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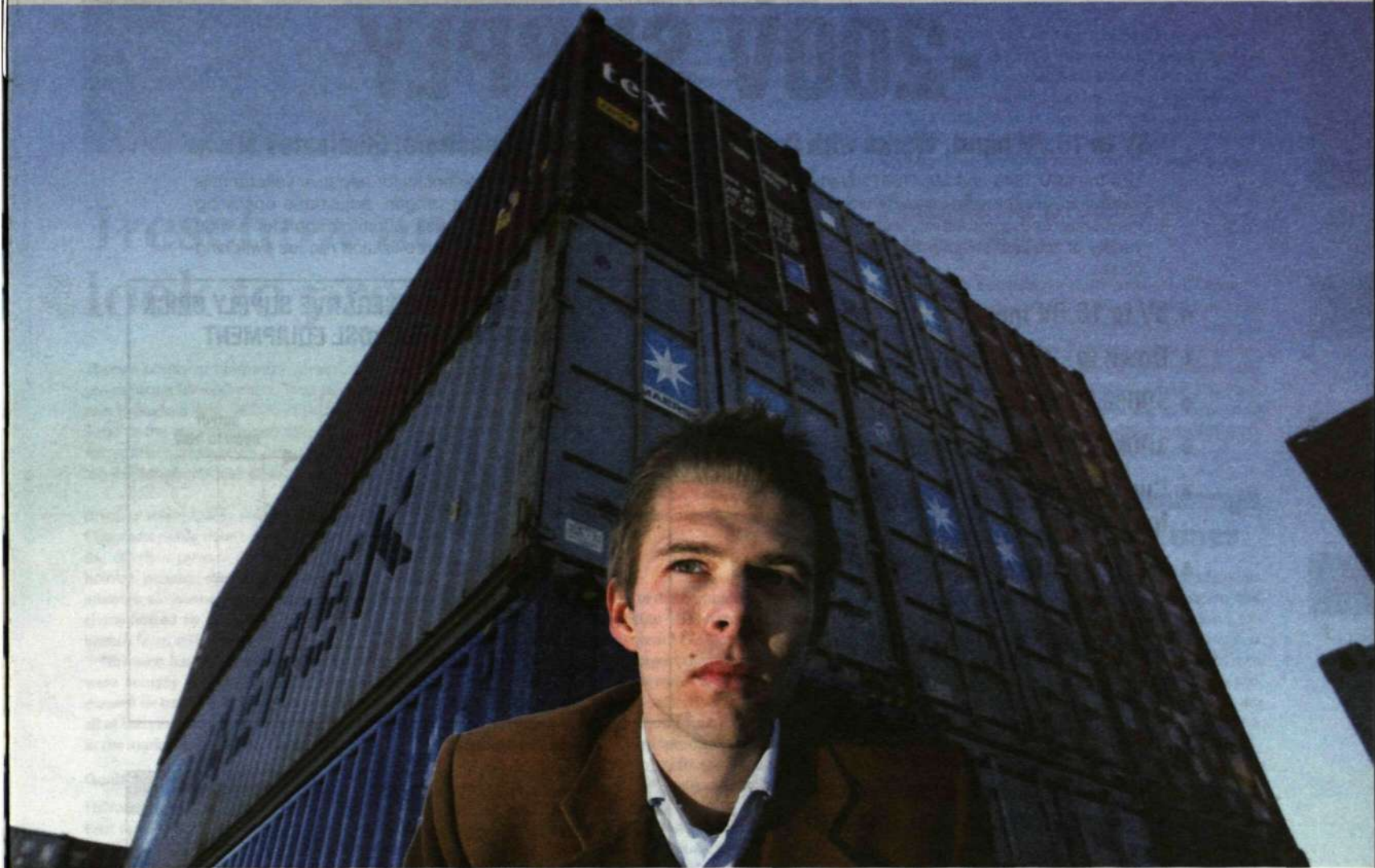


PHOTO: GUNNAR ASK

## Business ideas become reality 10-14



PHOTO: GUNNAR ASK

Michael Treschow  
elected chairman 3



ILLUSTRATION: SYSTER DIESEL

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no.  
April 4,  
2002

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# SMALLEST, LOWEST NOISE, FLEXIBLE -200V SUPPLY

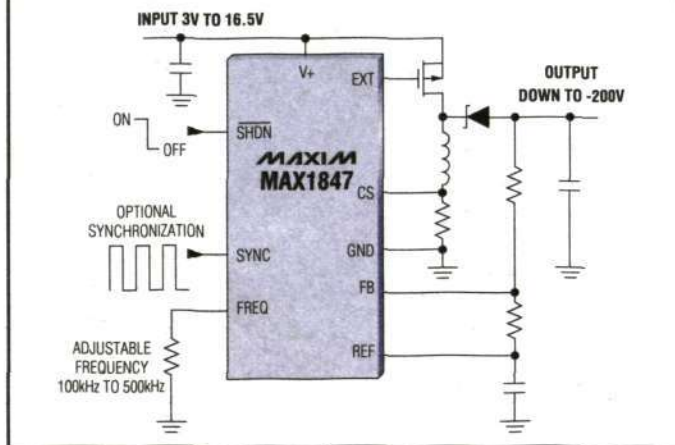
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The new Chairman of the Board Michael Treschow and Kurt Hellström at the Annual General Meeting in Stockholm.

"Ericsson is today a company that is well outfitted for the future. The enormous changes we made in the company have been absolutely essential to our survival," said Kurt Hellström.

PHOTO: GUNNAR ASK

## Treschow and Hellström look to promising future

There's plenty of hard work ahead, but there are reasons for optimism. That sums up Ericsson President and CEO Kurt Hellström's message to the two-thousand plus shareholders who participated in the Annual General Meeting in Stockholm last week.

It was a relaxed duo, Kurt Hellström and the new Chairman of the Board Michael Treschow, that met the Swedish press a few hours before the shareholder's meeting started in the Globe Arena. Their answers to journalists' questions were, however, characterized by the view that the entire telecom branch faces still more tough times.

"Ericsson has managed better than most, and we were actually the only telecom supplier that increased its market share on the systems side during all of last year. But we still don't see the desired turn in the market," stated Kurt Hellström.

### Goals remain firm

He maintained that the company's goal is a 5 percent operating margin (profit after deductions with regards to sales) this year. To the question of whether there will be more redundancies, Kurt Hellström answered that Ericsson continues to examine its efficiency, but he said there are no specific new savings measures.

When the Annual General Meeting had started, Kurt Hellström expanded on his reasoning for the company's situation, and stated that despite the

tough times, there are reasons to believe the coming years will be brighter.

"Ericsson is today a company that is well outfitted for the future. The enormous changes we made in the company have been absolutely essential to our survival. Changes, and working towards more cost efficiency, will never stop. It's part of our daily life as long as we are working in a competitive market," he said.

### Stronger in systems

The good news for now is the company's strengthened market position within GSM systems (sales increased by 9 percent last year.) Developments in the US, where many of the largest operators have chosen the GSM path to 3G, are also very positive, Kurt Hellström pointed out. He added that another high point is the Sony Ericsson joint venture, which got a jump start with its recent product launches and which is expected to turn a profit already this year.

"I believe that few people have realized just how powerful the combination of Ericsson and Sony is and can be," said Kurt Hellström.

He stated as well that Ericsson's deliveries of 3G equipment have begun in earnest, and that the mass market for 3G services would probably take off next year.

JENZ NILSSON

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## Mobile phone use hits one billion

Sometime at the end of March or the beginning of April, the number of mobile phone subscribers in the world will reach one billion. In conjunction with this milestone, Ericsson Mobile Systems will launch a global campaign intended to help operators continue to provide the growing number of users with good service.

Statistics from the respected EMC World Cellular Database indicate that the number of worldwide subscribers will top one billion within the next few days. This is a milestone in the history of mobile telephony and further proof of the tremendous impact that mobile telephony has had globally. A large proportion of these subscribers are connected to an Ericsson GSM network, and Torbjörn Possne, who heads the WCDMA/GSM unit within Ericsson

Mobile Systems believes that the company has a great responsibility to operators.

"The growing number of cellular subscribers places exacting demands on many operators' networks. We must help them with quality products and solutions that allow them to maintain good for their customers," says Torbjörn Possne.

Together, the world's ten largest cellular operators account for fully 51 percent of all mobile phone subscribers. Ericsson, which is a supplier to all ten, is now launching a global Meganetwork Program aimed at operators and marketing managers.

"The campaign targets some 40 operators that all have large networks and very favorable prospects for continued growth," says Patrik Regårdh, who is responsible for the Meganetwork Program.

JENZ NILSSON

## First sustainability report in Ericsson's history

Ericsson has published environmental reports for eight years. Now a further step is being taken. This year a sustainability report is published in which Ericsson's operations are reported not only from an environmental perspective, but also with respect to social and socio-economic issues.

"The background is increased pressure from stakeholders such as investors, customers and employees," says Lars Bernau, director Sustainability and Environment.

Measures implemented during the year include a code of conduct that must be accepted by all suppliers. This guarantees that all direct and indirect employees are treated in accordance with international labor regulations.

## Yugoslavia praised for equality

Ericsson in Yugoslavia has been awarded Ericsson's annual equality prize. Factors behind this choice are that equality in the workplace is high and that Ericsson Yugoslavia reports excellent financial results. Of the total number of employees, 42 percent are women, and among management, the figure is 46 percent. The company promotes equality at the university, in the political arena and in various national and international symposia. This, in turn, strengthens the Ericsson brand.

## Stockholm Stock Exchange approves report routines

The Stockholm Stock Exchange has finalized its investigation about information leaks at Ericsson and approves Ericsson's routines. The Stockholm Stock Exchange emphasizes that it regard the leaks at Ericsson as very serious. During one year Ericsson was hit by two leakages. The investigation shows that the measures taken by Ericsson after the leakages in 2000 and 2001 are corresponding to or exceed the standards one can expect from a company of Ericsson's size.

## Two ENGINE orders in China and the UK

Ericsson has recently garnered two more ENGINE orders in China and the UK. China Telecom in Guangdong province will deploy ENGINE in two major cities, Guangzhou and Shenzhen. China Telecom's CTO Mr. Wei Leping believes that the project "will not only enable China Telecom to migrate the world's biggest circuit switch network to a multi-service network, but also to grow into a strong Chinese enterprise with international competitiveness."

In the UK, operator Your Communications has chosen ENGINE Integral to overlay its current network and will continue to expand with Ericsson solutions on the path to a true multi-service core and access Network.

## Focused visitors at CTIA in Orlando

There were fewer visitors than usual at the CTIA exhibition in Orlando, Florida, but Ericsson was proud to welcome a record number of visitors to its stand.

"Our visitors knew what they wanted to see and what to expect, because we had prepared them through direct mailings and special invitations prior to the exhibition," says marketing communications manager Mark Wightman.

Ericsson's demonstrations were based on four themes: creativity, innovation, integration and development.



PHOTO: TRACI POLLARD

For Ericsson to return to profitability and capture new market shares, an overall strategy and clear goals are required. The main focus is on positive cash flow and an operating margin exceeding five percent. However, it is not enough to have large, general goals; it is the small sub-goals that will show the way.

The incentive programs are based on all managers and employees knowing what is expected of them and their units. They will be encouraged to make that extra effort to ensure that Ericsson becomes better than its competitors.

# Profitability essential

**Ericsson must report a profit this year.** Accordingly, the company's primary goals for 2002 are positive cash flow and an operating margin of 5 percent or better. If the company is going to achieve these objectives, every employee will have to work together, towards the same goals.

"Even in the challenging situation we are currently facing - one in which we cannot expect any growth and will have to be prepared for lower investment levels - it is essential that we return to profitability. It is not possible to operate a company at a loss," says Sten Fornell, chief financial officer at Ericsson.



Sten Fornell

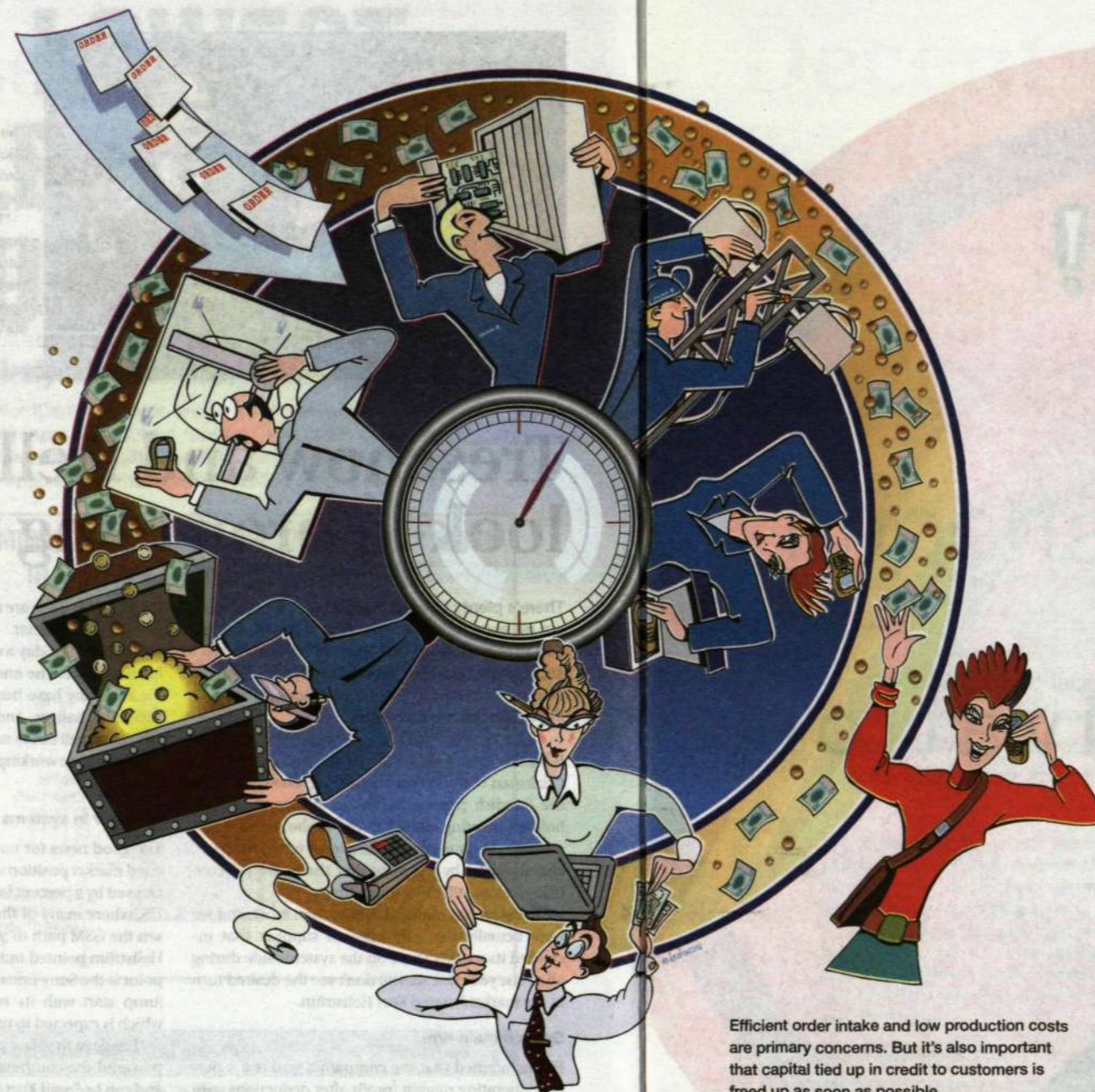
When the management team realized the crisis that Ericsson was facing last spring, they requested permission from the Board of Directors to change the incentive program so that it would be primarily focused on positive cash flow. The ship was leaking and every means available needed to be applied. Cash flow had to be turned around. The efficiency program became the primary tool in the battle to do that, and the operation was a success. Thanks to the combined efforts of employees, cash flow for 2001 ended on a positive note.

Unfortunately, that did not make the company profitable.

"Cash flow is a matter of survival. No company can survive very long if the cash flow is negative. In order to mobilize everyone's energy in a single direction, we tied the variable portion of salaries to cash flow," explains Sten Fornell.

If Ericsson is to continue on the path towards both positive cash flow and profitability, further significant improvements will be required. The efficiency program focused primarily on overheads and not so much on cost of sales or the supply chain.

"This year, we'll have to combine monetary restraint with major customer-oriented efforts. A positive operating margin will require a reliable amount of orders already during the first part of this year. This is



Efficient order intake and low production costs are primary concerns. But it's also important that capital tied up in credit to customers is freed up as soon as possible.

ILLUSTRATION: LEIF ÅBJÖRNSSON

## OPERATING MARGIN AND OPERATING INCOME

The operating income is the same as the profit or loss calculated in kronor. The operating income is what remains when all of the operating costs have been subtracted. The operating costs correspond to expenses for production, development, personnel, etcetera.

Financial items, that is, interest income and interest expense are not included in the operating result.

The operating margin describes the size of the profit or loss in relation to the operation's sales.

important if we are to retain our leading position," says Sten Fornell.

According to Sten Fornell, it is essential to aim at achieving a favorable operating margin, which will ensure positive cash flow in the future. In 2001, cash flow benefited from the sale of non-core operations such as real estate holdings. This year, the primary emphasis will be on further trimming expenses and reducing the amount of capital tied up in such areas as accounts receivable and inventories, while continuing to focus heavily on customers.

"The telecom industry still has problems and we are, of course, affected by the cautiousness of our debt-laden operators who have adopted a wait-and-see attitude towards new investments. At the moment, our primary challenge is to monitor the market and see

# Clear goals in sight

The primary goal is a return to profitability. To reach this via positive cash flow and a positive operating margin. Checklist: Establish clear sub-goals for every operation. Focus on every sub-goal. Retain this focus all the way to the finish line.

## 2002 GOALS

- The overall goals for 2002 are primarily financial.
- Positive cash flow and an operating margin of 5 percent are the main goals.
- Each unit has established goals to support the main goals.
- Company goals are followed up in conjunction with the quarterly reports.
- The Balanced Scorecard model is used for follow-up of the unit's goals.

"If we are to achieve our overall goals, every unit will also be required to establish goals that lead to achieving those overall goals. Every unit must know exactly what it is going to produce and deliver and when. The sum of all these various goals must combine and correspond with our overall objectives," says Ericsson's Chief Operating Officer, Per-Arne Sandström.



Per-Arne Sandström

## Setting goals

When establishing goals for an operation, it is important to start at the top. First of all, it is essential to get a bearing on market trends.

"This is a prerequisite for knowing what we are going to sell and which markets we should focus on," says Per-Arne Sandström.

These strategies are the starting point in the goal-setting process - based on these, overall goals are defined. Then, decisions are made about what must be achieved at the BU level in order to support these goals. One goal might be to define the market share that a business unit must acquire. BU goals are, in turn, broken down into sub-goals for various operations.

"It is not quite so simple as making sure all business units achieve the same results, however. Certain units will have to balance for others that cannot aim as high," says Per-Arne Sandström.

Merely establishing goals is not enough, however. The goals must be continuously monitored.

"Follow-up is essential in order to steer things in the right direction. Moreover, I believe that everyone feels good when there is someone checking to ensure that we are moving in the right direction."

## Balanced Scorecard model

Balanced Scorecard is the model that Ericsson uses to set its goals as well as to check how well the various units are succeeding in meeting their objectives. The model is comparable to a traffic signal, where green means that work is proceeding as planned and that goals will be met. Yellow indicates a warning. Red means that something has obviously gone wrong and that something radical must be done in order to succeed.

Goals have been established for 2002, which is likely to be a tough year according to Per-Arne Sandström. All available resources will have to be mustered if Ericsson is going to achieve its objectives. The incentive program will provide a necessary nudge in the right direction, however.

"A huge effort will be required from all of us if we are to achieve our objectives for 2002. The extra effort on our part will determine whether or not we succeed or not. Consequently, it is enormously important that we motivate employees to make that extra effort. The incentive program has been envisioned to serve as that carrot."

SARA MORGE

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## CASH FLOW

In simple terms, it can be said that the operations generate a cash surplus, that is, a positive cash flow, when more money is paid in through operations than is paid out during a reporting period.

The cash flow is a combination of the operations' results and the tied-up capital. Usually, the capital is tied up in accounts receivable, inventory and other assets. In order to improve the cash flow, the capital must be released as quickly as possible.

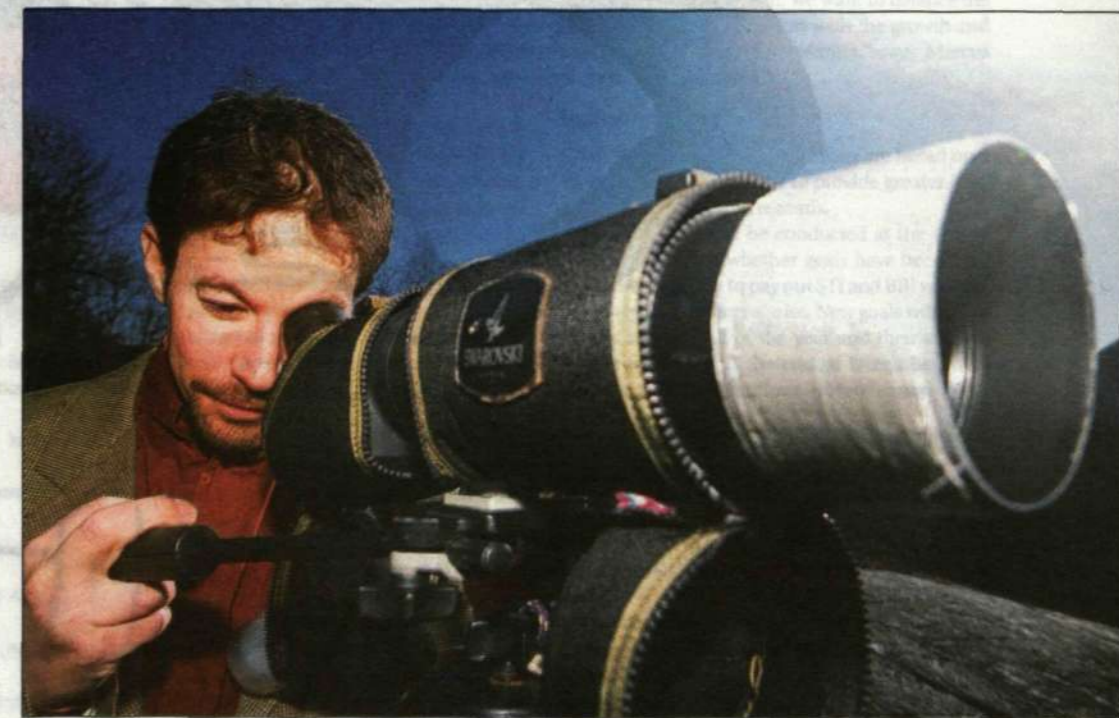
If you want to know more about cash flow, play "The way cash flows" at:

university.ericsson.se

where it is headed and adapt with sufficient speed so that we can achieve reasonable profitability over the short term without damaging future prospects. We are determined to once again emerge even stronger from this crisis."

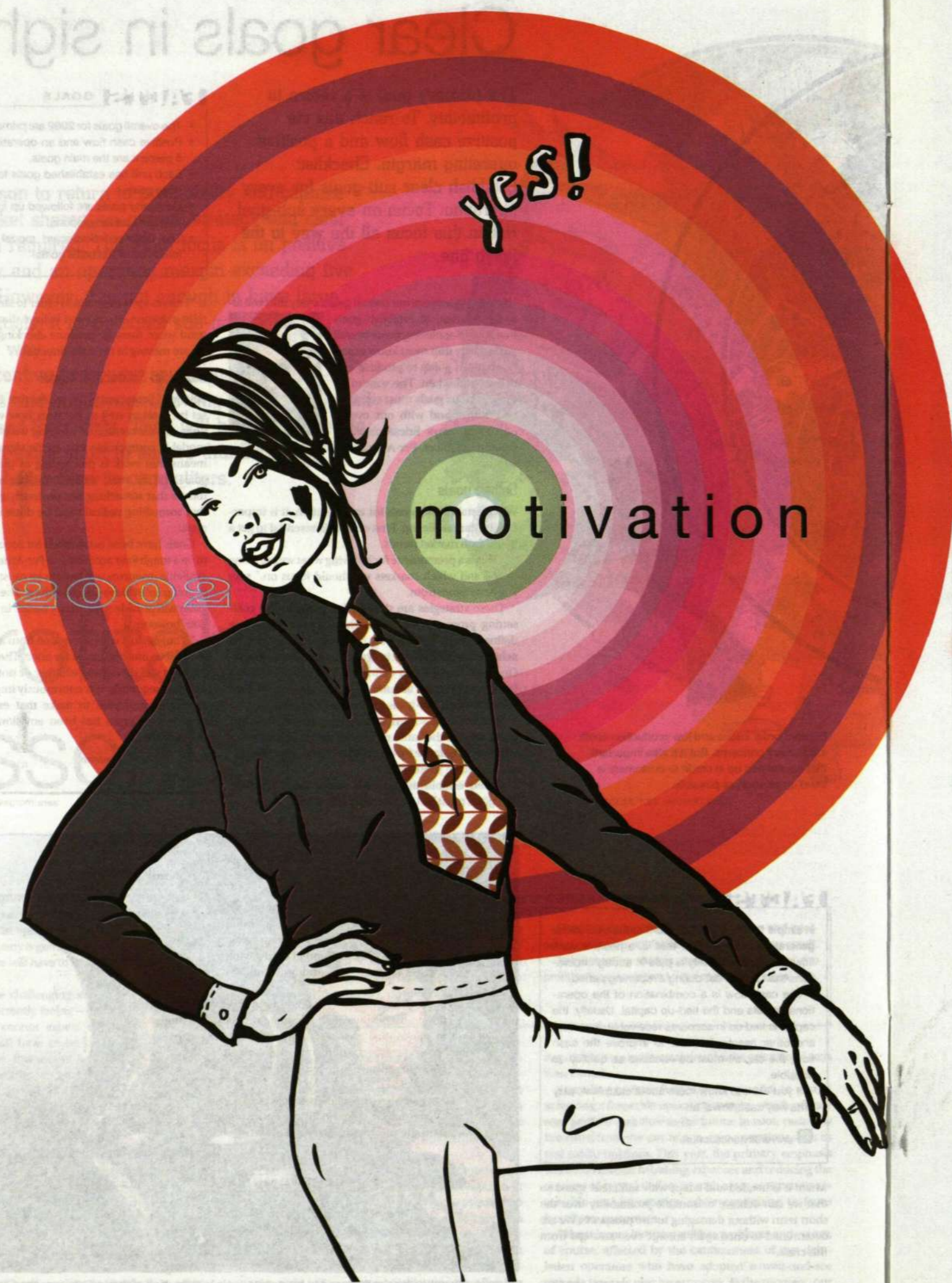
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All units within the organization need to have clear goals in sight. If all of their efforts are aimed at achieving the same overall goals, it will increase the company's chances of success.

PHOTO: ALEXANDER FARNSWORTH



Incentives are used to motivate employees and reward results.

ILLUSTRATION: SYSTER DIESEL

# Decent outlook for mobile games

to date, the abundance of mobile devices and the growth of the mobile phone market is a positive sign for the mobile games industry. Analysts expect the market to grow significantly in the next few years. However, the mobile phone market is still in its infancy, and the mobile games market is still in its infancy.

# Mobile experiments with 4G network

NTT DoCoMo is expected to begin its 4G network trials in Japan in the next few months. The network will provide up to 100 Mbps of data rate, which is 10 times faster than the current 3G network. The network will also support mobile video and mobile TV services.

# Hutchison 3G moving

# Important to reward results

The goals behind all incentive programs are one and the same – helping Ericsson achieve good results. The reason that Ericsson does not only have incentives for management is to send the message that all employees are able to influence company earnings.



"Incentives are all about rewarding results," says Marcus Sheard. PHOTO: SARA MORGE

The money that the company sets aside for employee compensation can be divided up in several different ways – for example salaries, pensions, stock options or incentive programs.

"When it comes to employee compensation, we want to place greater emphasis on paying for results. Incentives are all about rewarding results," says Marcus Sheard, vice president, Compensation and Benefits.

### Broad Base Incentive

All Ericsson companies have different incentive programs for their employees. Broad Base Incentive is the program used in Sweden for non-management employees. This year, the BBI-program for the first time includes all employees in Sweden who are not part of any other incentive program.

The maximum amount that can be paid out is 8 percent of an employee's annual salary, or almost one extra month's salary.

Of this, 2 percent is based on the company achieving a positive cash flow. The remaining 6 percent is based on the fulfillment of operational goals on a unit level.

One of the conditions for receiving payment of BBI is a positive cash flow for Ericsson as a whole. In other words, no BBI is paid out if there is a negative cash flow, regardless of whether operational goals have been achieved. For full payouts, both a positive cash flow and fulfillment of operational goals are required.

### Short Term Incentive

Short Term Incentive (STI) is the name of a global program that includes management and key contributors.

"We think variable pay is a positive thing. People are more motivated when they are rewarded for doing a good job. It also makes more sense financially to reward good results rather than paying out high salaries regardless of earnings," says Marcus Sheard.

In 2002, STI will have to build on both positive cash flow and a positive operating margin, in addition to operational goals established for various units in some cases. Ultimately, the company's cash flow will still have to be positive in order to get any payout of STI.

"Last year, when the market changed so dramatically, it was important to focus the entire organization on the priority of survival. This year, while

business remains difficult, we want to balance the survival instinct in cash flow with the growth and cost control in operating margin," says Marcus Sheard.

### Half-year goals

Goals for both BBI and STI in 2002 are based on a six-month period in order to provide greater linkage between goals and rewards.

An evaluation will be conducted at the end of June to determine whether goals have been met, and whether or not to pay out STI and BBI with the August or September salaries. New goals will be set for the second half of the year and their success will be measured at the end of December, with eventual incentives paid out in March 2003.

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### BBI AND STI

#### BBI – Broad Base Incentive

- Includes all Ericsson employees in Sweden who are not included in any other incentive program.
- Can give a maximum of one month's extra salary (8 percent of annual salary) in payment if all goals are fulfilled.
- 2 percent is based on positive cash flow for the company, 6 percent on operational targets.
- Positive cash flow for the company is a requirement for the payment of BBI.
- Each department has its own goals towards which the employees must work.

#### STI – Short-Term Incentive

- A global program for managers and key personnel.
- Positive cash flow for the company is a requirement for the payment of STI.
- Positive cash flow and operating margins are the main goals for everyone.

### INCENTIVE QUALIFYING CASH FLOW

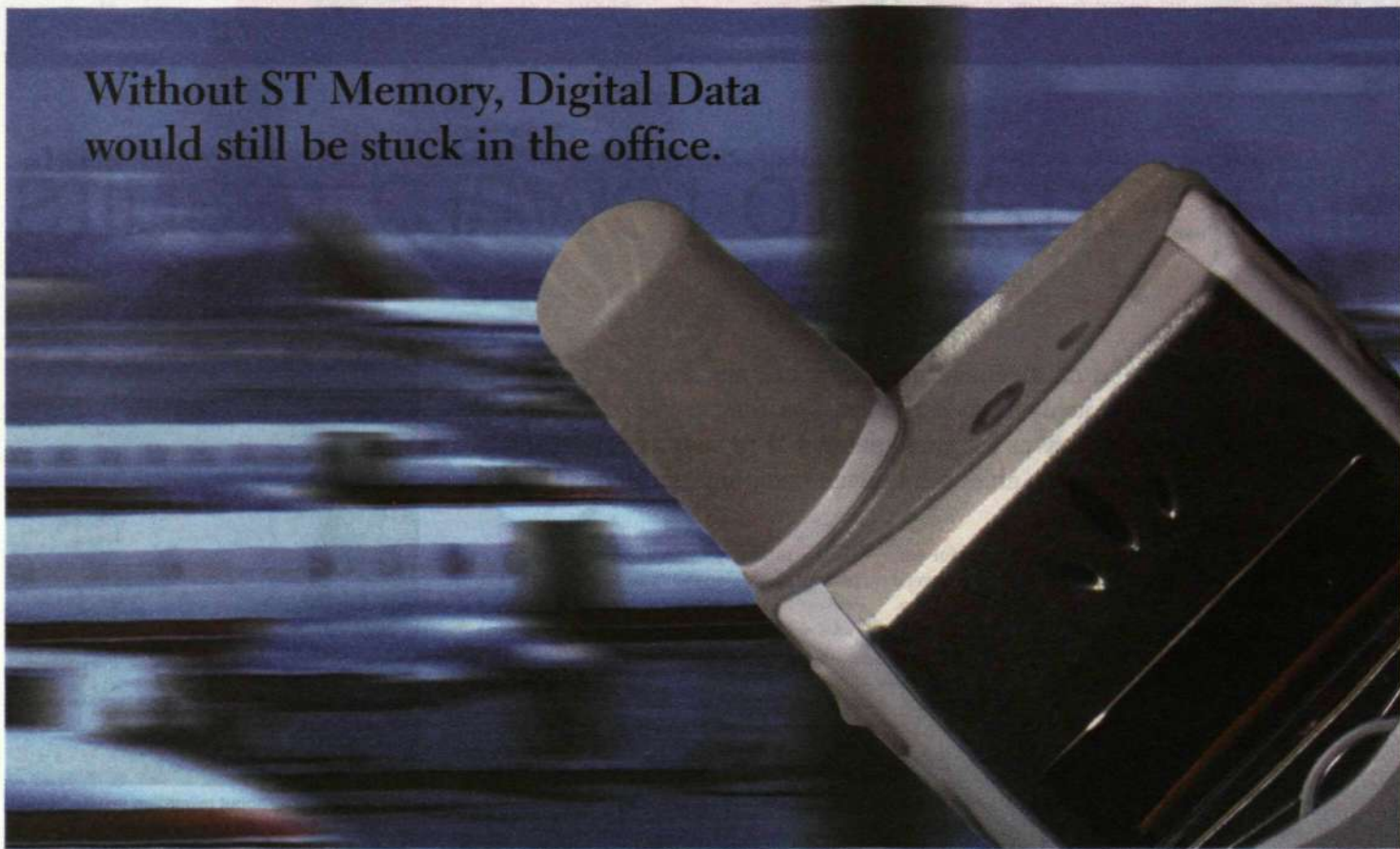
For 2002, the calculation is somewhat stricter than previously, in the sense that the items not linked to operations are excluded from the calculation. Examples of such items are divestments of entire operational units or strategic investments.

The basis for any payment of incentives is defined as cash flow before financial operations. This is an item that is reported in Ericsson's interim reports.

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# Decent outlook for mobile games

Naturally, there is a market for mobile games, but keep your expectations within reason. Above all, don't let users believe that their mobile phones are going to be transformed into a Gameboy. This is the advice from Roope Mokka, an analyst with Ovum.

"Remember that the majority of mobile users will never play games over mobile networks," says games expert Roope Mokka, who recently visited Ericsson in Kista.

It must be pointed out that Ovum's estimate of the future mobile games market is more pessimistic than that of competing analysis companies. Ovum believes that global revenues will level off at about 4 billion dollars in 2006, which is less than a quarter of Data Monitor's forecast (17 billion). ARC is also anticipating higher revenues of approximately 11 billion.

There is already a mobile games market today, but it is virtually negligible outside Japan and South Korea, according to Ovum.

"Those who are playing today are primarily 'early adopters' who see it as their duty to test all new applications," says Roope Mokka.

Users also include children and teenagers.

"They use SMS as a second language and are keen players of SMS games."

Another group plays games that are linked to TV programs or films, such as Big Brother or Who wants to be a millionaire? However, a small group of really dedicated players has already become established.

"Mobile games are one of their most important leisure interests. This is noticeable in the fact that play is most intensive between 6:00 and 9:00 p.m. There are also websites where they can discuss techniques, such as 'How can you play games in the shower in a safe manner?'"

One problem, according to Roope, is how games are billed. Tariffs are generally based on time. The more skilled you are, the more you pay. This is a contradiction - people are used to winning prizes when they do things well.

Nevertheless, his advice to operators is to promote existing games more and to invest in new games. However, a warning should be added: Don't raise expectations too much.

"If you let users believe that they are going to get Gameboy in their mobile phones, they will be disappointed and will not come back."

How do you know, then, which games work?

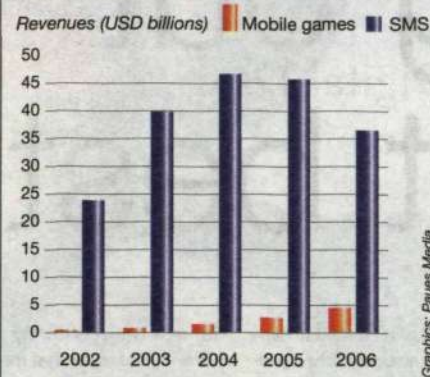
One tip is to continuously monitor the market. If you find a concept that is successful in some part of the world, you should copy it quickly," says Roope Mokka. "In this case, it will probably work in other places."

ELIN DUNÄS

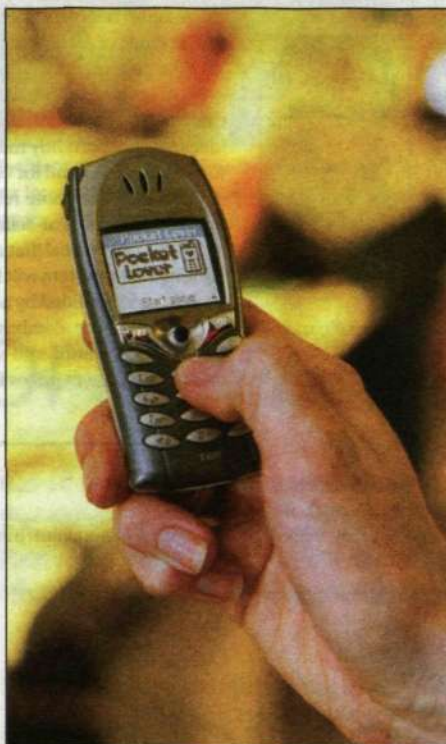
elin.dunas@lme.ericsson.se

## MOBILE REVENUES

Revenue from mobile games is expected to increase sharply in the next few years. However, everything is relative, which can be seen in a comparison with SMS. Source: Ovum



Graphics: Peaves Media



The number of players of mobile games is currently negligible, but there are nevertheless many games to choose from. PHOTO: BLUEFACTORY

Footnote: Roope Mokka spoke at a seminar arranged by the Business Intelligence Center (BIC).

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## DoCoMo experiments with 4G network

NTT DoCoMo of Japan has begun to build an experimental system for a fourth-generation mobile network. The system will provide up to 100 megabits per second when downloading data and 20 megabits when uploading. The operator intends to commence practical evaluation of key 4G technologies in the summer. DoCoMo expects the system to be ready for commercial launch in 2010.

Networks consisting of various technologies that use the unlicensed frequency bands are usually referred to as 4G.

## Hutchison 3G moving in right direction

It will not be easy for new 3G operators. They must succeed in enticing subscribers away from established players. Phil Kendall, head of Global Wireless Practice at Strategy Analytics, has investigated the conditions for the new 3G operators and warns against price-based competition.

"This will only lead to a price war that will backfire on the operators in the end," he says.

"The key is to acquire the rights to exclusive content."

"The Hutchison Group's purchase of exclusive football rights in the UK, Sweden and Italy is definitely a step in the right direction."

The new operators should also invest in the corporate market with powerful applications and put considerable energy into positioning their brands.



Phil Kendall

## Verizon charges by volume

The largest mobile operator in the US, Verizon Wireless, is now following the lead of many European operators and allowing many business users to pay by volume instead of per unit of time. Verizon's high-speed data network is called the Express Network and is an advanced version of CDMA known as iXRTT. The service currently covers 20 percent of the network, but the operator is planning to expand this to 30 percent before the beginning of April, when the new means of payment is launched.



China was the world's largest mobile market in 2001.

PHOTO: LARS ÅSTRÖM

## China Mobile soon larger than Vodafone

China Mobile, China's largest mobile operator, is closing in fast on Vodafone. In 2001, China became the world's largest mobile market, since the number of China Mobile subscribers increased by 54 percent to 69.9 million. Vodafone has 93.1 million subscribers throughout the world, but its growth seems to be slowing, according to Silicon.com. During the fourth quarter of 2001, the operator acquired 2.5 million new subscribers, compared with 4.4 million during each of the previous two quarters.

## PLAYERS OF MOBILE GAMES

Ovum has divided future players of mobile games into three groups:

1. The real devotees who play on a daily basis: 1.5-2 percent of mobile users.
2. The "social players," participating in up to three games per month: 4.5-10 percent.

3. Occasional players who only play if they receive a game as part of an offer and play up to twice a month. This is the largest group with between 10 and 20 percent of mobile users. It can thus be seen that the majority of users will not play any mobile games at all.

They have a big responsibility – developing Ericsson's next best-seller. Since its inception almost two years ago, quite a bit has happened within Ericsson Business Innovation. A number of ideas have grown into independent ventures within the company that have gone on to sign their first contracts. Read more about this stronghold of innovation on the following five pages.

# Seeking out the next best-seller

**Ericsson Business Innovation** began operating in July 2000. It was created to capitalize on good ideas both within and outside Ericsson and to let the best of them develop into their own operations, ending up either within our outside of Ericsson. Today, Ericsson Business Innovation supports approximately 20 ventures (young companies) and five cells, which are operations in their infancy.

"Our operations have gone well over the past year, although we were also affected by the economic downturn and the Efficiency Program. A number of the ventures that showed up as ideas in our e-mail in-boxes two years ago, are today fledgling companies that have landed their first contracts," explains Jöran Hoff, head of Ericsson Business Innovation.

Ethernet, a solution for broadband in the home, is one example of an operation that was developed within Ericsson Business Innovation and which is now standing on its own feet. Today, the solution is being further developed and marketed successfully within the Multi-Service Networks business unit.

Due in part to the economic downturn, it has been more difficult to secure financing



Jöran Hoff

for new projects during the past year. The telecom industry has had to dust off old, time-tested ideas that many people did not care much about just over a year ago.

"New ideas blossom best in established companies, while time-tested ideas work best at new companies. That is an old business truth that nobody cared about during the telecom boom, but which applies now," says Jöran Hoff.

The kinds of ideas that venture capitalists are willing to invest in have also changed over the past year.

"At the moment both we and other financiers are focusing on products and solutions that can provide income within a short period of time, between one and two years. The ideas that are currently making the most headway are usually solutions that contribute to increased demand for GPRS, EDGE and 3G services and networks," he says.

Jöran Hoff was more reluctant to answer the question of which services and products will become best-sellers in the future.

"Well, I can't reveal that now, but I believe that all kinds of exciting services for mobile handheld computers will be coming out, including games, as well as lower prices for mobile services aided by advertising."

"The real-time database that is being developed within Business Innovation is incredibly powerful and will result in more stable connections, increased capacity and possibly lower prices for services," says Jöran Hoff.

## ERICSSON BUSINESS INNOVATION

**Established:** In July 2000

**Headquarters:** Stockholm

**Goal:** To create future core operations for Ericsson. Among the items that Ericsson Business Innovation ventures are developing: A real-time database (Alzato), IP telephony for the home (DRG), advertising on mobile phones (Mediatude), video streaming (Popwire), and more (see website).

ULRIKA NYBÄCK

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Inn.ericsson.se

## From concept to new venture

Some 20 new ideas arrive every week in Ericsson Business Innovation's suggestion e-mail box. A number of people at the company evaluate which ideas have a future. They take into consideration such factors as technology, the market and standards.

"First of all, we find out whether or not the proposed solution or product already exists on the market or within Ericsson. Then we look at whether demand exists or could be created. A good idea always solves a problem and fulfills a need," says Tomas Ulin.

He works as a technical advisor for Ericsson Business Innovation and is one of the people who evaluates incoming ideas. Every year, a number of innovators receive an offer to



Tomas Ulin

form a cell within Ericsson Business Innovation, something like a precursor to a company. The cell is used primarily to develop a business plan, and innovators receive assistance that they do not have themselves, providing answers to questions regarding personnel in the form of expertise and resource issues, and issues relating to legislation and standards.

Work within a cell lasts approximately three to six months. Business concepts that are still judged to be sound are then formed into a venture.

Ericsson Business Innovation sometimes provides all of the financing, and sometimes partial financing in conjunction with one or more partners. Work within a venture involves recruiting employees, completing the product or solution and initiating marketing efforts.

Only between one and five percent of the ideas received by the company actually get the chance to form a cell.

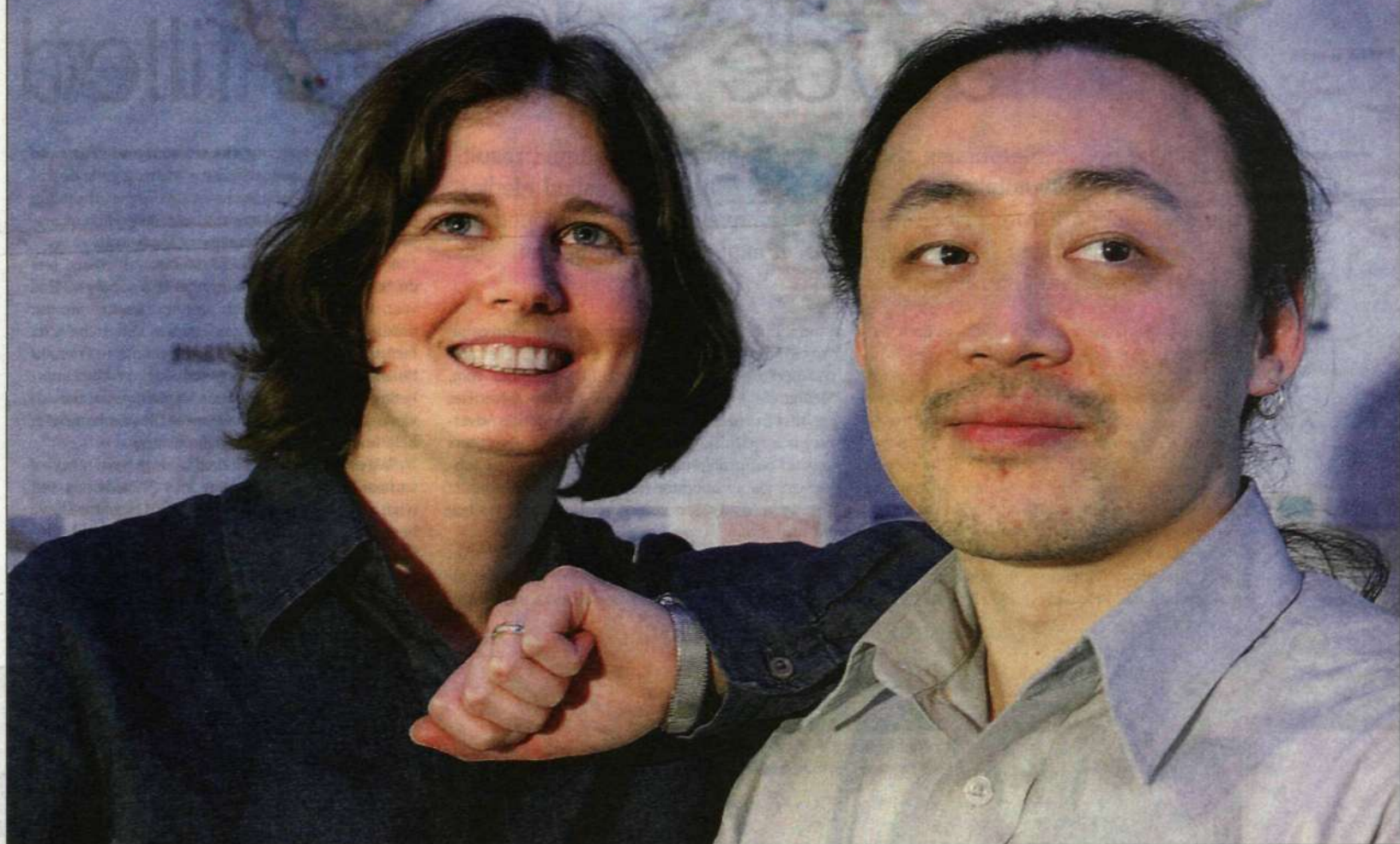
"The ideas that are turned down are seldom bad. In most cases, the concept needs to be developed further and sometimes they are not ready for the current market. Fairly often we pass ideas along to other areas of the organization or to other companies, such as Sony Ericsson," says Tomas Ulin.

Tomas Ulin is also responsible for ensuring that as many people as possible know where they can go with their new ideas. Building up a network of ambassadors, linked to Ericsson Business Innovation, is a key aspect of this work.

An ambassador's task is to be on the lookout for new ideas within the organization and let employees who have ideas know where they can go with them.

ULRIKA NYBÄCK





Sara Sundvik and Per Bäckström, who both work at the Residential Communication Services venture, believe that they have been able to enjoy the best of both worlds by having the opportunity to grow within Ericsson Business Innovation. They are now working hard at marketing their DRG System, an IP telephony solution for the home. The company has already signed contracts with two operators, Sonera and Kingcom.

PHOTO: GUNNAR ASK

# IP telephony with potential

Ericsson Business Innovation believes that IP telephony will become the foundation for broadband services into the home. This is why the company made the decision two years ago to support the Residential Communication Services venture. It has now developed the DRG System solution and has already landed its first two contracts.

According to Per Bäckström, chief technology officer for the venture, IP telephony now has the same sound quality as today's fixed circuit-switched telephone networks, with the potential for even surpassing them if so configured. He believes that the time is right for IP telephony.

"Currently, there is an intensive struggle underway among operators to attract Internet subscribers. One

way to differentiate oneself from the crowd is to offer telephony and a high-speed Internet connection bundled as a package," he says.

With the DRG System, operators can offer broadband subscribers a high-speed Internet connection as well as the option of two telephone lines – one for the parents and another for the children, for example. Subscribers can also place calls and be online at the same time.

The DRG System consists of two parts: a box (gateway) which is placed in the home of the subscriber, and a management system that enables the operator to remotely oversee upgrades and configuration. The gateway converts signals from analog telephones to IP telephony and vice versa. Via the control system, the operator can add services and download new software to the gateway in order to adjust voice quality levels, for example.

Available on the market for the past year and a half, two operators have signed contracts for the system, Fin-

land's Sonera and Italy's Kingcom. The solution can be connected to all kinds of access networks. Kingcom has, for example, a fiber-optic network (Ethernet) and Sonera connects the solution to an ADSL network. Currently, another 50 or so operators are testing the solution.

Sara Sundvik is product marketing manager for the DRG System. She believes that it is only a matter of time before more contracts are signed.

"Operators are much more mature and there is greater understanding than there was one year ago. During the second half of the year, we are anticipating several commercial tests, after which we expect sales to really take off," she says.

What advantages have you had from being able to expand within Ericsson Business Innovation?

"I think we've had the best of both worlds. For one, there has been a real entrepreneurial spirit with many innovators who have had more than one role in the project. Moreover, we've been able to take advantage of the company's extensive network of contacts and broad expertise," explains Per Bäckström.

Sara Sundvik nods in agreement.

"Not being locked into a single occupational role has been a big advantage. I also appreciate the short path between what our customers want and what we actually deliver for them," she says.

ULRIKA NYBÄCK



The white box, a gateway, converts analog signals to digital ones, enabling subscribers to both place calls and surf the Web at the same time.

© [www.ericsson.com/about/innovation/venture\\_drg.shtml](http://www.ericsson.com/about/innovation/venture_drg.shtml)

# Mediatude sees ad-filled future

Advertising on mobile phones might become popular as it should result in lower prices for mobile phone subscribers. A company called Mediatude, with support from Ericsson Business Innovation, has developed a service for advertising on mobile phones. It expects to sign its first contract in the near future.

Ericsson Business Innovation receives ideas from various sources. Frequently, it is Ericsson employees who contact the company, but sometimes Ericsson Business Innovation seeks out innovators or companies if they have a product or a certain area that they believe in. When Ericsson Business Innovation first made contact with Mediatude, it was in search of a company that worked in the field of mobile advertising. Mediatude was formed three years ago and develops technical platforms for profile-based marketing. It also sells strategic services for mobile marketing.

After their initial meeting, the two parties expressed a mutual interest in working together. In the

summer of 2000, Ericsson Business Innovation came forward as the company's first financial backer and collaboration was established. In September 2001, Mediatude took over Ericsson's Mobile Advertiser product in order to develop it further. Mobile Advertiser is a technical platform that enables advertisers to send out profile-based ads to mobile phone subscribers via an operator (see fact box). The product has been ready for commercial operation since autumn 2001.

"At the moment, we are working hard to market Mobile Advertiser. A number of operators have already tested the service on their networks and we also

demonstrated it during the telecom trade shows in Cannes and Hanover, where it attracted a great deal of attention. That's why we have high hopes of signing our first contract in the near future," says Håkan Larsson, who is technical manager at Mediatude.

A conceptual version of Mobile Advertiser was demonstrated last year at the CeBIT trade show. This year, Mediatude has been able to demonstrate the finished product. The company was able to have its own stand at the Ericsson display, thanks to Ericsson Business Innovation. Jenny Carlsson, product marketing manager at Mediatude, explains what the advantages have been of developing the company with help from Ericsson Business Innovation.

"We've received a great deal of support in terms of various individual marketing and PR activities. But what has been most important for us is that we have been able to promote and sell our services and solutions through Ericsson's marketing company. Mobile Advertiser will be offered both as part of Ericsson's solutions and as a standalone product for various cus-



Advertising on mobile phones, tailored to the recipients, could really take off, at least if one is to believe Håkan Larsson and Jenny Carlsson of Mediatude. With the support of Ericsson Business Innovation, they have developed a solution that will enable operators to offer lower prices on their services if subscribers are willing to receive advertising on their mobile phones.

PHOTO: ECKE KÜLLER

## MOBILE ADVERTISER

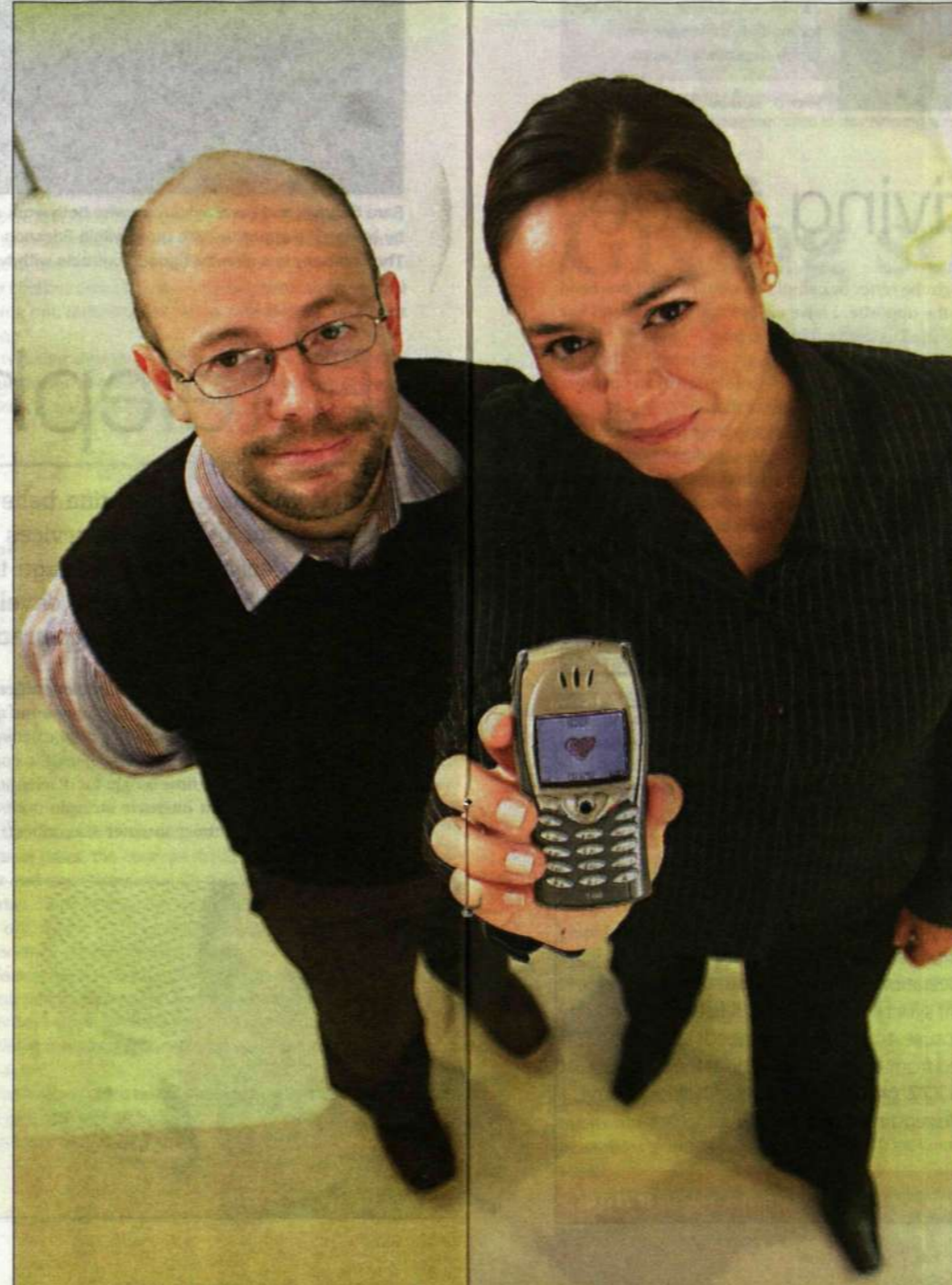
The Mobile Advertiser solution can be utilized in different ways, by both operators and advertisers. Here is an example of how it might work:

An end user subscribes to a mobile phone operator and in order to obtain certain services at a reduced price, the customer allows advertising to be sent to their mobile phone combined with actual service content.

In order for the advertisements to be as relevant as possible, subscribers disclose certain demographic facts when signing up, such as age, gender and interests.

The operator, in turn, signs a contract with various companies that advertise in mobile media channels and send out a certain amount of advertisements to end users. Details about how long, when during the day and how often advertisements are sent out are controlled by the advertiser.

When a mobile phone user, for example, checks the weekend weather report on a WAP page, they might also receive an ad for a ski trip or a discount on winter tires or whatever it might be that corresponds to their profile.



# future

tomers. Moreover, it means a great deal to us to have such a heavyweight as Ericsson as our financial backer, especially when we meet with customers and new sponsors," says Jenny Carlsson.

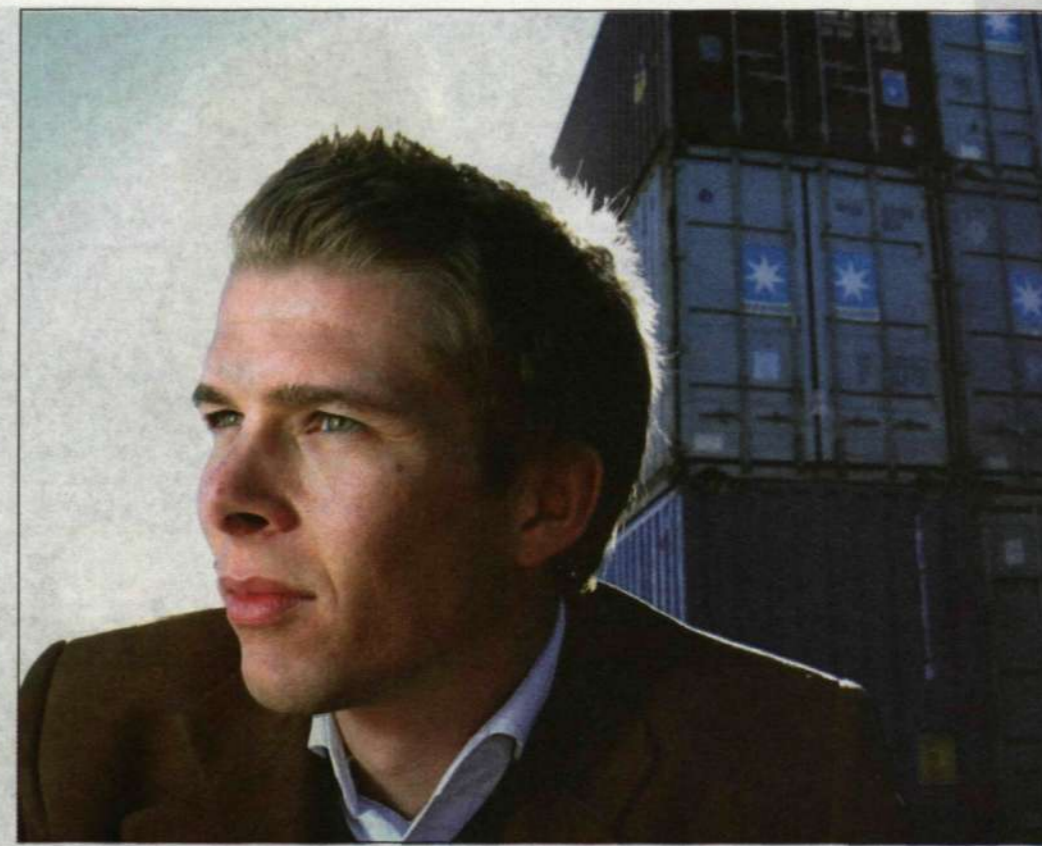
When it comes to future prospects, Håkan Larsson and Jenny Carlsson both believe that profile-based mobile phone marketing is something that will be very big in the future.

"What we are hoping for now is to collaborate with a large mobile phone operator in Europe who understands the scope of mobile services," says Jenny Carlsson.

Håkan Larsson agrees. "We also hope that within the near future it will be just as commonplace to send fun advertising clips between mobile phones as it is to send fun film clips on the Internet," he says.

ULRIKA NYBÄCK

www.mediatude.com



"I was amazed when I found out that there was an entire organization and process for implementing ideas such as mine," says Karl Bohman, who received help in developing a system that tracks shipping containers. PHOTO: GUNNAR ASK

# Karl keeps track of containers

Don't give up if you have a good idea, a good support system exists within Ericsson, says Karl Bohman whose invention to keep track of container traffic made him the president of his own company.

Two years ago, Karl Bohman was working at Ericsson, developing logistical solutions aimed at the packet level. However, he quickly realized that the system could be developed further.

"Funds within my project were tied up so I began looking around the organization for some other unit in which to develop the concept. In the end, I saw an ad in *Contact* that led me to Ericsson Business Innovation, and when I found out what they had to offer, it sounded almost too good to be true," says Karl Bohman.

His idea consists of a wireless system for tracking and monitoring containers. Radio transmitters, attached to containers, communicate with the vehicle, which in turn transmits data to a server via GSM, TDMA, WLAN or whichever technology is the most suitable for the location.

The potential market for intelligent transportation systems has been estimated at USD two billion this year, and ten times that within a few years. At the same time, customers are conservative and patience is required when marketing a new technology. Ericsson Business Innovation gave Karl four

months to show results in the form of an operational system, a business plan and a commercial customer contract.

"It was a difficult job, involving a lot of pressure to produce tangible results. But we succeeded and were able to start a venture where we could further develop the concept. It was like working at a small company within a large company and it worked very well. There was plenty of scope and flexibility for our operation."

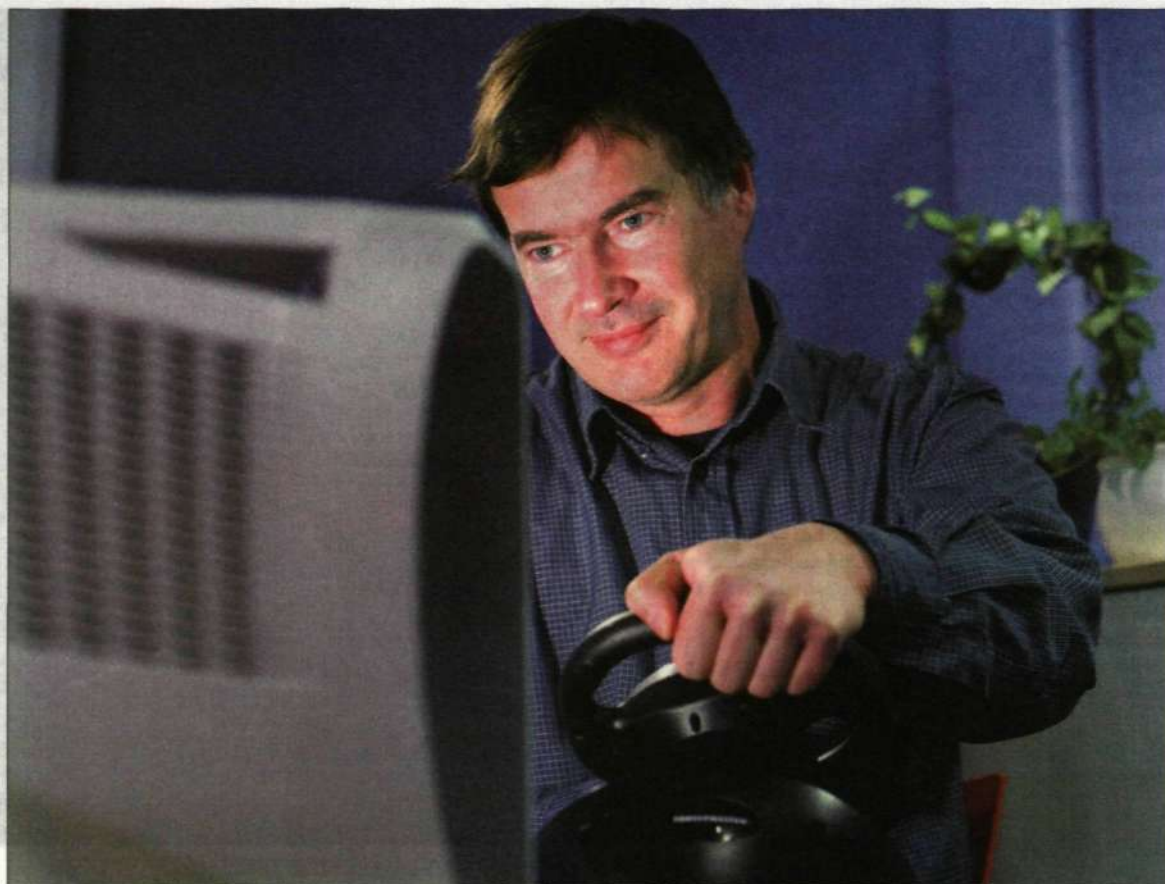
In June 2001, it was decided that operations should continue outside Ericsson. Once another financial backer was found, Karl Bohman was named president of his own company, All Set Wireless Tracking.

"I'm full of ideas, sometimes a few too many perhaps. For that reason, it has been good to have the support of Business Innovation and more down to earth colleagues who can screen my ideas," he says.

Karl Bohman believes that there are many people at Ericsson who, like himself, have ideas that they would like to implement. His advice is to not give up hope.

"I was amazed when I found out that there was an entire organization and process for implementing ideas such as mine. But you have to expect to work hard at it. When I developed the initial presentation, I was working two jobs for a couple of months - both my regular job as well as developing business plans that I could present to the committee. But it has been worth it," says Karl Bohman.

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"Focus on customer needs. These are the ideas that have promise." Advice from Magnus Jändel, whose real-time solution for multiple computer users today employs 37 people.

PHOTO: GUNNAR ASK

## "Solving problems is my driving force"

Magnus Jändel previously worked as a research manager at a lab within Ericsson Telecom. Today his invention employs 37 people at a company called Terraplay, where he is the technical manager.

It all began in 1998 when Ericsson Business Innovation encouraged employees at Ericsson Telecom to come up with proposals for new products.

"I thought that sounded exciting and started thinking about what sort of technical problems needed solving. It led me to think about my children who played

computer games over the Internet and the poor transmission quality available, and I realized that there was much that could be done here," says Magnus Jändel.

Ericsson Business Innovation "bought" the concept and today Magnus Jändel and his group have developed a system that enables real-time communication between many individuals. The system has wide applicability, although the first commercial application will be for computer gaming.

"For me, the driving force has not been gaming, but rather finding new applications for telecommunications," he says.

After starting out within Ericsson, the decision was made to spin off the project. About a dozen people joined Magnus Jändel at the new company, with Ericsson's blessing.

"It has been extremely exciting. People expected that

I might be bitter or complain about it, but it has been just the opposite. I have always felt that Ericsson has supported us one hundred percent."

Today, Terraplay has a delivery agreement with Ericsson, and when Ericsson sells a solution to an operator, Terraplay is included as part of that.

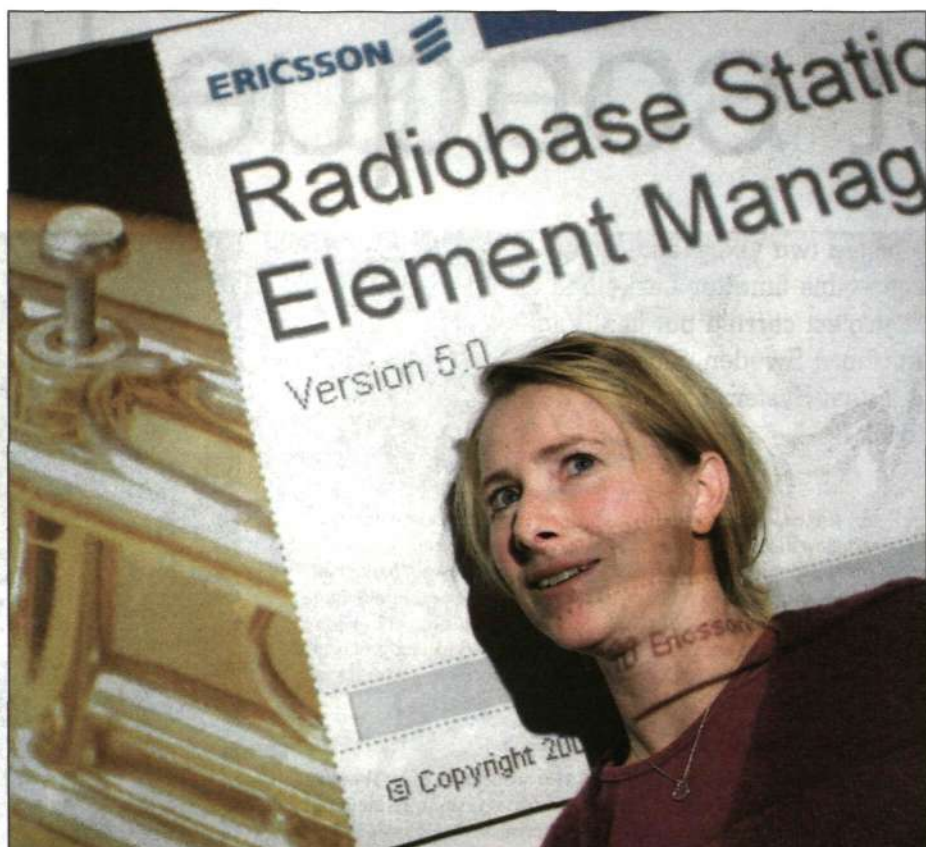
"My advice to others is not to work from a technical angle, but to concentrate on customer needs when developing an idea. This is how you come up with promising solutions. And if you don't succeed the first time, just remember that most of the proposals submitted to Ericsson Business Innovation are rejected. So don't take it as a defeat, but rather as an experience to build upon and try again," says Magnus Jändel.

LARS-MAGNUS KIHLLSTRÖM

## Works great in temperatures that **KILL** other oscillators



The inside of a basestation is no walk in the park... it can get blistering hot or frosty enough to stop quartz oscillators cold. Your basestation customers don't like downtime, it costs them revenue. They're going to order the product that eliminates interruptions in service. Datum-Irvine's **X72** Rubidium oscillator makes your Basestation design stand out from the competition because of its excellent synchronization and reliability. Periodic maintenance is greatly reduced because the **X72** never needs calibration. Its operation can even be monitored from a central site. And if there is an interruption in GPS disciplining, the **X72** provides 48 hours of holdover, time enough to make repairs without affecting service.



The user interface for Ericsson software should resemble Ericsson, not Windows, according to Marie Sparr, an industrial designer who is developing a new operator interface for 3G base stations.

PHOTO: GUNNAR ASK

## Giving software an Ericsson profile

"We must have an Ericsson profile even on software," says Marie Sparr, an industrial designer whose task is to provide 3G base stations with pleasing and user-friendly graphic interfaces.

Design is not only a matter of creating attractive phones with simple interfaces. It is also a question of conveying an Ericsson feeling in all products. At the unit responsible for developing WCDMA base stations in the RBS3000 series, an industrial designer was recruited a year ago for this purpose. Her somewhat unusual assignment is to give the new base stations a simple operator interface that will be used by installation and maintenance personnel.

"This is clearly a neglected area, and it will take some time to develop an Ericsson interface appropriate for all Operation and Maintenance applications," says Marie Sparr, who estimates that more than 400 icons will be required.

The vision is that the user's perception of the graphic interface should be seamless, meaning that the application, help texts and e-learning, for example, should be perceived as a single unit. The interface must function in an intuitive manner in several products.

### Musical metaphors

Together with the product and marketing departments at CRND, Marie Sparr has chosen musical metaphors to symbolize the parts of a WCDMA network.

An RBS (Radio Base Station), for example, becomes a trumpet, while the RNC (Radio Network

Controller) is a metronome, RAN a conductor, and so on.

"We must also provide a similar appearance on screen between the various interfaces that Ericsson supplies and which may be used by the same person. The various functions should always be located in the same place, for example, and what happens when you click a given button must be logical," notes Marie.

Another consideration is that Ericsson should look like Ericsson and not Microsoft. The interface should thus be specific for Ericsson, yet so simple that an operator can send out a person who is not an expert in telecom technology to replace a card in a switch or a base station.

"Windows is designed for administrative applications, and it is not at all clear that it is optimal for our applications," continues Marie.

### Strengthening the brand

During the past year, Marie Sparr has had two thesis students helping her with the technical design. Portions of the new software are already being tested by users. The idea is that operators should save time and money, while Ericsson strengthens its brand.

"If our customers have a choice between two suppliers, usability considerations may be decisive. This has happened before, and in our testing we can see that an appealing, simple and user-friendly interface is very much appreciated by our customers," concludes Marie Sparr.

LARS CEDERQUIST

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## Whatever happened to mobile radio?

During the 1990s, there was much talk of creating a pan-European mobile radio standard, TETRA, which would be the equivalent of mobile telephony's GSM. Mobile radio is a noncellular technology for voice and data that is used by police, fire departments, ambulances, etc., and supports group calls and broadcasting. It was hoped that TETRA would make it possible to integrate the networks of different countries. But what happened to all this?

The attempts to compete with mobile telephony did not succeed, but TETRA does serve a useful complement to GSM, and later on, to UMTS, and it exists in about 30 countries. The iDEN system, which was developed by Motorola and is used in about 13 countries, is applied mainly by the operator Nextel, which provides a service similar to mobile telephony that supports roaming with GSM to millions of users in the US.

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## 3G equipment integration really works

A new world record may well have been created: in Japan at 4:30 in the afternoon on March 4, a 3G mobile phone call was sent, using equipment from three different suppliers.

This is an example of the trend toward MVI – Multi-Vendor Integration – itself the result of the development of standardization toward open interfaces.

The call was placed at the test facility of Japanese operator J-Phone in Kita-Ikebukuro, in cooperation with suppliers NEC, Ericsson and Nokia. The two combinations that included Ericsson were radio networks from Ericsson, and core networks from NEC and radio networks from NEC or Nokia.

## Nokia demonstrates new platform for M2M

In mid-March, Nokia presented its platform for machine-to-machine communication, M2M. The platform consists of hardware, software and an application-development package.

M2M is expected to skyrocket very shortly, and reach 100 million users by 2005.

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## Palm launches proprietary browser

Also in mid-March, Palm launched its own Palm Web Browser for networked Palmtops.

The Palm Web Browser is slated to become available in the US on April 8, and in Europe at the end of April. According to Palm, this product is more powerful than previous browsers.

Meanwhile, Handspring – which produces handheld computers based on the Palm platform – has released its own browser, "the Blazer."

## Tech tip

Windows users can quickly minimize all active windows by pressing the Windows key and "m".

If you press only the Windows key, you will open the Start menu. Go to Help and search for Natural Keyboard Shortcuts, which will give you a list of keyboard commands that can be very useful when keyboarding.

A tip from Gunilla Ahrens at IT Solution Management.

# Internet conquers

# the arena

Direct webcasting of ice-hockey games was tested two years ago. A few months ago, more pilot webcasting took place – this time for basketball. These tests are part of "Arena" – a research project carried out jointly by the Mäkitalo Research Center in Luleå, northern Sweden, where Ericsson Erisoft is an important partner. The Event System product is a concrete result of the Arena cooperation project.

The project began in autumn 1999 and includes Ericsson, the Center for Distance-spanning Technology (the CDI, of which the Mäkitalo Research Center is a part), the Luleå Institute of Technology and the Swedish operator Telia. The first part of the project, which concerned ice-hockey, also included Luleå Hockey.



Tommy Arngren

"The Arena project has shown how the Mobile Internet can be integrated with various sports such as ice-hockey and basketball. The project continues, and current plans are to carry out the next tests with women's soccer," explains Tommy Arngren, Arena project manager at Ericsson Erisoft.

In the first test, involving ice-hockey, the match was shown on the Luleå broadband network at the same time as it was broadcast on television. In addition to real-time picture and sound, viewers had access to chat rooms, could choose camera angle and display certain statistics.

The next step in the project was to get closer to the ice-hockey players by placing sensors on them to measure their pulse and breathing. Moreover, there was a camera built into the referee's helmet. During the game, different camera angles and sensor data were wirelessly transmitted to handheld computers held by spectators.

"These tests attracted considerable international attention, with the result that the idea of a camera built into the referee's helmet was used in the World Ice-hockey Championships held in 2000 in Germany," explains Tommy Arngren.

### First basketball game

The first webcast basketball game was transmitted just before Christmas. As with the ice-hockey match, residents of northern Sweden with broadband service could watch the match from their home computers.

Apart from watching the game live, they could also communicate with each other via interactive services such as chat rooms and read digital match programs and statistics. A post-game sur-

vey showed that basketball fans are keen on the idea of being able to follow their favorite basketball team via the Internet.

"The Arena project continues, as further webcasts of basketball games are planned for the spring. We plan to observe how different access technologies – WLAN, SMS/GPRS/MMS, Internet by wire-line connection and digital television – can be used. Our goal is to demonstrate interactivity between different technologies during a single game," Tommy Arngren relates.

### Creative cooperation

Cooperation and creativity are two concepts that Thomas Brännström, president of Ericsson Erisoft, stresses in responding to the question of what the Arena project means for Ericsson.

"Our cooperation with CDT has become even more intense, and the same applies to companies outside the academic sphere. Our contacts with the member companies of Internet Bay (see adjacent article) have broadened our perspective and provided useful contacts in other industries. Here, you can really talk about a creative ferment," he says.

Taking advantage of creativity is important for Ericsson Erisoft. The Company has in fact established a "venture board" to evaluate new ideas.

"It makes it easier for us to evaluate proposals and in certain cases launch experimental operations. At the same time, we are able to cultivate new ideas in an organized manner," Thomas Brännström continues. How to exploit new ideas for business purposes is a key issue. The Arena project is a good example here, considering the high-end Event System server it produced.

Event System was demonstrated in the autumn at the Comdex trade show in Gothenburg. In March, it was demonstrated at the CTIA show in the US. The considerable media attention given to the product proves its attraction.

"No doubt about it, this is a product that can accelerate the progress of the 3G systems," Thomas Brännström says.

GUNILLA TAMM

gunilla.tamm@ime.ericsson.se



The first live webcast of a basketball game took place just before Christmas. Apart from watching the game live, viewers could communicate with each other via interactive services, such as chat, and were able to read digital match programs and statistics. PHOTO: STIG EIDEGREN

## IT companies of Gulf of Bothnia in Internet bay

The Internet Bay association for IT companies based on the shores of the Gulf of Bothnia was created about two years ago.

"We have created a brand that represents the entire IT industry in this region, and it has resulted in greatly increased cooperation among the companies," says Thomas Brännström, chairman of the association and president of Ericsson Erisoft.

Internet Bay began when the business community and the university spontaneously took the initiative to cooperate with each other.

### 100 companies

The association currently consists of about 100 companies, of which Ericsson is the largest. Most of the companies have between 40 and 50 employees.

"In cooperation with companies in Finland, we wanted to create a Silicon Valley here in the Gulf of Bothnia, and help this area become known as an advanced IT region. With IT, there are no borders and distance is never an obstacle, so it is an appropriate industry for our northerly location. We have now created a brand that has become well known," relates Thomas Brännström.



Thomas Brännström

### Many advantages

Cooperation within Internet Bay yields many advantages from coordination, as is to be expected when companies with different perspectives and ideas compare notes and exchange views.

"Internet Bay is now hoping to generate more cooperation through the active participation of IT companies from the Finnish side of the Gulf of Bothnia," says Thomas Brännström.

GUNILLA TAMM

## Valuable experience from test audience

The Arena project has been, and continues to be, important for us," says Tor Björn Minde, head of the Ericsson Research team working at Ericsson Erisoft. Wireless multimedia, as in the Arena project, is a common factor throughout several of the teams' assignments.



Tor Björn Minde

The Arena project has enabled the team to cultivate its relationship with the University of Luleå. The high-end Event System server was developed. Tor Björn Minde believes that the server will stimulate interest in 3G.

"In our work with the 3GPP standard for multimedia messages, we have worked closely with the Arena project, and have acquired an understanding that has helped us steer standardization in the right direction," he explains.

Apart from the Arena project, the Ericsson Research

team is working on "eStreet," an electronic commercial street in the Luleå city-center complex. In conjunction with the Christmas rush in December 2000, when the eStreet project was rolled out in reality, a test panel was created, and this panel currently consists of about 2,800 people.

"For those of us who work on hi-tech projects in wireless Internet, these testers are very useful. From this population, we can select different groups of people for different tests. It is easier, too, to keep such a group together in a small city like Luleå, than in a larger city," says Tor Björn Minde.

The cooperation between universities and business partners on end-user tests is conducted by the Mäkitalo Research Center, where several projects are in progress.

"One example is eStreet, where we are now in Phase two, which involves testing our positioning. Another example is virtual queuing numbers for banks, which

we tested last autumn," says Mats Eriksson. He has been on leave from Ericsson Erisoft for a year and a half, and is currently managing the Mäkitalo Research Center.

"Our job is to bring technology into the community, focusing particularly on distance and how we can bridge it using Internet technology. There is currently an EU project under way on preventive healthcare in the home and services related to home-based medical care. The project manager for this project is Ericsson Consulting in Germany," he says.



Mats Eriksson

GUNILLA TAMM

## Free Net-Based Courses !!!

Ericsson University can now offer more than **250** free net-based courses for all Ericsson employees around the world. Many new titles are available in the areas of Business, Information Technology and Interpersonal skills!

The courses are accessible via Internet until the end of 2002. This means you can take them at work or at home.

university.ericsson.se



On March 19 and 20, the Ericsson Project Management Institute held a workshop in Stockholm for representatives of Ericsson's market regions. Here, Åke Rundqvist, center, advises Ulf Sandberg, project office manager in Sweden, and Kate Lynn, project office manager with PDU IP Access in the US, on how to manage projects more efficiently.

PHOTO: TOMMY JOHANSSON

# The better projects project

By managing projects more efficiently, Ericsson can save a great deal of money. Project Portfolio Efficiency, PPE, is a program designed to make Ericsson market-leading in project work as well.

Hundreds of projects are started within the Company every year. However, at present, Ericsson has no uniform approach to managing these projects and determining what types of projects are worth pursuing.

"The result is that we make incorrect project management decisions – we discontinue projects that ought to proceed and start projects that are not worth the effort," says Åke Rundqvist, who works at the Ericsson Project Management Institute, EPMI, and is in charge of the program.

At Ericsson, we're good at carrying out specific parts of the process properly, but not so good at identifying the right parts to conduct. This has to change," he says.

### Enormous savings

Ericsson managers Mats Dahlin and Bert Nordberg pointed out the problem some time ago. They in turn have directed the EPMI to create a "healthier" project culture throughout Ericsson.

"We have set a goal of reducing costs by 1–5 percent by running projects more efficiently. Ericsson manages projects amounting to a total value of about USD 12.6 billion a year, so even saving a small percentage of costs would amount to something in the millions," Åke Rundqvist explains.

PPE consists of two different focuses: the project office model and the career guide for project managers. The project office model is a tool for coordinating a number of projects. It is also an aid for linking up different project elements such as the project owner, control functions and the project team.

The career guide helps project managers find a career path, so that they stay with the role within the Company.

"Solid leadership is essential to the success of any project. Too often, someone in charge of several parallel projects jumps off to work on something entirely different," says Åke Rundqvist.

PPE's initial phase has just been concluded. The purpose of this phase was to analyze the need for better projects and more efficient project management within each market area.

### Holding workshops

"We are now in the midst of implementing our concepts in the market areas, beginning with the market units in which the need is greatest."

This involves holding workshops with the market units involved. One such workshop was held in Stockholm on March 19 and 20.

"At these workshops we examine the particular conditions facing the units, update their requirements and help them launch local projects."

According to Åke Rundqvist, there is plenty of enthusiasm for the project throughout the company.

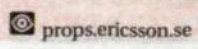
"Even the market units we have not begun to work with have produced many initiatives to become better at projects."

**EIGHT FACTORS FOR SUCCESSFUL PROJECTS**

- Good communication between all project stakeholders
- Clear allocation of roles among project participants
- Carry out a thorough risk analysis prior to project start
- Have clear plans and goals for the project
- Ensure that capable substitutes are available in case personnel resign
- Give proper priority to the project in relation to other operations
- Ensure that the workload on individual project members is reasonable
- Follow recommended project procedure

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For further information on PPE, visit:





The Mobitel team got some reinforcement from Ericsson. Jure Cuderman at the front with Suzana Laznik (Ericsson), Leopold Šulc and Roman Žitnik.

PHOTO: ALES FEVZAR

## Skis switched for rope

The excitement was intense at Ericsson in Slovenia as employees prepared for the fifth annual ski competition against the company's biggest customer Mobitel. Only once has Ericsson enjoyed victory over Mobitel, when the Swede Mats Arnamo won the prestigious competition in 1998. Now he had been brought in again to Slovenia to participate, so it was a confident Ericsson team that met up with Mobitel's skiers by the ski slope not far from the capital Ljubljana. Unfortunately, the weather was far from ideal. A thick, impenetrable fog enveloped the mountain, making skiing impossible. However, the competition-hungry skiers did not let the weather stop their plans to determine a winner. A rope was

produced, and soon the competitors were engaged in a lively tug-o-war. After a long and even struggle, an Ericsson team – with a little help from Slovenian ski legend Bojan Krizaj – pulled their way to victory. The happy winners were rewarded with Slovenian Olympic team jackets, and then it was of course time for the After ski party.

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### from the archives

In the 1960s, the telephone network in Tunis had to be upgraded. Telephone traffic in the Tunisian capital had increased exponentially after the country's independence from France, as the country gradually constructed its own state institutions. Ericsson was chosen to be the supplier from among ten suppliers in different countries, and installation commenced. The photo shows technicians connecting up the new cables to Carthage.

## Will Code Zero be the hero?

Many people have discovered the Web game Code Zero. Not only is Code Zero Ericsson's most-visited site ever, the game is now in the finals for the annual Flash film festival in San Francisco.

The festival awards prizes to films and animations developed using the Flash software, and Code Zero is one of five finalists in the international category of Best Commercial Flash Film.

© [www.ericsson.com/mobileinternet/codezero/game](http://www.ericsson.com/mobileinternet/codezero/game)

## Virtual wine-sniffing of French wines



Wine lovers will soon be able to enter the website of the Vins de Bourgogne and experience the atmosphere of the vineyards and the earthy smell of the wine cellars – thanks to a scent spreader and downloadable software. The system was developed jointly by France Telecom and partners.

The scent spreaders, which are plugged into the computer like loudspeakers, are currently expensive. However, prices are expected to drop. France Telecom is also planning scent games and scent-TV – reports Swedish tech magazine Ny Teknik.

© [www.vins-bourgogne.fr](http://www.vins-bourgogne.fr)

### new assignments

Starting March 2002, Bengt Bergvall is key account manager for UTS and TELBO, as well as the head of Ericsson in Curaçao (Netherlands) and the Antilles.

He succeeds Juan Rangel.



Thomas Waldeen at Ericsson Radio Systems has been appointed expert in Radio Network Control Systems.

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Mobile communication has always been attractive. Lars Magnus Ericsson and his wife Hilda performed some early experiments.

ILLUSTRATION: CLAES-GÖRAN ANDERSSON

## The century-old lure of mobility

There are now one billion mobile phone subscribers in the world, and judging by the growth rate, demand is still enormous. Much has happened since the first mobile phones were taken into operation, but interest in mobile communications was already high 100 years ago.

Lars Magnus Ericsson was himself an early innovator and user of mobile telephony. This was not an early application of radio, however, but rather another ingenious experiment. Together with his wife Hilda, Lars Magnus sometimes motored around the Swedish countryside during the early 1900s.

The couple brought along a telephone apparatus which was connected to two fishing rods with contact hooks at the top. When the Ericssons found a pair of suitable telephone lines by the roadside, they stopped the car and hooked the fishing rods onto the lines. Lars Magnus turned the crank on the phone and thus made contact with an operator, who connected him to the desired number. Thus was born an early form of personal mobile communication.

During the 1900s, mobile telephone services were offered using similar principles in many parts of the world. Telephone carriers roamed the streets with a telephone apparatus strapped to their stomach. For a small charge, they con-

nected the telephone so that customers could make calls.

Ericsson was involved in the many mobile systems that were operated and tested during the 1900s, but it was not until 1981 that Ericsson delivered the world's first NMT (Nordic Mobile Telephone) system to Saudi Arabia. Four years later, Ericsson had built large mobile networks for all standards established at that time: NMT, AMPS (Advanced Mobile Phone System) in the US, and TACS (Total Access Communications System) in the UK.

In 1990, Ericsson received its first order for the digital GSM system, a standard that resulted in a veritable explosion in the number of subscribers during the 1990s.

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SOURCE: THE ERICSSON CHRONICLE



column

LARS-GÖRAN HEDIN  
corporate editor

## In search of a good story

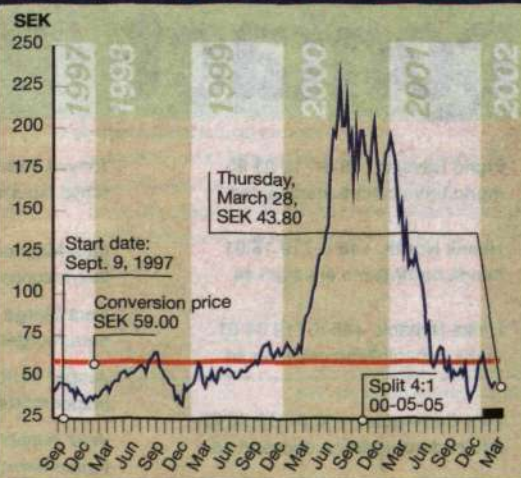
The other day I was listening to a presentation of Ericsson's new branding platform. The presenter John Giere, responsible for branding at the corporate level, described how Ericsson can master the considerable challenge of continuing to build a strong brand without the help of mobile phones. In recent years, it has been mobile phones as consumer products that have increased general awareness of the Ericsson brand.

For the company to succeed in building a strong platform for the brand, it is extremely important that everyone working in the company contributes. This in turn naturally presumes that everyone acquires knowledge about how the company wishes to be perceived. Several different descriptions are possible. Naturally, we can recite the qualities that have been established as typical for Ericsson – openness, intelligence and innovation – and try to describe them. This is not the most effective way, however. John Giere and his colleagues have found a much smarter method. By relating stories from Ericsson's daily work, we can illustrate exactly what distinguishes our company from others. Let me give an example.

An important customer in the Far East, renowned as a tough businessman, was meeting with Ericsson for contract negotiations, which were expected to be lengthy and demanding. In the elevator on the way down to the meeting, the back of this distinguished gentleman's trousers happened to split at the seam, resulting in a very revealing opening. Upon discovering this mishap, he naturally felt extremely embarrassed when the elevator doors opened and he stepped out into the hotel lobby where the Ericsson representatives were waiting. An awkward silence followed during which no one knew quite how to handle the situation until one of the Ericsson negotiators resolutely strode up to the reception, picked up a stapler and quickly and without the slightest hesitation stapled together the torn trousers. Without showing the slightest reaction, the customer returned to the elevator with the words: "Come up to my room with the contracts in a few minutes, and I'll sign them."

Do you, dear reader, have a better story? I hereby invite you all to send in your best stories to *Contact*. We promise to publish the best ones and forward them to John Giere and his branding experts!

## the ericsson b share



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