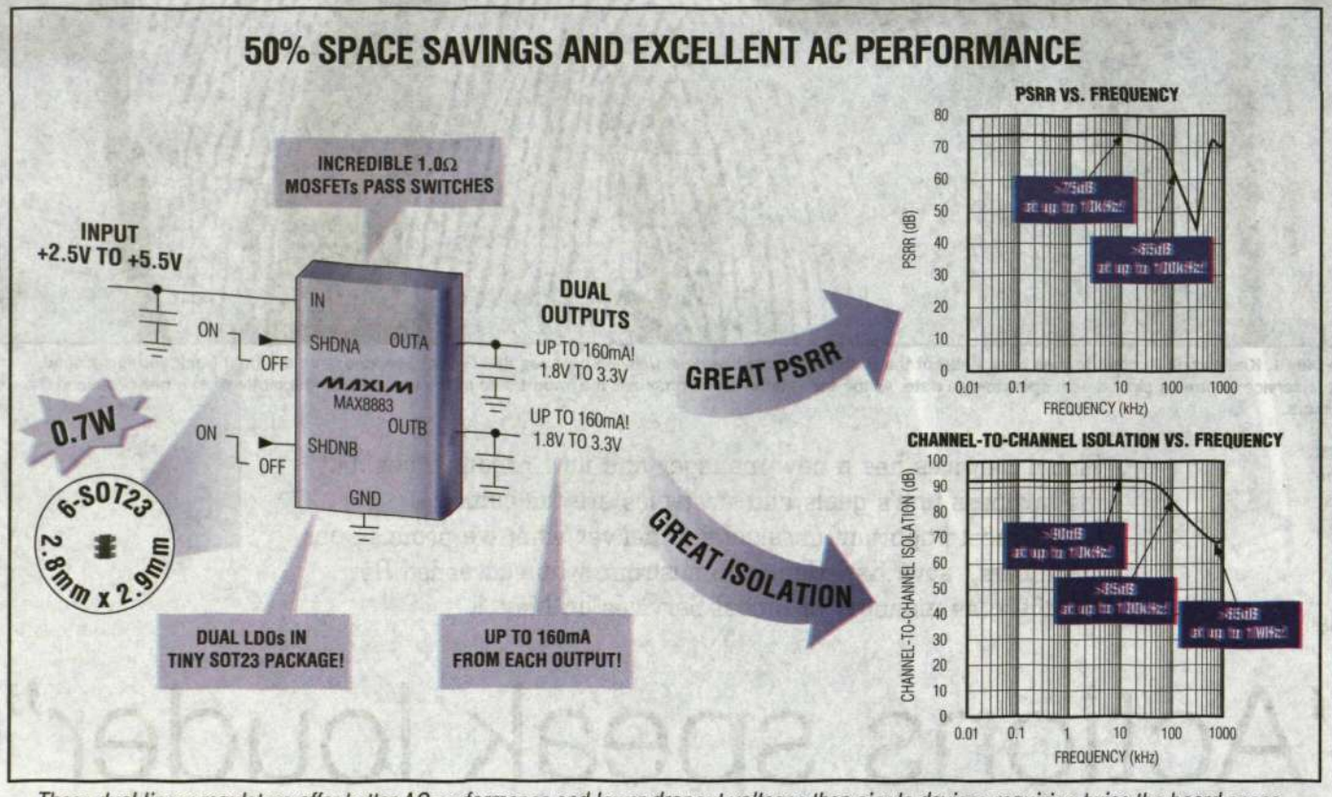

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Patricia Russo, CEO of Lucent Technologies, is unable to speculate on when the market might start to recover. Lucent reported a loss of USD 535 million in the first quarter of 2002.

PHOTO: MIKE DERER/ PRESSENS BILD

Telecom sector remains uncertain

Red figures, more personnel cutbacks and uncertainty surrounding future business prospects. When the telecom giants reported their latest financial results, the stock market reacted nervously.

"Conditions in the market have turned out to be more challenging than I think anyone in the industry might have expected six months ago and the length of this down cycle is uncertain," said Patricia Russo, president and chief executive of Lucent Technologies of the US, when the company's first-quarter results were released recently.

And there's probably no better way to summarize conditions in the telecom industry today. Although some companies showed results that exceeded the stock market's – low – expectations, widespread uncertainty clouds the future outlook of telecom companies. Nokia's results were better than expected, but when the company lowered its projected sales figures for both systems and mobile telephones, the interim report was interpreted as a disappointment.

The analytical company Dresdner Kleinwort Wasserstein said the report was "a further sign of weakness". Nokia should focus more on actual revenues, rather than the "fantastic" margins. How can margins improve when sales fall short of plans, the company asked in a research note.

Lucent issued a warning as early as March that profitability will not be reached until 2003. When the company reported its eighth consecutive quarterly net loss at the end of April, it became clear that Lucent will most likely reduce its workforce by an additional 6,000 persons to about 50,000. And the company had already eliminated 23,600 jobs before the report. Nortel has implemented even larger redundancies, with more than half of the company's workforce laid off since year-end 2000; the company has 47,000 employees today. Nortel has also announced plans to eliminate another 3,000 jobs but, according to some analysts, it will probably have to reduce its workforce by at least 10,000 persons to get back to profitability. When Nortel's first-quarter financial report was released, the company's CEO Frank Dunn told investors that surviving in today's telecom industry sometimes feel like an endurance test, according to a report in the Financial Times.

Nortel's loss in Q1 was lower than last year, but sales declined by nearly 50 percent.

"It's not pretty. You think you are at the bottom of the capex cut, but when you listen to the equipment vendors it sounds like there is more to come or you would see sequential growth, and not flat," said one analyst, according to the Financial Times.

Alcatel of France, the largest supplier of telecom equipment in Europe, was last in line to release its first quarter report. Despite a loss of USD 746 million, the company said its expects to report a positive result for full-year 2002.

It should be noted, however, that Alcatel has been widely acclaimed for its rapid reaction to the market's decline. The company is considered a model for the manner in which it has reduced purchases, eliminated jobs and outsourced production to subcontractors.

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Sources: Reuters, Financial Times, CNNMoney.com, Totaltele.com

FACTS RESULTS OF DIFFERENT COMPANIES (IN USD)

Lucent Technologies
Operating loss: 535 million (loss: 3.7 billion)
Projects operating margin of 35% before 2003

Nortel Networks
Operating loss: 463 million (loss: 2.6 billion)
Provided no guidance for next quarter

Alcatel
Operating loss: 746 million (profit: 235 million)
Expects positive earnings in 2002

Nokia
Operating profit: 770 million (profit: 870 million)
Future guidance: Lowered sales forecasts for both telephones and systems

Motorola
Operating loss: 174 million (loss: 211 million)
Expects loss again in Q2, but positive earnings in second half of 2002

(2001 Q1 results in parentheses)

Bharti's loss higher than anticipated

Bharti Tele-Ventures of India reported a first-quarter loss of about USD 11 million, which was higher than expected. The company operates six mobile networks and two fixed networks, and is India's first, privately owned long-distance operator. In mid-February, Bharti Tele-Ventures also became the first mobile telephony company in India to list its shares on the stock exchange.

New mobile operator in Malawi

Malawi in southern Africa will be served by a third mobile operator before year-end 2002, according to a recent report by Reuters news agency. Evans Namanja, director-general of the country's telecom authority, says he hopes that a third operator will help reduce prices, as subscribers have complained about the country's high costs for mobile telephony. Malawi has a population of approximately 11 million. 60,000 are customers of the mobile operators Celtel Malawi or Telcom Networks.

Good results for Swedish Vodafone

The mobile operator Vodafone in Sweden reported a 7-percent increase in earnings during 2001 to about USD 190 million. Average revenues per subscriber, however, declined marginally (2 percent), which reflects a common trend throughout the entire western world, attributed to the growing numbers of prepaid customers.

Telecom Malaysia expanding

Government-owned Telecom Malaysia has acquired 13 percent of all shares in TRI, the country's second largest mobile operator, increasing its shareholding to 15.6 percent. Deutsche Telekom, with 15.98 percent, is the only shareholder with a larger ownership interest in TRI. The industry considers the acquisition as a step toward a possible merger, and Telecom Malaysia might soon tender an offer for the German operator's shareholding in TRI, according to Mobilecommerceworld. com.

Talking about decline...

Is the current downturn within the telecoms industry comparable to the one 10 years ago, when operators made shifted from 1G to 2G? We put the question to David Chamberlain, research director of Probe Research.

David Chamberlain

"Not really. The last technology shift was driven by a strong demand for greater network capacity. But I don't know how big a demand there is for more bandwidth today.

"What people really want is 2.5 G that allows them to be always on. At the CTIA show in 2001, this was what everybody told me they wanted. And look at what is happening with J-Phone in Japan and its successful 2.5 G services."

When will the decline finally stop?

"It's impossible to say. We have to carefully observe the Orient and what happens to 2.5G and 3G there. I believe the next 12 months will decide the coming 3 or 4 years."

What should telecom equipment suppliers do in the meantime?

"They should concentrate on making operators feel safe by helping them succeed and showing success stories from operators that have already rolled out 2.5G or 3G. This would be my advice."

As part of the Traffic and Revenue Growth initiative, Ericsson has analyzed services that have proven to be good sources of revenue. Additionally, they have combined various skills, services and products from a number of Ericsson units, creating a one stop shop for customers. ILLUSTRATION: ULF FRÖDIN

Best practices to help operators earn more

The goal of Ericsson's recently unveiled Traffic and Revenue Growth initiative is to help operators earn more money from their existing mobile networks, while simultaneously getting them started down the 3G path.

"We have analyzed the services that have proven to be good sources of revenue. We've also combined various skills, services and products from a number of Ericsson units in order to provide a one-stop shop for customers," says Kurt Sillén, who is responsible for the initiative.

The number of new subscribers in mature markets is no longer increasing at the same rapid pace it once was. Consequently, it is becoming increasingly important for operators to earn as much money as possible from existing users.

Even in countries with high mobile phone penetration rates, more calls are still placed over fixed telephone networks than are made using mobile phones. If, for example, ten percent of calls placed on fixed networks were instead made via a mobile phone, the level of traffic in mobile phone networks would double.

Many operators are placing their hopes on the Mobile Internet, such as DoCoMo's i-Mode service in Japan, which has been a big success. SMS services have also been successful and today account for between 10 and 15 percent of European operators' revenues. And there is even more money to be made by making it easier for subscribers to utilize SMS, especially by employing GPRS technology to offer new and improved services.

"Many operators throughout the world have made it a habit to contact Ericsson in order to acquire various kinds of assistance. Until now, these inquiries have mainly focused on technology. Now we are starting to notice a change in the kinds of questions that operators are posing. A desire to find new services that might interest customers has led to requests for Ericsson to gather information about new, operational and profitable services from around the globe," says Kurt Sillén.

Collaboration with customer team

"We have analyzed the services that have proven to be good sources of revenue. We've also combined various services and products from a number of Ericsson units in order to provide a one-stop shop for customers. It's all about finding the best products on the market and offering them to our customers. Very close collaboration with Ericsson's Key Account Managers is essential for the Traffic and Revenue Growth initiative to succeed," says Kurt Sillén.

Using this initiative, Ericsson would like to help operators increase their revenues, both in terms of voice and data services, in existing networks, that is, 2G and 2.5G. Four key areas have been identified:

- Most importantly, end users need to be the focus, which means the right services for the right consumers, at the right price and with the right marketing.
- New services must provide something that the consumer wants because it is fun or makes everyday tasks simpler.
- These services must also be very easy to use. One example is Ericsson's Mobile Internet Easy Access solution, which enables people to quickly access the services they want.
- A fourth area identified is to offer stimulating measures for the companies (content providers) that are behind the content of various services.

List of most popular services

As a major supplier of mobile phone systems, Ericsson has built up a unique network of customers, application developers and other relevant parties within the industry. This experience and the associated contacts have now been combined within the Ericsson Traffic and Revenue Growth initiative. Included are various tools and working models for increasing traffic on existing networks.

There is also a regularly updated "top 40" list of some of the world's most successful mobile services, more than half of which are based on GPRS/WAP, and a collection of "quick wins" for operators.

Ericsson's Consumer Lab and Ericsson Mobility World, which are now located at several sites around the world, have important roles to play in this program, as do Ericsson Consulting Services.

"When we combine Ericsson's resources and experiences, as we have now done with Traffic and Revenue Growth, we end up with a good way to market the products and services that we have to offer. The initiative is also intended to get operators to perceive Ericsson as the supplier who makes it possible for them to bring in more revenue from their current network. This is all about partnerships with customers," says Kurt Sillén.

Conducting workshops for customers is another important part of the Ericsson Traffic and Revenue initiative. The first workshops were held in Asia earlier this spring. Since then, several more have been given and additional sessions are planned with operators around the world.

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Workshops lead the way

One of the very first customers for whom Ericsson gave a workshop was the operator Peoples in Hong Kong.


Charles Henshaw

"It is interesting that Ericsson is taking this initiative to increase the traffic in today's network. It was a worthwhile workshop and the services presented were interesting. Although not all of them are suitable for Hong Kong, we can learn from what Ericsson presented," says Charles Henshaw, CEO of Peoples Phones.

Downloading various ring signals and graphics is one of the most popular services the operator offers today. Inter-operator SMS only started a few months ago in Hong Kong due to complex issues with Mobile Number Portability. The increase of SMS messaging has been threefold since then and is growing.

"We are extremely interested in MMS and, personally, I believe it can become a killer application in Asia and one of the principle contributors for GPRS usage. Everyone here likes to take photos and being able to send pictures by mobile phone will be appreciated by old and young," continues Charles Henshaw.

He believes there will be a snowball effect once the service is launched in Hong Kong. At the same time, he emphasizes how important it is that services and telephones are truly easy to use. Roaming between different operators must be available in order for the application to be a success.

This past January marked the fifth anniversary of the launch by mobile phone operator Peoples in Hong Kong of its GSM 1800 system. Today the network has approximately 700,000 subscribers. Altogether, there are six mobile phone operators in Hong Kong, with a penetration rate of about 85 percent.

"Ericsson supplied us with our infrastructure and we are convinced this has contributed to our success," says Charles Henshaw.

In addition to Peoples, Far EasTone, Taiwan's third largest mobile operator, with just under four million subscribers, was one of the first customers for whom Ericsson held a workshop in Asia. Joseph O'Konek, president of Far EasTone, believes that it was an outstanding opportunity to exchange ideas.


Joseph O'Konek

"Ericsson's Traffic and Revenue Growth program is interesting to us – especially finding out information about successes in other markets with high penetration rates," he says.

Currently, services based on SMS are the most popular among Far EasTones' customers.

"Location-based services are also going to become very popular," predicts Joseph O'Konek.

GUNILLA TAMM

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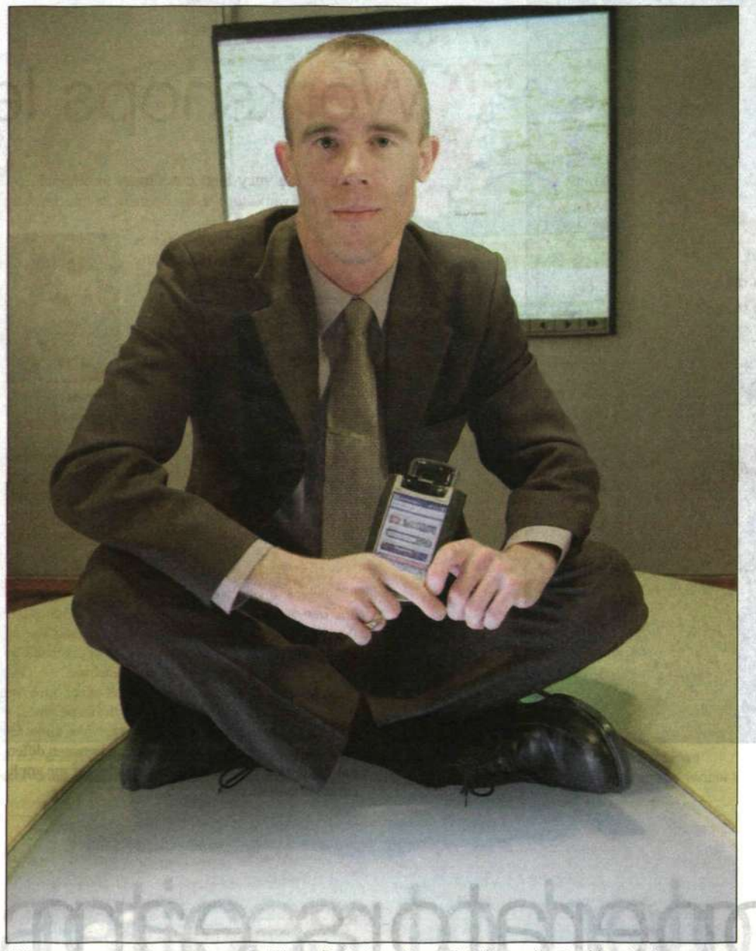
Packed portfolio gives a taste for 3G

Games, news, music videos, chat – Ericsson's fully packed 3G portfolio shows that the Company does not just deliver infrastructure. It is also leading-edge in the drive to make 3G a profitable business.



"A frequent question from customers is 'When will this be on the market?'" says Jon Gamble, who demonstrated Ericsson's 3G applications at both the Cannes trade show and CeBIT. PHOTO: ECKE KÖLLER

Once operators launch their 3G networks, generating traffic as quickly as possible will be crucial. Consequently, stimulating the development of 3G services is a key aspect of Ericsson's Mobile Internet strategy.

"We want to make sure that the Mobile Internet becomes a profitable business, not only for Ericsson but also for mobile operators and for the companies that develop services," says Helene Birknert, who is in charge of Mobile Internet marketing strategies at Ericsson's Systems unit.

Ericsson's 3G portfolio, which was developed in close cooperation with customers, contains several services aimed at both the business and the consumer market.

Some of the services were developed by Ericsson itself – particularly in the Business Innovation and Service Networks and Applications unit – but most were developed by other "third-party" companies within the framework of Ericsson Mobility World.

"In cooperation with customers, we selected solutions we believe will be commercially viable. It is important that they have a clear purpose to allow for service differentiation," says Helene Birknert.

Focus on three areas

For a long time, Ericsson's product portfolio was a smorgasbord of different applications. However, as a result of the new Mobile Internet strategy, the range was narrowed to focus on three specific areas: multimedia (for example, games, ring signals and music), messaging (such as chat services and instant messaging), and location based services.

To date, the 3G portfolio has been exhibited at the GSM show in Cannes and, most recently, at CeBIT in Hanover. Jon Gamble, who is in charge of customer demonstrations, has observed customers' reactions at the trade shows while demonstrating the services at the company's stand. According to him, the services have been very enthusiastically received.

"Customers need profitable services, and there is clearly a lot of money to be made here. Frequent questions are: 'When can we get this? Is it available now? What's the price?'" says Jon Gamble.

Right business model

The demonstration of 3G services works as an appetizer for operators that are about to launch their WCDMA networks. At this stage, it is particularly important for Ericsson to keep a high profile, and to show that it is already possible to launch the networks commercially and that the company has the necessary resources and the expertise to deliver and integrate customers' new systems. Here the Global Services unit plays an important role in helping customers select the right business model and ensure that the business strategies are translated into appropriate network and IT solutions.

The unit also ensures that the wireless applications are always available and reliable, by securing the data flow through all network levels and nodes in the WCDMA system.

"Ericsson turns WCDMA into reality. We are world leaders in this area, having delivered commercial WCDMA equipment to over 30 operators worldwide to date. We provide total solutions, including infrastructure, terminals, applications and integration services. We're ready for delivery. We're ready for operation. Now we're showing that we're also ready to do business," says Helene Birknert.

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Jon Gamble and Helene Birknert consider it important to give Ericsson's customers practical experience of the services that will become possible with the new WCDMA networks.

Jon Gamble about some of the applications that will be shipped to WCDMA-customers:

"The Interactive tour guide is a service for tourists that want to make the most out of their visit in a new city. Through a positioning system the application knows where you are, and can tell about the things you see around you, and direct you toward other interesting sights. So instead of paying for a bus tour you can let your handset guide you through the streets."

"SeaWars is based on the well-known game Battle ships. You can play it alone or with a friend connected to the same infrastructure. I really like the graphics of this game, they are very advanced."

"Bloomberg gives you the latest stock market results, news broadcasts and other current information through Ericsson's streaming platform Multimedia-on-demand."

"The Mobile Workforce Manager is an application aimed at enterprise customers, for example road carriers, home-help services or repair firms. Through the application, assignments and directives are given to a working team on the move. It's one of my favorites because it is so generic but still solves a problem in an excellent way by using data from the customer. It's a new area that operators will look into because it is clear that they can make money out of it."

"Visual greetings are an example of rich messaging content that 3G networks facilitate. It's based on normal e-mail and you can send graphics, animations and sound. So instead of just writing a message you can let the animation say it."

Practical experience drives the market

Operators will soon be able to experience next-generation telephony for real when Ericsson begins to ship applications for all of its initial WCDMA systems. The aim is to drive the commercial launch of the next generation of mobile telephony.

When Ericsson supplies test networks to potential customers, not only infrastructure is involved. To give them a thorough understanding of the meaning of 3G, terminals and applications are also included. Deliveries are now beginning of a portfolio that will contain approximately 15–20 applications, aimed at both enterprises and consumers.

"This is the first time that operators will be able to demonstrate actual Mobile Internet services in their WCDMA systems. The aim is to show examples of the kinds of new services 3G will bring to users, provide them with hands-on experience of what 3G has to offer and to encourage the rapid build-out of their commercial systems," says Kevin Nicholl, who works in the marketing department of Ericsson's Business Unit Systems.

He has been involved in selecting services from Ericsson's regular 3G portfolio in order to form a collection of applications that are especially suited to demonstrate to operators the added value of increased bandwidth. Greater interactivity, richer content and enhanced features such as positioning and streaming multimedia are some of the improvements that the operators will notice. When the initial period is over in the middle of next year, the operators will be able to contact Ericsson or the third-party suppliers in question if they want to continue to use the applications and perhaps also launch them in their commercial WCDMA networks.

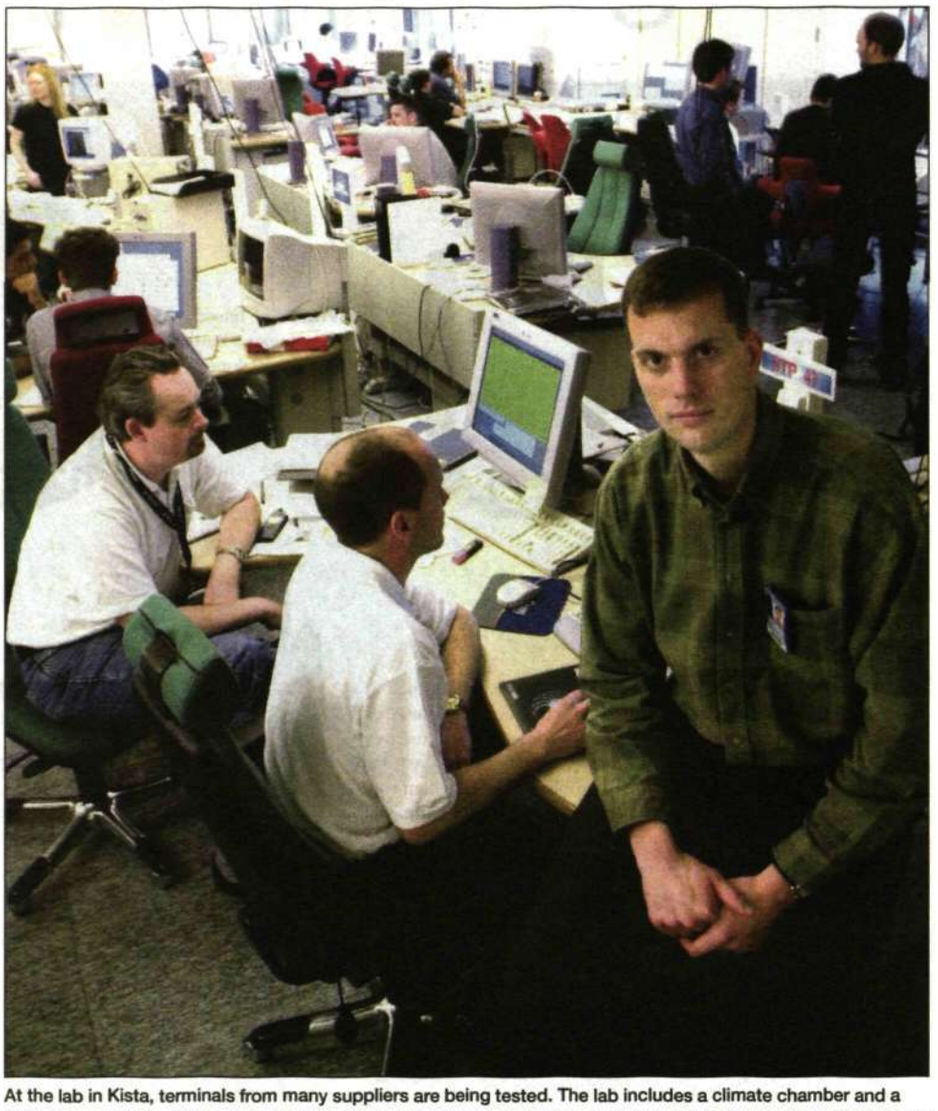
"Naturally, we hope that as many as possible will take this opportunity. It is a win-win situation for both parties; the operators get help from us in locating commercially viable services and we get the possibility to stimulate the deployment of WCDMA and the growth of the Mobile Internet market," says Kevin Nicholl.

Kevin Nicholl has been involved in selecting services that are available from Ericsson's regular portfolio.

TONYA LILBURN

Polishing WCDMA networks

This is the first of three articles on WCDMA. Here we describe how Ericsson puts the finishing touches to the network before delivery to the customer. The next article will describe how Ericsson supports customers after delivery, while the third will discuss what WCDMA means for ordinary people.



At the lab in Kista, terminals from many suppliers are being tested. The lab includes a climate chamber and a test rig to ensure that the equipment meets EMC requirements. "Visitors are usually impressed to see how much real hardware we have," says lab manager Jan Häglund, adding that it is important to have the same equipment as customers to be able to solve problems that may arise. PHOTO: ECKE KÜLLER

At Ericsson's Integration and Verification Lab in Kista, highly qualified staff work with final testing and trimming of the WCDMA radio network to ready it for the customer's commercial launch. Testing includes 3G services and applications that will be important for end users. Nearly all work is performed using actual hardware to ensure that the tests are as realistic as possible.

The lab's equipment room is lined with radio base stations, radio network controllers, nodes for operations support and core network nodes, all of which have been taken directly from production. A total of 35 test chains have been established, each with its own team working in parallel with others to solve problems.

Put simply, the teams put hardware and software into operation and test whether or not it works as it should according to the system documentation, which is standardized by 3GPP. If it does not, they send fault reports to the designers, who correct the fault and deliver a new unit.

"The people working here are all very knowledgeable, and many have been working with mobile systems for at least ten years," says Jan Häglund, who manages the lab and has himself worked with WCDMA since 1994 when the technology was still in the prototype phase.

"Many have also worked with the standardization of WCDMA, an area in which Ericsson has been a leader and contributed about a third of the technical specifications, which has put us in a very favorable position when developing our system and enabled us to get products out quickly," says Jan Häglund.

The WCDMA standard has been refined in stages through various versions of 3GPP Release99 but has now been frozen.

System functionality verified

The work consists of three parts: integration, functional verification and system verification. Integration means that the radio network is connected to a real core network with AXE and GPRS and tested with various phones. During functional verification, all parts of the system are tested to make sure that everything functions correctly even under worst-case test conditions. System verification is about testing the entire system's behavior during which various performance parameters, such as overloading and the handling of large networks and many users, are evaluated.

"Checking vital functions, such as power regulation and handover, is time-consuming, but we have excellent control over the system and do not really see any fundamental problems," says Jan Häglund. "The standard is completely new and includes many new services, but we are making constant progress and starting to see the end of the first phase."

Most critical at the moment are mobile phones. For some time, the lab has been working with phone manufacturers to develop terminals with functionality that can be tested successively at an early stage. The whole idea of integration is to be able to test the entire chain, from the mobile to the base station and onward into the core network. However, when many calls must be tested simultaneously, an exception must be made from the principle of using real hardware. Instead, test environments are created using simulators that provide a background environment against which real mobile phones can be tested. There is also a test network in the northern suburbs of Stockholm that is used to enable field studies of network characteristics to be conducted quickly.

Part of a larger program

Although integration and verification work is a complex and methodical task, it is an important part of the puzzle in Ericsson's total plan for getting functioning networks out to customers quickly.

A very important part of testing concerns interoperability, meaning that equipment from different suppliers must work together. Operators of 3G networks demand to be able to mix equipment from different suppliers. This applies to the core network, the radio network and other equipment, as well as mobile phones. Interoperability is based on the 3GPP standard. The lab for interoperability testing is well established and the test procedures are based on extensive experience with similar tests for 2G networks. Work with 3G testing is progressing according to plan.

The next step is to test the networks in the field on a larger scale before they are ready to be released for 3G users in customer networks.

Customer networks are not test networks, but rather real networks on a small scale that constitute the first building blocks in a larger network. One feature of the WCDMA concept is that it is based on the GSM infrastructure, meaning that it can be deployed successively. Ericsson already has more than 30 networks in operation with customers using commercially and fully tested equipment.

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Flexible and powerful WCDMA base stations

An important component in the new WCDMA networks are the radio base stations that have already been delivered to Japan, the UK and several other countries. In the space of just six weeks, large numbers of these will now be installed in Telefónica's Spanish network.

The outer cabinet and compact building practice for the WCDMA base stations are identical to the new GSM base stations. Inside, however, there are major differences. In a WCDMA network, all calls are transmitted on the same broad 5 MHz frequency channel and distinguished from each other by being assigned a code (Wideband Code Division Multiple Access), while GSM calls are handled by allocating repeating time slots for each call on a narrow 200 kHz channel.

One consequence is that cell planning is not required. Each cell provides roughly the same coverage as in GSM 1800. All WCDMA base stations use the same 5 MHz channel, and a single base station may has three sectors, for example, each using the same frequency. (The operator can add an additional 5 MHz carrier to increase capacity.) Although some things are more difficult, it is also possible to make significantly more flexible use of resources than in GSM.

Dynamic resource allocation

"An important difference is that in WCDMA base stations, we have separated the digital baseband portion from the radio sub-system," says Martin Högberg, who works with technical support. "A GSM operator buys capacity with the number of transceivers, while in WCDMA resources are pooled, allowing them to be distributed among the base station's sectors or frequencies and capacity for the up or downlink to be added as necessary."

A central concept is the channel element, which corresponds to processing capacity for a speech channel with 12.2 kbps. When an operator wishes to add network capacity, new channel elements are purchased. One cabinet can accommodate a maximum of 768 channel elements, which will be possible to add remotely.

"Ericsson's channel element is a resource that is 100-percent dedicated for subscriber traffic. The operator thus does not have to use any part of the channel element for other base station functionality," continues Martin Högberg.

Ericsson WCDMA base stations support Remote Electrical Tilt (RET), which means that commands can be issued from the RANOS operation and maintenance system to adjust antenna tilt electrically to obtain optimal coverage in an area in which two cells overlap.

A critical component in the RBS 3000 base station is the Multi-Carrier Power Amplifier (MCPA), which can deliver output power of 20 W for a 5 MHz carrier at the top of the cabinet. Traditionally, the weak radio signals are amplified before being combined into a strong signal at the antenna. In the MCPA, however, signals are first combined and then amplified, thus eliminating the need for a separate amplifier for each transceiver.

The base stations also include an ASC (Antenna System Controller), which amplifies the incoming signal from mobile terminals, resulting in fewer dropped calls. The ASC is controlled from RANOS, which can also adjust its amplification remotely. In combination with RET, ASC provides a very powerful solution that helps customers achieve higher sensitivity.

ATM switching

The base stations are built on the CPP ATM platform, which allows the base station to function as a hub that switches ATM traffic between mobile switching centers and base stations using an integrated 17 Gbps ATM switch that is included in the baseband sub-rack.

Much more can be said about the RBS 3000. For example, there are plans to split it into two units, linked by an optical interface and consisting of a centrally located baseband unit and a remotely located radio unit placed near the antenna in macro or micro cells. The software also consists of several sub-systems, each running on multiple clustered processors, which increases operational reliability and facilitates restarts.

The RBS 3000 is sold as a complete product package, tested and pre-configured for fast roll outs.

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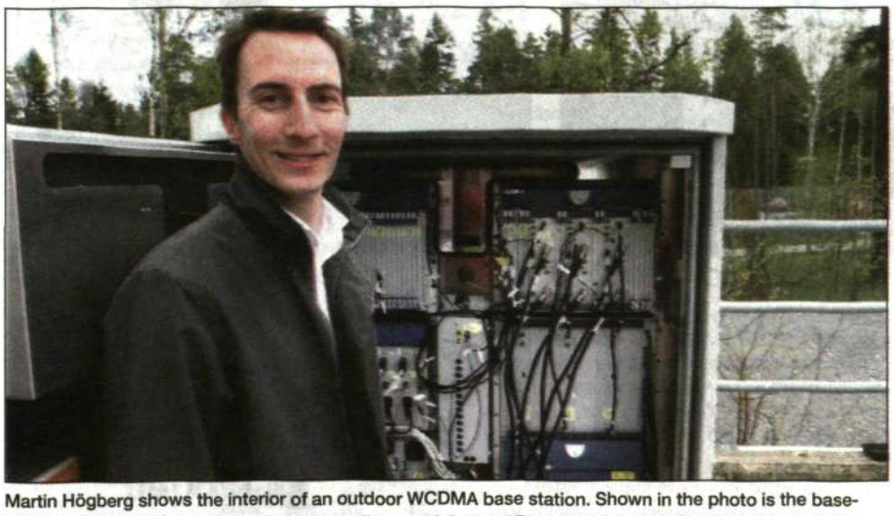

Martin Högberg shows the interior of an outdoor WCDMA base station. Shown in the photo is the baseband card at the upper left that handles coding, modulation, ATM switching and other functions and the radio-subsystem at the upper right, which includes the digital-analog converter, filter and antenna interface card. Below it is the MCPA, while power and fuses are seen at the lower left. PHOTO: ECKE KÜLLER

New project for advanced training

It is becoming increasingly difficult for the industry's engineers to find time to become familiar with all the new research results and design methods being produced at universities and research institutes. The need for structuring this knowledge and delivering it to the right persons is increasing.

A two-year European project was therefore started in April that will provide a bridge for the industry by developing new courses. Ericsson and Ericsson University, which together with the EU are sponsoring and conducting the project, will play a key role.

Kim Lundgren

"This project is the best way to introduce advanced training for the key group of system designers," says Kim Lundgren, project manager at Ericsson University.

Subjects included in the project are systems specification, low-power design, SOC (system on a chip) verification and integrated hardware and software design.

"The goal is to increase knowledge of modern design methods and tools among our most experienced designers," says Lars-Olov Eriksson, manager for Ericsson's CadLab Research Center and Chairman of ECSI, the European Electronic Chips and Systems Design Initiative, which is running the project.

ECSI includes members from industry, research centers and design tool suppliers.

Management includes representatives from Ericsson, Nokia, Alcatel, Siemens, Mentor Graphics, Italtel, Matra, ARM and Cadence.

Even smaller chips with carbon dioxide

Extremely volatile carbon dioxide can be mixed with copper to create very narrow conductors in etched silicon patterns for microcircuits, as was demonstrated by Jim Watkins and his colleagues at the University of Massachusetts.

These results were reported by the Swedish journal Forskning & Framsteg, which cites Technology Review.

tech tip

Clean up and save storage costs. The volume of data on our file servers and not least in our home directories (H:) is increasing dramatically, and the cost for this storage space is increasingly great. This is a trend that must be broken, according to Gunilla Ahrens at IT Solution Management.

A simple example:

If a department stores an average of 1.5 GB per person × SEK 450/GB × 400 persons × 12 months, the result is SEK 3.24 million per year.

If they instead store an average of 300 MB per person × SEK 45/MB × 400 persons × 12 months, the result is SEK 648,000 per year, approximately USD 64,000.

You can contribute to reducing costs by throwing away what you don't need. By looking at the file size in the Windows Explorer (click View, select Details and double-click on Size) you can see where the most storage-demanding documents are.

Compress large documents that you wish to keep so that they take less space. Use the standard application WinZip for this purpose.

If you make back up copies of your local disk, do not back up program files.

Mp3 files and video films account for about 10 percent of the total storage volume. Many of these have no place in our business environment and should be removed.

Jordan number two for MMS

Recently, MMS was launched in Hungary. Now it will soon be a reality in the Middle East. MobileCom of Jordan is planning a commercial launch within the next six months, and with Ericsson as its partner.

It will soon be possible to send MMS in Jordan, which will be the first country in the Middle East to have this service.

PHOTO: PRESSENS BILD

In Jordan, the launch of MMS is just around the corner. MobileCom, which is owned by France Telecom, is planning a "soft launch" for some selected customers in June, with MMS becoming completely commercial a few months later.

Enrico Leonardi

"We believe that the market in Jordan is ready for this. SMS is incredibly popular among young people here – if you go out to a café or restaurant, you can see them sitting everywhere composing messages on their phones," says Enrico Leonardi, who until recently was country manager of Ericsson in Jordan and key account manager for MobileCom.

MobileCom is one of the first companies in the Middle East to launch MMS and Ericsson was selected as a partner because the two companies already have close cooperation. MobileCom has been an Ericsson customer since it started up in 1999 and wants to remain at the leading edge in terms of new technology.

"MobileCom is keen to foster an image as a 3G operator and MMS represents a bridge to the next generation of mobile telephony. For Ericsson, this is an effective way of demonstrating that we can handle all kinds of markets, including those in more unstable parts of the world like the Middle East," says Enrico Leonardi.

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Smaller inventories saves large sums

By holding daily information meetings and assuming greater responsibility for suppliers, inventory management has improved dramatically at Ericsson's Gävle plant, in northern Sweden.

"Currently, we have inventory levels of three or four days, compared with six to eight weeks in the past. As a result, we are tying up less capital in inventory and helping to improve Ericsson's cash flow," says buyer Johan Sjödén.

Johan Sjödén and Pontus Andersson in the Gävle plant warehouse. Here they work efficiently with suppliers and have reduced inventory levels from six to eight weeks in the past, to just three or four days now.

PHOTO: LEIF JÄDERBERG

Previously, when the telecom market was on the upswing, large inventories were usually not a problem. Demand was great and all materials were quickly needed in production. Today the situation is different and a large inventory means that significant amounts of capital are tied up.

Andreas Grundsell

"The automotive industry was a pioneer in the fields of logistics and inventory management, whereas the telecom and electronics industries lag somewhat behind. Although the new work routines have been in place for some time with certain products, it is now time to go one step further," says Andreas Grundsell, head of dimensioning at the Supply Chain Management unit of Radio Access.

"The routine that we use together with our suppliers is known as Vendor Managed Inventory (VMI)," explains Pontus Andersson, who oversees tools and processes within Supply Chain Management at Radio Access.

"We have been using this system for some time now for items such as mechanical equipment and cables. Now we are going one step further and are also using it for components and other products. Our ambition is to eventually implement this system at all of our production units throughout Ericsson," he says.

In trying to give a simple explanation of how VMI works, Andreas Grundsell makes the comparison to a grocery store. It is the bread suppliers themselves, for example, who check to see when the store shelves need to be refilled and with which kinds of bread. By the same token, Ericsson's production unit suppliers will be assuming greater responsibility for ensuring that a suitable inventory is maintained.

Instead of using detailed forecasts to control the purchase of materials, as in the past, information about trends is now more important for dimensioning operations according to actual usage.

"The fundamentals of my job have changed. Previously, we spent a great deal of time placing orders and then monitoring them. Now we are doing much more long-term planning together with suppliers, exchanging information on a daily basis," explains Johan Sjödén, who works with three suppliers, one is Flextronics.

"Operational responsibility for purchasing now lies with the operational units, while tactical decisions are made by Core Unit Supply. If we implement VMI on a wide scale, there will be significant opportunities for improving cash flow," emphasizes Andreas Grundsell.

"I think my work has become both more fun and more interesting. Suppliers also think that it is working well, since they are now able to control their own production planning better. With the exchange of information we have with suppliers, they are gaining greater insight into Ericsson's operations and a correspondingly improved understanding of our needs," says Johan Sjödén.

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inside.ericsson.se/5minutes/→ 16 april

With the information transmitted to his computer, Örjan Grytting is able to calculate exactly how long inventory will last.

Suppliers keep track of inventory

At Flextronics in Visby, a Vendor Managed Inventory system called Pipechain has been installed.

"I'm able to immediately see on the computer exactly how much is in Ericsson's inventory and when it will need to be refilled," says Örjan Grytting, who works with deliveries.

Flextronics supplies various parts for 3G and GSM base stations that are assembled in Gävle.

"We have been working with this new system for about a year and a half and feel that it functions well. Our job has become simpler since we no longer have to deal with orders and there is significantly less paperwork," says Örjan Grytting.

All items are marked with a barcode and as soon as an article is removed from the warehouse at the Gävle plant, it is deducted from the balance and that information appears on the computer. Örjan Grytting can also see how demand for materials fluctuates.

"This means we are able to control our own production much better than we could before," he says.

GUNILLA TAMM

Canadian spirit makes good business

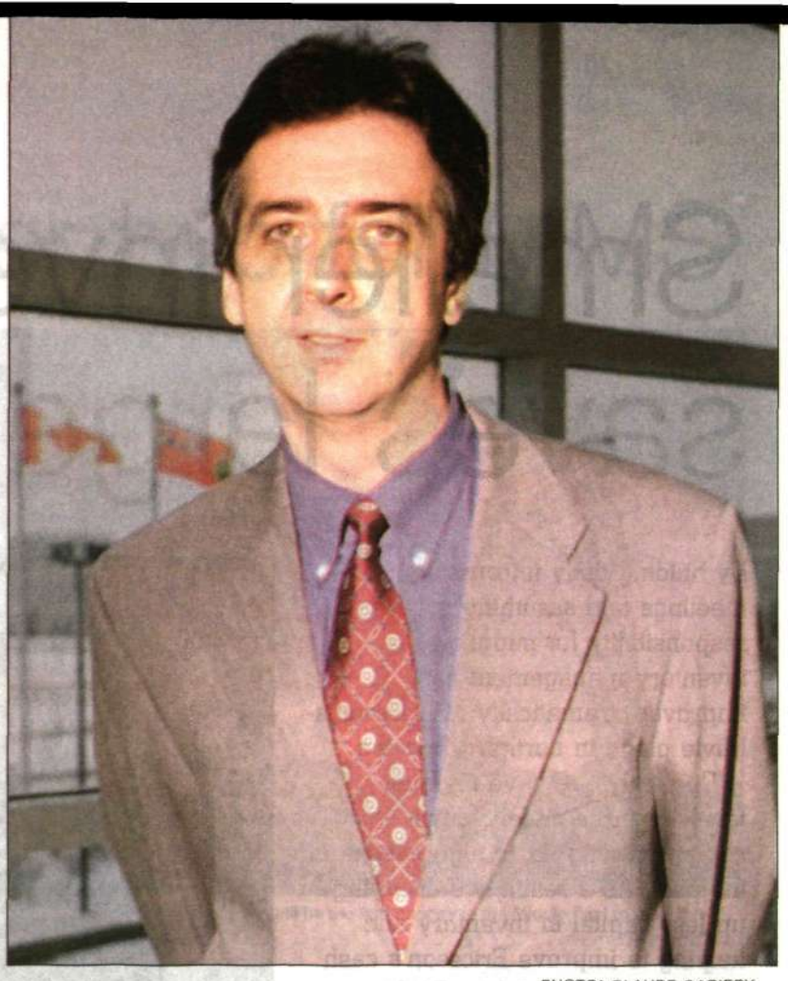

PHOTO: CLAUDE GARIEPY

The sales organization at Ericsson Canada has a unique structure. The company's President and CEO Mark Henderson is responsible for coordinating no fewer than five customer accounts in two countries. Resources and specialists are gathered in a pool and can be assigned to customers as needed.

Mark Henderson regards personal responsibility as the key to success, and despite a difficulties in the telecom sector, Ericsson Canada is regarded as one of the country's 50 best employers.

MARK HENDERSON

Lives: Mississauga, Ontario.
Family: Wife and two children.
Interests: Golf and travel. Also dreams of having more time to play his guitar.
Background: Mark Henderson has more than 20 years' experience in the telecom sector and has been working for Ericsson since 1989. His responsibilities have included building up Mobitex in the Canadian market and managing the TDMA and GSM units in Canada. For two years he worked at Ericsson in Stockholm responsible for a major GSM network release.

Before being appointed president of Ericsson in Canada, he was head of operations in Canada, with responsibility for business development, technology and operations.

The Canadian operators Rogers AT&T Wireless and Microcell, and the American operators Worldcom, Qwest and Leap Cricket, all fall within the area of responsibility covered by Mark Henderson's organization. He supervises five groups dedicated exclusively to sales, and these groups in turn can draw on a pool of work groups, each with its own area of specialization, such as technology, finance and so forth. These groups are available to work on projects involving any of the five operators.

"I recently assumed responsibility for three operators in the US and it is a real challenge to work in this way," says Mark Henderson. "We focus the sales organization and create synergies and a joint process regardless of which customer we are working with. We begin by gathering information about the customer and we listen to their wishes. Based on this information, we then adjust the resources and number of personnel required. Every second week we hold meetings which are attended by representatives of the customers."

Motivated employees

During 2001, Ericsson Canada cut its workforce by 20 percent. Mark Henderson has worked strenuously to maintain competitiveness while at the same time motivating employees in the stressful situation. Despite the personnel cutbacks, Ericsson was voted one of the 50 best employers in Canada in 2001.

"The most important task for me was to persuade employees to assume personal responsibility within their specialist areas. I want them to feel that they are in control of their own operations, but also that they bear responsibility for how things turn out. The result is that they work proactively and get things done. I feel that this has been a successful strategy."

Ericsson's most important operations in Canada are in the mobile area – a market that continues to grow. The number of subscribers is increasing by 25–35 percent per year. Competition between the operators is tough and there is heavy pressure on prices. There are four major mobile operators in Canada: Rogers AT&T Wireless, Microcell, Telus Mobility and Bell Mobility. Ericsson's most important customers are Rogers AT&T Wireless and Microcell, both of which have chosen Ericsson as their sole supplier of GPRS systems.

However, mobile penetration is still relatively low, varying between 35 and 42 percent in different parts of the country. Mark Henderson concedes that it is lower in North America than in some parts of Europe, where the dominance of GSM has aided growth. However, growth is also increasing in North America as progress continues toward the adoption of a uniform standard. The increasing interoperability between different networks is speeding up the process. There are also other differences that affect behavior patterns.

"In North America, the recipient of the call pays a portion of the call charge if he or she is using a mobile phone. Moreover, subscribers to wireline networks can obtain fixed prices for phone calls, meaning that they pay a fee and it makes no difference whether they talk for three minutes or three hours. All of these factors influence the value people attach to their mobile phone," explains Mark Henderson.

> *"I want the employees to feel that they are in control of their own operations, but also that they bear responsibility for how things turn out"*

Turbulent market

In the Canadian market, as in many other markets worldwide, 2001 was a turbulent year. Many of the operators who were new on the scene and focused on competing with new services, have now disappeared.

"Ericsson had business contacts with some of the companies that have disappeared, and these events have had an impact on us. Accordingly, we have redirected our focus to Ericsson's core areas. When we were working with the new operators, we recruited new competence. What we need to do now is to use these resources as we expand our business with the established operators. We are concentrating on selling new services and new products, such as routers, service networks and portals, to these customers, thereby making them even more valuable," concludes Mark Henderson.

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The sky is not the limit

Weighing over eight tons and costing USD 1.9 billion, Envisat is Europe's largest and most expensive satellite to date.

The Envisat project is of great importance to Saab Ericsson Space, one of the main suppliers for the renowned satellite.

The European Space Agency created the satellite in order to gain new insight into how the earth's climatic systems operate. Over a five-year period, Envisat will help researchers monitor conditions and changes to the earth's water and landmasses.

Useful satellite

"This is a very important project for us since it is research oriented. It allows us to develop products and expertise within our areas of specialization that we can then use in other commercial applications. Moreover, it is quite rewarding to be involved with supplying equipment for such a useful satellite," says Iréne Svensson, director of communications and public affairs at Saab Ericsson Space.

In 1994, the company landed its largest project to date. The company was to deliver a reflector antenna and onboard computer for the satellite platform, as well as control computers for several of the instruments housed on Envisat. Altogether, the contract was worth almost USD 40 million.

"That remains one of the very largest contracts that we have ever received," says Iréne Svensson, now that all of the components have been delivered.

Watched live

Saab Ericsson Space also supplied the onboard computers, telemetry antennas and separation system for the Ariane 5 launching rocket.

"And this is the largest separation system that we have ever delivered," says Iréne Svensson.

Everything went according to plan when the satellite left the launch pad at Korou in French Guyana earlier this year. The time of launch was 2:07 am central European time. Iréne Svensson was content to watch a taped replay of the launch the following morning.

"Of course there were a few people who stayed up to watch the launch live from their PC:s as it happened," she says.

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Over the next five years, the Envisat environmental satellite will collect data about deforestation, how deserts and ice caps are changing, alterations in sea temperatures as well as how all this affects the climate. Saab Ericsson Space supplied key components for the mission.

FACTS ENVISAT IN FIGURES

Rocket type: Ariane 5
Satellite weight: 8.2 tons
Altitude: 800 km
Speed: 20,000 km/hour
Orbit: 101 minutes

Development and financing: European Space Agency (ESA)
Project cost: Approximately USD 1.9 billion (development, construction and launch)

The satellite orbits the earth once every 101 minutes at an altitude of 800 kilometers.

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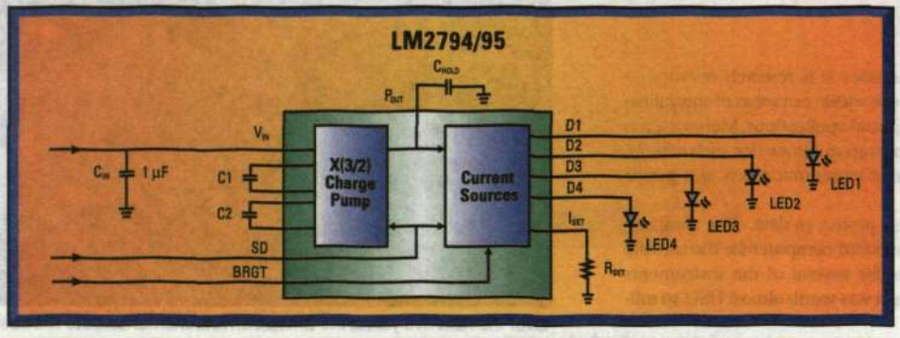

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	LM2791-L/H	1–2	Switched Cap	LLP-10	3 mm 3 mm 0.8 mm	Low/High	450 kHz
	LM2792-L/H	1–2	Switched Cap	LLP-10	3 mm 3 mm 0.8 mm	Low/High	900 kHz
NEW	LM2794	3–4	Switched Cap	micro SMD-14	2.08 mm 2.4 mm 0.845 mm	Low	325 kHz
NEW	LM2795	3–4	Switched Cap	micro SMD-14	2.08 mm 2.4 mm 0.845 mm	High	325 kHz

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National Semiconductor

The Sight & Sound of Information

Smiling faces in Hull City, where people can now pay for parking via their mobile phones.

PHOTO: LORNE CAMPBELL

Mobile pioneers in Hull City

You are about to pay for your parking when you discover you have no coins. Imagine how convenient it would be if you could use your mobile phone to pay instead. Trials of payment for parking via mobile phone are being conducted here and there throughout the world.

Ericsson and the Hull City Council have now jointly launched a test that is said to be the first of its kind in the UK. The approximately 200 participating residents of Hull City can pay by making a call or via WAP.

Moreover, parking attendants can use the system to send messages to carpark users telling their parking time is just about up. The trial operation is to run for six months.

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from the archives

Africa, and particularly Nigeria, is an increasingly important market for Ericsson. However, Ericsson's business activity on the continent started as early as 1895, when fixed telephone lines were built in Cape Town of South Africa. The photograph, from 1961, shows Nigerian state dignitaries visiting the plant at the Ericsson head office in Stockholm. At right, the Minister of Trade, Z. B. Dipcharina, and another government minister, S. A. Tinubu.

SMS on the fly

Do you feel handicapped without the possibility of sending SMS while flying? If you're planning a trip with Singapore Airlines, this might no longer be a problem. Starting July, selected flights will allow passengers to send text messages using special equipment. Indian firm Unimobile will act as the messaging broker between the airline company and 400 mobile operators in 130 countries.

Outgoing messages are delivered using Inmarsat Holdings' satellite system. One drawback, however, is that passengers will not be able to receive messages while on board.

Watching the market

What's happening in the wireless market right now? And what will happen two or three years from now? Jason Chapman, analyst with Gartner, visited the Ericsson site at Kista (Stockholm) to present his views on the subject on April 25.

If you happened to miss this interesting talk, you can still read it on the bic portal.

bic.ericsson.se

hello there...

...Hans Ovesen, new head of the Saudi Ericsson company in Saudi Arabia.

Hans Ovesen

Why did you take this job?
"I did a lot of work with the Middle East before, when I was working with TTC Global, so it was familiar territory, and felt like an interesting challenge."

How have things gone so far?
"Fine. We deal with all operators running non-public networks – that is, networks that are not open to the public. And I'm pleased to say that Saudi Ericsson is profitable despite the challenging market."

Any plans for the summer?
"I will be in Sweden with my family, sailing. Then, in the autumn, my wife and daughter are coming down to join me here in Saudi Arabia."

"It will be really exciting to go on trips into the desert in a four-wheel drive vehicle."

Finally, what do you think of Saudi Arabian cuisine?
"The food is wonderful! They have incredibly good vegetables and other ingredients. My favorite dish is lemon-marinated chicken kebab," says Hans Ovesen, with a grin.

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Paul R. Sidey is a farmer in western Ohio, in the US. He is also a dedicated collector of old Ericsson phones. However, he is not only interested in antique phones, he is also secretary to the Board of the local Buckland Telephone Company, where his father and grandfather held the same post before him.

Hooked on a phone

A farm in Western Ohio, in the US, is home to a fine collection of old Ericsson telephones. Paul R. Sidey, the owner of the collection, says that he began collecting old American phones, but when he saw Ericsson's "Eiffel" model, he was charmed. When he later saw an early pulpit model, he was completely sold, or as he says himself, "hooked for life."

The Ericsson Chronicle, issued in conjunction with the company's 125th anniversary in 2001, is clearly well known among people who are interested in the telecom industry and old phone models.

An e-mail arrived at Ericsson asking where the Ericsson Chronicle could be bought. The mail, from Paul R. Sidey, included a link to his website, with pictures of his collection. This made *Contact* rather curious, so we got in touch with him.

Paul R. Sidey has a degree in electronic media from the University of Cincinnati. Before he took over his father's farm and the cattle there, he worked at Cincinnati Bell Inc. on the production of video films. It was when he was working on the company's history that he became interested in old phones and began collecting them.

"A few years ago, I decided to invest a little less in Ericsson shares and more in old Ericsson phones instead. I am always on the lookout for more models and at the same time try to learn more about the technology and history of the various models," he says.

Today, the collection consists of as many as 30 different models, all of which are pictured on his website. The site also includes detailed information in text and images about all of the models. The information was gathered from old LM Ericsson catalogs.

Paul R. Sidey is not only interested in old phone models, but also in today's phone technology. He is secretary to the Board of the Buckland Telephone Company, like his father and grandfather before him.

In addition to Ericsson, he also has other interests in Sweden. His fiancée is currently completing her studies in western Sweden.

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Take a look at Paul R. Sidey's telephone collection at:

www.angus1.com/ericsson/

column

LARS-GÖRAN HEDIN
corporate editor

Great tools, high price

I've been away from Ericsson on leave for the past few weeks – busy with more tangible tasks. I swapped my laptop case for a carpenter's belt to renovate a lovely old house so my family could move into it. A four-week holiday at the height of the communications season – can that really work?

Sure it can – when you have a fantastic staff of self-directed colleagues, an incredibly competent assistant, and understanding and supportive bosses. Not to forget the great blessings of our time, RACOM, Click-to-Buy and eflow. These names stand for the opportunity to perform the administrative part of one's management duties remotely and to maintain contact with the outside world without having access to the regular mailbox.

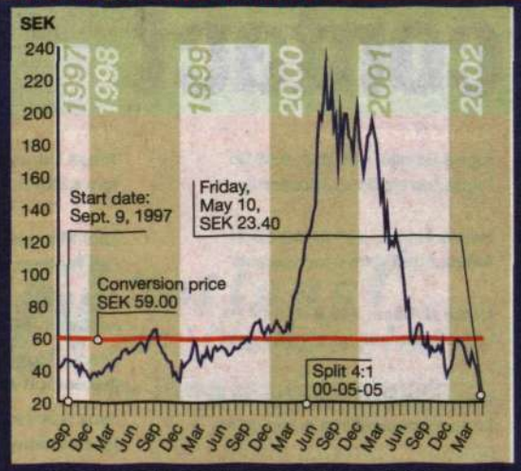
Outlook, with all its disadvantages – messy e-mail and messages to others, sent simply for your information – is still a blessing. My ordinary mailbox used to become overfull after only a few days. Now, after a couple of weeks, there are no more than a handful of letters and advertising messages.

The RACOM connection, which lets you securely call up the Ericsson network from home or while on the road, is a smart solution that I for one cannot live without, and that works almost all the time. I have praised Click-to-Buy before in this column, as a useful tool for ordering and validating goods and services.

Eflow, the latest function, is a new electronic billing system that is simply terrific. With eflow, invoices to be checked coded and approved arrive by computer. The result is a billing process that is faster, more secure, and hopefully cheaper. I say "hopefully," because while I cannot help praising these ever-smarter electronic tools, the fact remains that they cost a great deal of money.

Here at LME, for example, the IT cost per employee is about USD 400 per month. Adding another megabyte of capacity to your mailbox, for example, costs a pretty penny. So, as a small money-saving tip, think about how much memory you need, and if you know of any unused Outlook accounts in your department, let the person in charge know as soon as possible.

The ericsson b share



For additional information, access the website: http://inside.ericsson.se/convertibles