contact

THE PUBLICATION FOR ERICSSON EMPLOYEES AROUND THE WORLD

7·2005

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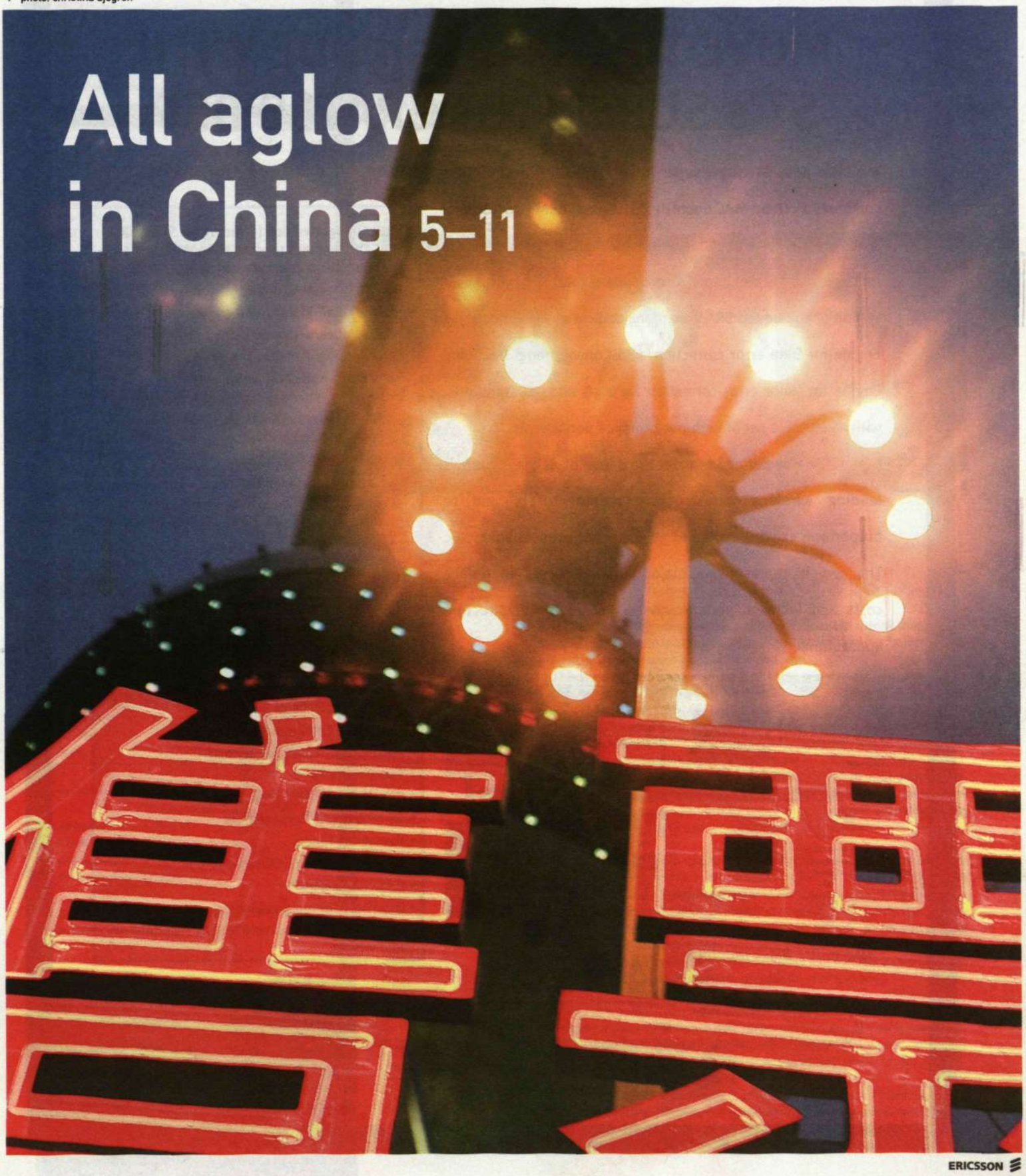

All aglow in China 5–11

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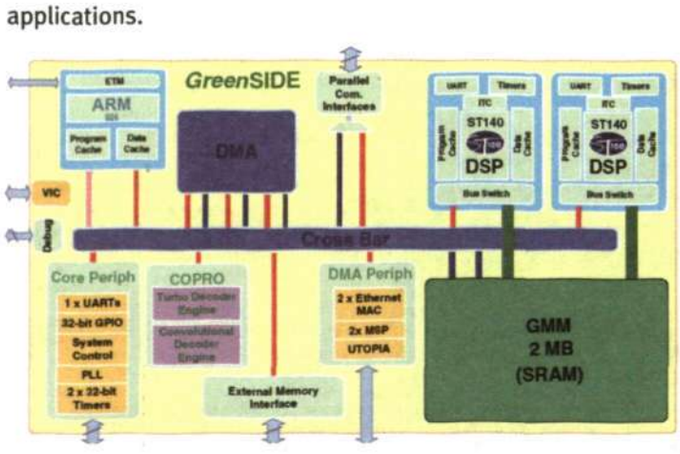

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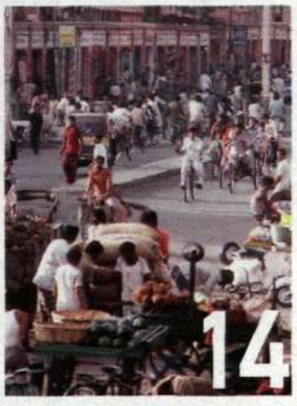

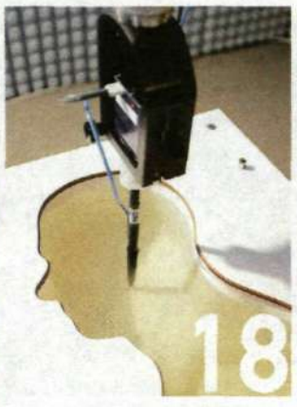

column

Henry Sténson
head of Group Function Communications and publisher of Contact

A few humble thoughts

There are times when you should be extra humble. I think that applies most when you try to look into the future and especially when you evaluate, after the fact, what someone has done and why.

This issue of Contact touches on both these possibilities. In our report on Ericsson and China, you can be certain, though, that what has been achieved has been unreservedly positive. Just think, we started selling telephones in Shanghai back in 1892. An amazing ability to look forward was then, as it is now, the basis for Ericsson. There were activities in China, Mexico, South America and Russia even back then.

Talk about having a vision. Talk about being driven by your convictions. Communication for all. That was one of the great things about Lars-Magnus Ericsson. And it became the basis for the company. By 1900, 95 percent of our sales were exports. The proportion was just as great in 2000.

In his book Megatrends, author John Naisbitt identified more than 20 years ago a number of trends that would come to affect us. I read it then, and just now over our Swedish Midsummer out in the country, I read it again. I wondered how good we are at understanding trends and the forces that can be unleashed on the world. Predicting the future is difficult. Yet we can still say that Ericsson's management did fairly well when it tried 10 years ago to predict the company's path into the new century. Contact has looked back at those predictions and compared them with the reality of 2005.

Working in a company based completely on the basic human need to communicate, it should not be too difficult for us to accept that communication is the greatest driving force in the world economy. It is communication that has made us what we are today. The same forces help to create greater prosperity and, hopefully, lasting peace.

Did Lars-Magnus understand that? In any event, you feel humble when you think about the difference our products have made around the world. So you tip your hat to the achievements of the past, then roll up your sleeves and prepare for the future.

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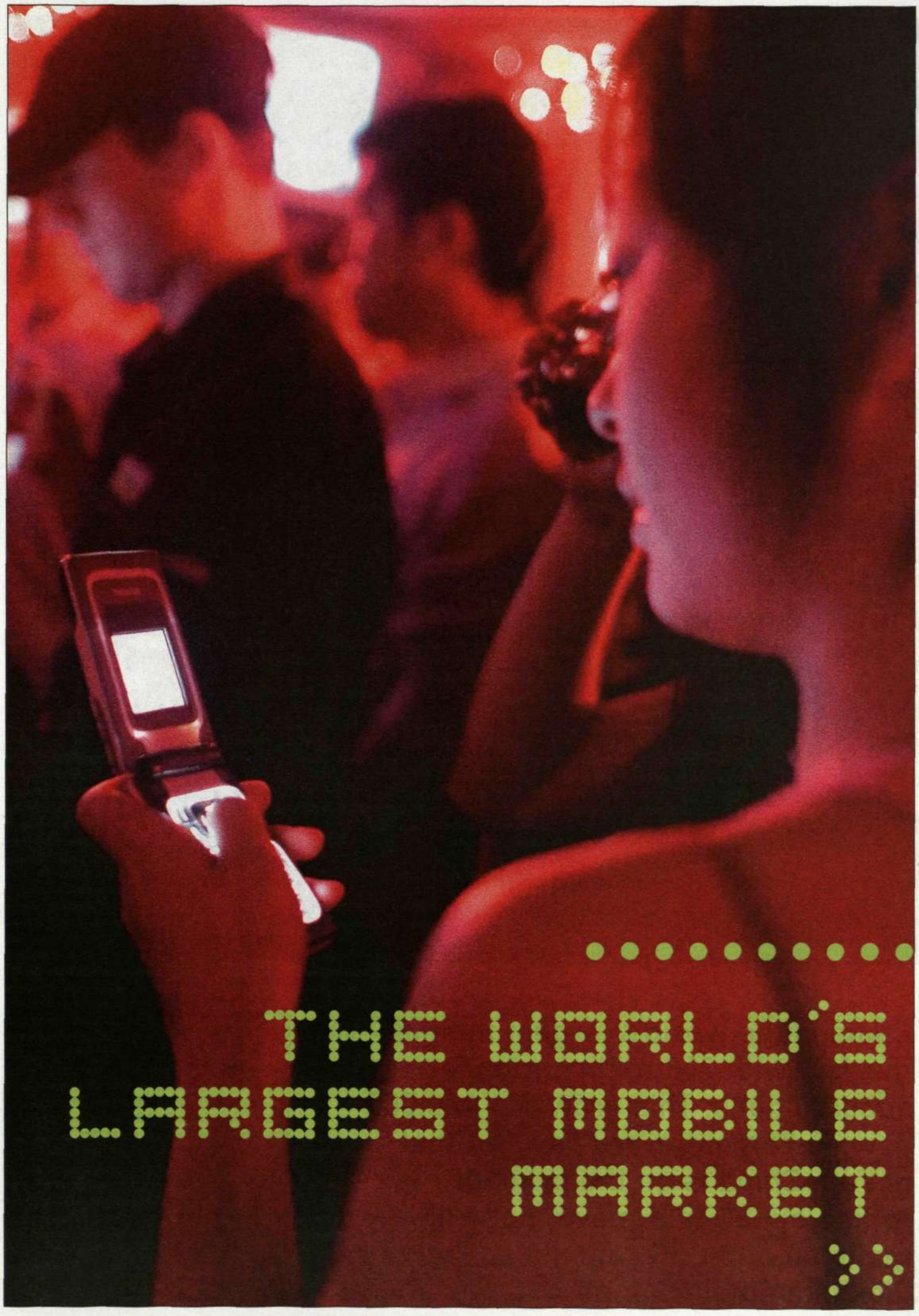


THE WORLD'S LARGEST MOBILE MARKET

Middle Kingdom

building up for 3G

China is the world's largest mobile market, with 358 million mobile subscriptions. This grows by 160,000 new customers every day. But that's not all. China is on the brink of rolling out 3G in a move that will make all other 3G rollouts so far look like small change.

Kitty Ma, 22, belongs to a young generation that uses mobile telephones constantly. She has traded in her mobile three times since she got her first, which her parents bought for their only child four years ago.

"I want video telephony so I can see and talk to my friends," she says. Her mobile is decorated with small love hearts and hanging ornaments. Her thumb jumps from key to key as she operates the phone in the crowded train carriage. International brands flash by on TV screens in the train tunnel.

"What does technology matter?" she asks rhetorically. "The technology isn't interesting; it's the services we get that are interesting."

She speaks dreamily of gaming. But the games take too long to download and are too simple.

For those providing 3G in China, the technology is essential in making it possible to deliver the services

"China will be able to offer 3G services for the Beijing Olympic Games in 2008."

Wang Xudong, minister

that Kitty expects. The telecom giants are preparing to roll out 3G at the same pace as the skyscrapers spread out in the big cities. Internet and telecom use is growing with the rise of the middle class, faster than anywhere else in the world. The Middle Kingdom, the literal translation of the Chinese name for their nation, is the world's largest mobile market, with more than 358 million mobile subscriptions and 160,000 new customers signing up every day. Operator China Mobile has built up the largest telecom network in history and China has surpassed the US in sales of both mobile telephones and television sets.

Wang Xudong, minister in charge of China's Ministry for Information Industry (MII) – the industry that allocates 3G licenses – says China will be able to offer 3G services for the Beijing Olympic Games in 2008. The only question is when the MII will give the okay for the 3G licenses. >>

>>

There are now three standards for 3G communication: WCDMA, which is used in Europe and Asia; CDMA, in the US; and the Chinese standard TD-SCDMA. The Chinese Government is the driving force behind the Chinese standard and has supported the Datang research organization. Foreign manufacturers then joined the efforts.

There will be some telecom reform before the 3G licenses are announced. China now has six national operators, but of these only China Mobile and China Telecom are really profitable. The companies are largely state-owned and they want to avoid rolling out systems too quickly and wasting their investment. That is why the government does not want to issue any more 3G licenses than necessary. An ideal scenario would be to get down to three networks and have all three profitable. The most likely results are a merger of China Netcom and China Unicom, or that China Telecom acquires China Unicom's GSM network and migrates it to 3G.

Mats H Olsson, head of Ericsson Greater China, tells Contact: "I expect the telecom reform to be announced within a few months. That will start the whole 3G race for real."

Mats H Olsson

Investments in 3G, however, have already started in many ways. Ericsson has submitted several tenders for model networks over a fairly large area, and is training and preparing operators ahead of the 3G rollout. In November last year, Ericsson delivered the first WCDMA radio base stations to be developed and produced in China.

And you do not have to wait for the licenses before you start building the 3G network, just as work on building GSM networks started before the licenses were announced. The licenses' only purpose is to give the operators permission to run their networks commercially.

"Once the telecom reforms are announced, everyone will find out which operators get which license," Olsson says. "That means it does not matter so much if the licenses are announced at the end of this year or, in the worst case, maybe next year."

Market watchers also believe that the results of the commercial TD-SCDMA trials will be a decisive factor for when the 3G licenses will be allocated. The Chinese state has already invested close to SEK 1 billion in the development of TD-SCDMA. Some believe that delaying the 3G licenses will give the Chinese standard a better chance of success in the introduction of 3G.

"The months or possibly half a year we are talking about will not really improve the position for TD-SCDMA," Olsson says. "That is actually a relatively short time. I am convinced that the Chinese 3G standard will play a role, but I do not believe it necessarily has to be a dominant role, regardless of when the licenses are granted."

facts: ericsson in china

- There are 358 million mobile subscriptions in China today (July 2005)
- The total grows by 160,000 new subscriptions every day
- China uses three standards for 3G communication: WCDMA, CDMA2000 and TD-SCDMA
- There are six national operators in the country, of which China Mobile is the largest. It is also the world's largest mobile operator
- Ericsson won its first deal in China 113 years ago
- Ericsson's first representative office opened in China in 1985
- Ericsson now has offices in 27 of China's provinces
- Ericsson received permission 11 years ago to create a full holding company in China. It did not however have a full business license, but was required to do business through joint ventures
- Ericsson has since gained the right to run independent businesses in China

> Huawei is very aggressive. It swaps out 2G equipment and puts in its own technology without cost.
>
> **Duncan Clark**, analyst

He emphasizes that the greatest challenge in the short term is to be armed to the teeth for 3G without losing focus on 2G, and doing it better than the competitors. Step two requires being ready to deal with the rollout of 3G whenever it happens. This rollout will make all previous such endeavors look small. It is an enormous undertaking. The third challenge is winning the 3G war. It will be fought on several fronts, at head office and out in the provinces at the same time.

Olsson has never seen another country where the state and government officials have been so deeply involved in the sales process as they are in China. This applies not just to the telecom industry. It is important to have government support if you want to do business in China, and relationships are an obvious requirement. In other countries, the government allocates the licenses and then lets market forces run the show; in China, the state weighs up the investments carefully.

"I am probably meeting more officials than I am meeting customers," Olsson says. "It is important to have government support if you want to do business. The officials have a lot to say when it comes to who is chosen as the supplier."

It is important to work for the long term, and that is something Ericsson is good at, says Erik Feng, head of the China Mobile account. The one that gets the most of a customer's time wins the most business.

Erik Feng

"We spend a lot of time with our customers all the time," he says. "Motorola is an example of a company that is good at building relationships, so it has a better position here than elsewhere around the world. Nokia and Nortel have good products but a worse position here than elsewhere. That might be because they have not focused on the relationship side."

China announced early on that three standards would be represented among the licenses. It was obvious that China Mobile will get a WCDMA license because it is the world's largest GSM operator. Then there could be a combined WCDMA and TD-SCDMA license. To have a chance for this type of contract, Ericsson needs to be able to offer a network that can handle both standards. Instead of developing base stations itself to suit the Chinese standard, Ericsson has chosen to buy base stations from Chinese manufacturer ZTE.

Olsson says: "We naturally want to defend our strong market position in China and possibly even try to improve it in several areas. That means we need a solution for all three standards."

He says Ericsson chose to work with ZTE, which had not previously had a partner, and it was seen to have a corporate culture that fitted in better with Ericsson's than the alternatives available.

The RNC (Radio Network Controller) will be adapted so that it supports TD-SCDMA as well as WCDMA. TD-SCDMA is a UMTS-based technology, which means it uses the same core network as WCDMA but has a totally different architecture for its radio access network.

Development and adaptation of WCDMA base station will be carried out primarily at Ericsson's R&D center in Nanjing, but there will also be some development work done in Beijing.

Dan Redin, head of Ericsson R&D in China, says the company has already recruited people who are now working in this area, and has identified about 25 more.

Dan Redin

"Right now, we are working to get up to speed in our cooperation with ZTE," he says.

Ericsson and Nokia will do well with 3G in China, but Huawei and ZTE will be serious threats along the way. That is the conclusion of analysts BDA China.

One unique characteristic of China is that it has only a few operators, but a lot of vendors. BDA China expects the domestic vendors to play larger roles in the 3G rollouts than they have had so far.

Duncan Clark, an analyst with BDA China, says: "We expect Huawei and ZTE to win larger market shares in 3G than they have in 2G. They were not really ready for the big 2G expansion, but they are more a threat to the weaker foreign players."

Huawei's tactics are obvious. It tries to come in with a very low price the first time, sometimes even free of charge, and then increases the price to a normal level. It does this consistently and often, says Erik Feng. Huawei ideally would love to offer a product that matches Ericsson's quality at a low price, but the stability of its products is not as good as Ericsson's. At the same time, it offers a price that is perhaps 30 percent lower.

Clark explains: "Huawei is very aggressive. It swaps out 2G equipment and puts in its own technology without cost. There are several cases where it has done just that." >>

"We want to play networked games on our mobiles"

>> **Ericsson** has refused to compete on price. The Chinese operators are sophisticated and price is not the only factor. Ericsson has relatively little interest in breaking into others' 2G radio networks. That would just be expensive for the customer or for Ericsson, or lead to competitors trying to break in to Ericsson's areas.

Mats Olsson says: "What we can see ourselves doing, and we are doing it, is breaking in to the core network side, because it is more important strategically ahead of 3G. The most important is to prepare an attack for 3G in those provinces where we are not already present."

Other vendors are doing the same thing, installing their own systems free of charge and then waiting for expansion business. Ericsson today has about 40 percent market share with China Mobile and 14 percent in both GSM and CDMA with the smaller mobile operator China Unicom. Ericsson is aiming for a share of at least 20 percent in Unicom's WCDMA network.

Qiao Weizhou

Qiao Weizhou, head of Ericsson's China Unicom account team, says: "Vendors with less than 5 percent market share nationwide are our potential targets, when we aim to replace competitors and gain market share with the customer."

He believes that Huawei is good for Ericsson.

"Huawei keeps outflanking us all the time, so we have become more aggressive. We can learn from Huawei. It understands customers' needs and aims to develop customers' systems. Ericsson often just introduces the technology; Huawei is more aggressive at defining the business opportunities itself."

With penetration of 26 percent, the mobile market is a long way from saturated. Analysts expect penetration approaching 30 percent by the end of the year. That means growth of about 5 million new customers every month will continue, just as it has since 2001. But many also have multiple SIM cards for their mobiles: BDA China estimates there are 1.4 SIM cards per customer.

Clark believes operators are investing too much in their networks. That the market is going through a growth phase is not important, he says, but developments when the market reaches saturation point could be. It is not an urgent problem, but it could arise in 18 to 26 months.

Olsson says: "I believe that growth will continue until we reach a subscriber base of 500-600 million mobile subscribers. GDP growth of nearly 10 percent year after year means a larger group of potential subscribers. •

Heavy bass tones waft out onto the street from one of Beijing's many department stores. Three enormous floors are selling mobile phones, and just mobile phones. Expensive. Cheap. Ultra cheap. A band is playing rock in the foyer. Girls in chic makeup and even more chic skirts are charming the crowd. The people are crowded in, watching intensely, but show no expression.

A mobile manufacturer is running a campaign. If you buy a mobile you can win both a rice cooker and a TV. Business is going well: all the different departments are crowded with people.

Analyst Duncan Clark says: "A mobile is a status symbol, a fashion statement. Even if people in China are sensitive to price, they have still been willing to pay for their mobiles. That has been a big surprise."

You see young people with very expensive mobiles equipped with MP3 players and cameras. China's one-child policy has led many parents to pamper their children with lavish gifts.

"They want their children to have a good life, which they have not had themselves," Clark says.

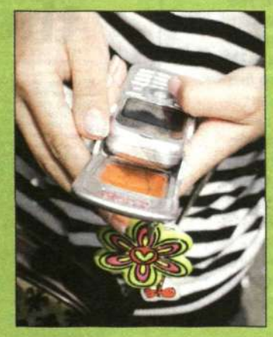
Many Chinese consumers prefer foreign products because they are seen as having higher status.

Zhang Wen, 22, says she does not trust Chinese brands. "In the shop, they try to force me to buy a Chinese mobile with diamonds on it. I chose the cheapest Nokia instead for USD 100."

China's strong mobile growth is being driven by consumers with low buying power: 98 percent of China Mobile's new customers use pre-paid. One factor can be that Chinese consumers want simplicity and control of their finances. One large population group in China, however, cannot afford mobile phones almost regardless of how cheap they are: the differences between the cities and the countryside are enormous.

Thumb culture is growing in China. Kitty Ma and her boyfriend Leo Lee taught their parents to use SMS a few years ago.

"One reason is that it is much cheaper to send an SMS than to call," Kitty says. "Our generation has learnt how to communicate with SMS instead of ringing each other. We hardly know how to make a call," she says, laughing.



Kitty and Leo send about 500-1000 messages per month. They are subscribers to China Mobile's M-Zone, a youth-oriented brand where the menu in the mobile changes depending on the service offering. In the King of SMS competitions, users send more than 300 messages – per day.

SMS use is increasing and voice revenues are falling in China. When SARS (severe acute respiratory syndrome) broke out in 2003, SMS usage boomed. China's thumb navigators send 217.76 billion messages in 2004, an increase of 58.8 percent on the year before. That is almost 7000 messages a second; with income of USD 0.01 per SMS, that makes a pretty penny. There were 10 billion messages sent just during Chinese New Year.

Erik Feng says the size of the SMS market is possibly related to Chinese culture. "You keep contact with people but you don't need to disturb them by ringing them when it is inappropriate. The user interface for SMS in Chinese is also very good," he says, demonstrating the predictive text input in Chinese.

Games are what most attract Kitty and Leo. The big thing just now is Paopao Long, which you can play on your own or with others over the network. But Kitty and Leo think the mobiles are too feeble.

"We want more games in our mobiles, and the download speed has to get better," Leo says. "It takes too long to download new games."

Kitty could see herself buying a 3G phone, but it depends on the cost. Anything more than USD 650 would be far too expensive.

"We think 3G sounds good. We want to try thing things, just because they are new." •

text: gunilla tamm

Predicting the future is never easy. A little more than 10 years ago, the report 2005 – Ericsson Entering the 21st Century was an ambitious attempt to understand the future and prepare for it. We have now reached 2005, so Contact is looking at how well the report's scenarios matched reality.

Scenarios show the future

Ericsson's organization and strategy in the mid-1990s was based on the study Ericsson in the '90s, which then CEO Lars Ramqvist presented to a major management meeting in Germany's Sonthofen in late 1990. At the start of 1995, Lennart Grabe, then Ericsson's senior vice president, Corporate Business Development, initiated a broad-ranging follow-up of the program to identify future business opportunities. The project grew in scope, eventually becoming 2005 – Ericsson Entering the 21st Century. It was an ambitious attempt to understand the future and prepare for it.

At the same time, Ramqvist gave Grabe the task of reassessing the Group's strategies and updating its marketing messages. He was assisted by Berth Eklundh, then an Ericsson employee, who proposed and then produced the scenarios. The accumulated knowledge, the result of the efforts, would form the basis for Ericsson's plans to adapt itself to future changes faster than its competitors. The aim was that Ericsson would be the world's leading telecom supplier within 10 years.

The 1996 annual report included an article on 2005 – Ericsson Entering the 21st Century. It stated the future was becoming harder to predict because of new players entering the market. It also saw a dominant trend – the convergence of telecom, data and media.

The need for multimedia communications was growing; this was an area with several different technical solutions. It dealt with fixed-line and wireless telecom, communications over IP but also cable TV or radio and TV over satellite. The thought was that all these solutions would work together.

There are three scenarios in 2005 – Ericsson Entering the 21st Century. They address trends that could be seen more than 10 years ago. The scenarios, which also address different uncertainties, should be seen as descriptions of different potential futures. Different forces could affect the expected developments. These included the internet, globalization, mobility, continued deregulation of the telecom industry and the increasingly unclear boundaries between telecom, the media and data.

The three scenarios were Service Mania (the service offering pot of gold), Gran Tradizione (traditional development) and Up and Away (total flexibility).

Service Mania is based on a deregulated telecom industry. Consumers buy ready-to-run packaged solutions from information brokers. The telecom, data and media industries have merged. It is simple and cheap to transfer huge amounts of information. Network intelligence is built into network-connected computers.

In Gran Tradizione, the telecom industry is still regulated and most communication is carried out using traditional, fixed-line and wireless telephony. Data, telecom and the media are still separate industries. The internet exists but has not broken through to the general population. Network intelligence is based on switches and networks.

In the Up and Away world, deregulation of the telecom industry is complete. Everyone is connected to everything and everyone all the time. There is network intelligence in the terminals. Most distribution of information is done over a future network, where the boundaries between telecom, data and the media are more or less gone. Consumers are not paying much for information because most of it is paid for by advertising. Many traditional operators have disappeared and there are only a few regional operators left.

Jonas Roupé was part of the project group, representing the then American Standard Mobile Telephony division. "With hand on heart, we can say that we do not see any of those scenarios in their entirety, but the common driving forces do describe the time up to today and the future development," he says.

Today Roupé is in charge of business development and business control within Ericsson Advisory Services, the area of Business Unit Global Services that advises and educates operators. He is the only member of the LME scenario group still at Ericsson today.

The recommendations set out in 1995 indicated that Ericsson must develop according to all three scenarios, as it was impossible to predict which would win through. "I think everyone had their favorite scenario," Roupé says. "Mine was 'Up and Away,' whereas many in the management team were maybe more looking forward to Gran Tradizione. In our working group we assumed there would be a mix of scenarios.

Jonas Roupé

Roupé believes much of what is said in 2005 – Ericsson Entering the 21st Century still serves as a guide for the Group today.

"The project helped Ericsson to gain knowledge of the world around it, even if some of the strategic decisions we recommended were not fully taken on board by top management," he says.

Roupé reveals that Cisco was on the list of potential acquisition candidates to broaden Ericsson's fixed-network offering. However, the Group Management Team decided instead to focus investments on radio and AXE.

One area top management did not predict would have such an enormous impact was the internet; in 1995 few people were surfing the net. On the other hand, those working within research and development had a greater belief in the internet.

A lot of work was done to inform employees of the scenarios, including seminars and information meetings. Contact published a special supplement on the three different scenarios.

Understanding the future through scenarios was something new within the telecommunications industry 10 years ago, so Ericsson's work in this field received much external attention.

"Futures Studies in Major Organizations' Long-Term Planning: Analysis Models and Case Studies" is the title of a thesis by Kent Ehliasson, recently published at the Swedish University of Linköping. Ericsson and the Swedish armed forces are the two cases covered in the study.

Ehliasson says: "The mid-1990s was a transition period. The telecommunications industry was being deregulated, the internet came and mobile telephony was developing considerably. For the armed forces the threat from the east was no longer as great."

The armed forces used the future scenarios in their strategic planning but Ericsson, where the scenarios were an attempt at interpreting the future, did not.

"One difficulty the project group had at Ericsson was that top management did not participate in the actual project work, and as a result they found it hard to change their way of thinking," Ehliasson says.

Since 2005 – Ericsson Entering the 21st Century, Roupé has done considerable work with scenarios, though nothing on such a large scale.

"Like the Cheshire Cat says in Alice in Wonderland, 'If you do not know where you want to go, it does not matter which direction you choose'," Roupé says. "Just by ensuring we have a better understanding than our competitors of where the world is heading today and where we want to be tomorrow we can make sure we really do get there. That is why futures studies are so important to Ericsson." •

6

CONTACT No. 9 1996

"2005 – Ericsson entering the 21st Century" is the designation for the most ambitious attempt in Ericsson's history to comprehend the future and to prepare for it. Thousands of hours have been expended and more than 500 persons, external as well as internal experts in various areas, have been involved.

2005
Ericsson entering the 21st century

At present, telecommunications is possibly the most changeable industry in the world. Forecasts of mobile telephony trends are invariably wide of the mark as new products and solutions emerge causing a rapid revision of established plans. Deregulation and the increasingly blurred boundary between data and telecom complicates the formulation of straight-forward forecast. In addition, the world is undergoing change at a faster pace than we are accustomed to. The map of the world is being redrawn before anyone has time to learn the preceding version.

Given this situation, it may seem naive to plan 10 years ahead and formulate Ericsson's strategies through the year 2005. And this is not a conventional 10-year plan based on a firm achievement forecast. Instead, it is a knowledge base that enables Ericsson to adapt to reality in a changing world more readily than any competitor.

Ericsson is well-prepared. Many of the claims surrounding "2005," as it is more commonly referred, sound commonplace. Moreover, much of what has been learned in the project has already been duly considered in the planning through the participants having successively taken to heart this experience and adapted their operations. Certain aspects, which will become paramount in how we conduct our future work, are specifically noteworthy.

Clearer comprehension

Ericsson must develop a clearer comprehension of the end-user's, the business customer's or the consumer's situation. In the role of system supplier, we must also learn how consumers think and what their needs are. This must also form the basis of product development. The products we produce must be justified in terms of end-user demand.

Ericsson cannot be the best at everything. For this reason, research and development resources are assigned to areas in which Ericsson can attain worldwide leadership. Accordingly, we are not adverse to engaging in joint projects with other companies which enjoy a world preeminence in their respective areas. In addition Ericsson' expertise distribution must also have a geographic dimension. Know-how must be available where the market dictates.

Ericsson must also develop a more coherent software culture. The emphasis should be on software-based solutions rather than devices. In the same context, preparations for meeting increased demand for more open systems must be reinforced. Ericsson must become more compatible. There will be no place for players who wish to go their own way.

Competitive market

In addition, Ericsson must develop the knack of thinking in terms of low costs. With more of a predisposition to mass-market trends. The price squeeze will be more keenly felt later on.

The market is growing as a consequence of the deregulation wave engulfing the telecom industry worldwide. Numerous players wish to break in and compete. The role of the traditional operators will become blurred as the prerequisites change. This is where Ericsson could make strides in the value-addition chain, closer to the end-customer. In addition to market growth, there is expansion attributable to the merging tendency of the three industries: telecom, data and media. This means that Ericsson must ponder how to position itself.

At an earlier stage, there was talk of receiving Internet via the telecom network. Now it is more a case of receiving telecom traffic over the Internet.

The foregoing conclusions are the distillation of comprehensive analysis of the strategies for "2005." Attention was drawn to already existing trends and various areas of uncertainty. From this developed three possible outcomes or scenarios (refer to separate text attached). In the beginning these were discussed on the basis of potential business opportunities in purely general terms, and then distilled into more tangible implications for Ericsson.

This is only the beginning. The efforts centering on "2005 – Ericsson entering the 21st Century" will continue undiminished and have an impact on practically all areas within the company. As a way-station, Ericsson will define where it intends to be in the year 2000. These goals will be matched with the starting positions of the three "2005" scenarios. The most immediate impact of the "2005" goal will be on annual strategic planning (ESP). The only thing that is certain is that this is not the last you will hear about "2005 – Ericsson entering the 21st Century."

PATRIK LINDÉN

Volumes of material were produced for "2005 – Ericsson entering the 21st Century." More than 500 persons were involved in the project. It involved many key personnel at Ericsson as well as experts from several research institutes and various consultants. The project was under way for a year. Photo: KURT JOHANSSON

CONTACT No. 9 1996

7

A video film has been produced in which Lennart Grabe, who headed the work with "2005 – Ericsson entering the 21st Century", and CEO Lars Ramqvist present the content and the effect of the project. "We cannot predict the future, but we shall be the fastest to adapt to the real future as it unfolds. This is how work with "2005 – Ericsson entering the 21st Century" will be of help," says CEO Lars Ramqvist. Photo: Peter Nordahl

Three versions of the future

The scenario planning has been central to the extensive investigatory work behind "2005 – Ericsson entering the 21st Century." It is not a matter of foreseeing the future, only of sketching possible turns of events. The different scenarios are an aid in opening the mind and to facilitate perceiving various possibilities. The scenarios are not to be intermixed with forecasts or a some desired sequence of events.

The scenarios deal with a number of already discernible trends. Cases in point are the increasingly rapid development of micro-electronics, with constantly increased capacity at a lower price, the Internet's enormous growth, the increased density of computers in households, the increased demand for cordless communication and the significance of the growth markets for the world economy.

Aside from these already discernible trends, the scenarios also deal with various uncertainty factors. For example, how quickly will the cordless trend proceed, and what will happen with deregulation of the telecom market? How successful will the Internet ultimately be? Where will the intelligence of communications systems reside? In the network or in the device?

Three possible scenarios with divergent development trends have been formulated. These have been designated:

- Service Mania,
- Gran Tradizione (adhering rigidly to traditional development patterns)
- Up and away, or total flexibility.

SERVICE MANIA

In such a world, the telecom industry is largely deregulated, with an overabundance of information and information services. Consumers buy pre-packaged solutions from information brokers. There is demand for integrated services. No one player can possibly control the enormous product line. The data, telecom and media industries have virtually grown together. Access networks are innumerable. Transport networks are not a problem. It is a problem-free and inexpensive to transmit large volumes of information. Network intelligence resides in the computers linked to the networks. It will be the information brokers who will "own" the consumer, so to speak. A situation comparable to the monopoly enjoyed by cable TV operators in their respective territories.

GRAN TRADIZIONE

In this world, people's values are considerably more traditional. There is a greater interest in family, friends and one's immediate world than in technology. There is only limited interest in advanced communication devices and technologies. Most communication is via traditional (wired and cordless) telephony. The industry is still regulated, with data, telecom and media remaining separate industries. Network intelligence resides in exchanges and networks. Trademarks will assume importance, with customer loyalty highly prevalent. The Internet exists but fails to excite widespread interest.

UP AND AWAY

This world is totally swamped with electronic devices. Everyone is linked to everything all of the time. Intelligence resides in the instrument. Total deregulation. Most information is distributed through a future network, a successor to Internet, and the borders between data, telecom and media have been virtually erased. Consumers pay very little for information and communication. Most everything is financed through advertising in the same fashion as we accept ad banners around a sports arena because it subsidizes the price of ticket.

What does Ericsson want to accomplish in the future?

Work with "2005 – Ericsson entering the 21st Century" has resulted in a number of conclusions. Most importantly, the collected knowledge gained through this work will provide a base for Ericsson to rapidly adapt as reality changes, but it has also resulted in certain statements about what Ericsson believes and how Ericsson views its role in the future. This will provide a platform for Ericsson's actions in the future.

Ericsson believes in a global development which will result in:

- Communications by voice, data, image and video will be easily accessible to most the world's population at reasonable prices.
- Mobile and cordless communications will be a fully accepted alternative, or complement, to wired communications.
- Many different networks, solutions and instruments will exists in parallel.
- A number of operators and other sellers of communications services will coexist in an environment of stiffening competition.
- A melting pot of data, telecom and media will crease a new industry - information. This development will occur as a result of higher requirements and greater demands from business and consumers.

Ericsson's role

- Ericsson will be one of the driving forces for communications to become a matter of concern for most people.
- Economic and social development is strongly linked to the development of communications. Accordingly, Ericsson plays an important role in community development. This should be a source of pride for Ericsson employees.

Ericsson's task

Ericsson should view as its task to better understand the customer's possibilities and needs in order to be able to offer better communications solutions than anyone else.

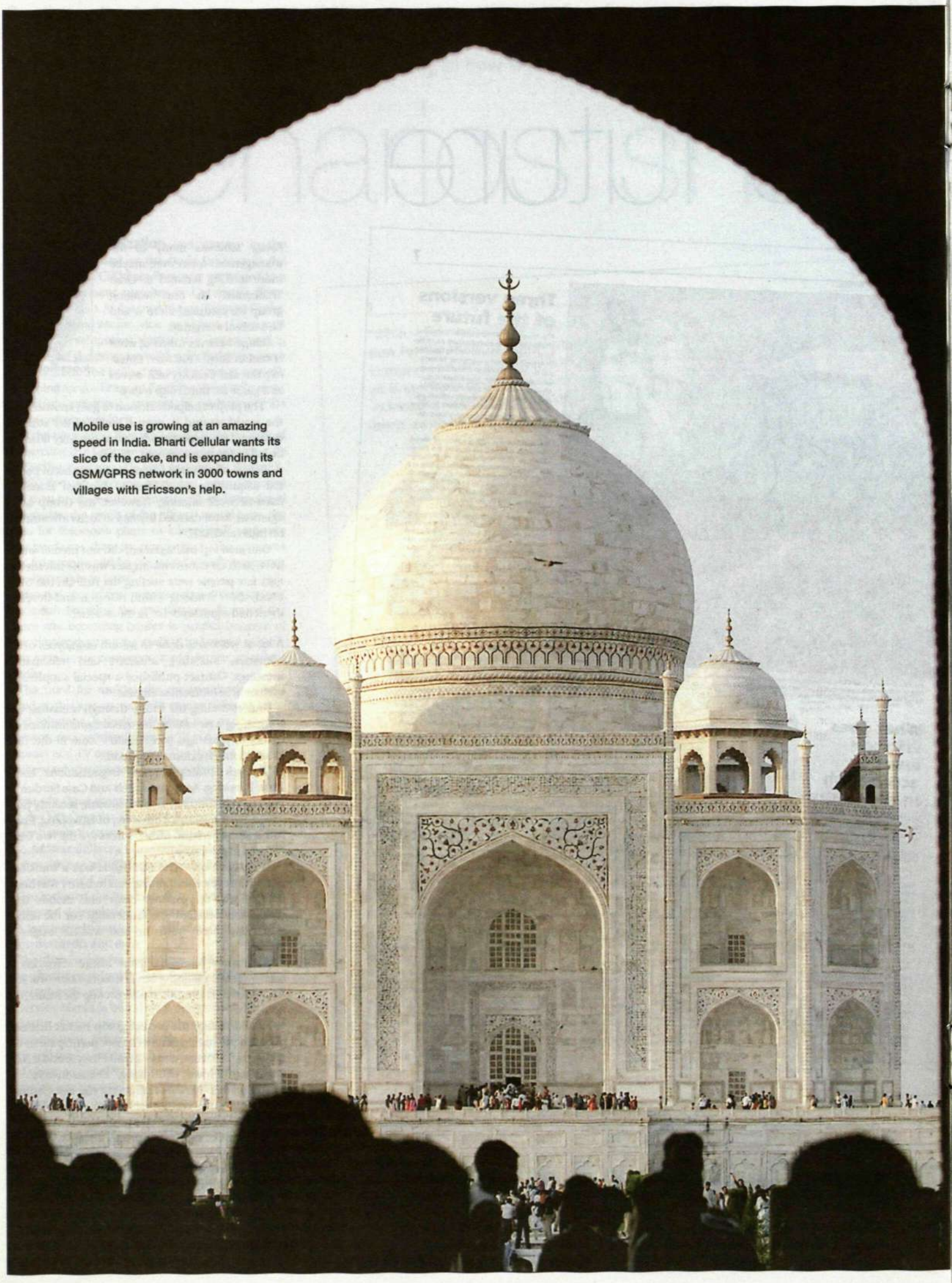
Ericsson should also create a competitive financial return for its shareholders.

Ericsson's vision and business concept

- To be a leading global supplier of communications solutions and services – for wireline and cordless networks and instruments for communications by voice, data, image and video.

Ericsson shall also provide a support system for technical and commercial operation of these networks and services.

Lennart Grabe and Lars Ramqvist are interviewed in the video by a number of Ericsson employees about how the strategies will affect them. The film is intended for presentation at large meetings at the various work sites where information is provided about "2005 – Ericsson entering the 21st Century."



Mobile use is growing at an amazing speed in India. Bharti Cellular wants its slice of the cake, and is expanding its GSM/GPRS network in 3000 towns and villages with Ericsson's help.

text: johan kvickström | photo: prakash singh/pressens bild

India last year became the second country, after China, to reach the magical figure of 1 billion inhabitants. Bharti Cellular is the leading mobile operator in this giant market and a new contract with Ericsson will help the company conquer even more market segments.

Bharti opens door for millions more

Bharti Tele-Ventures is one of India's leading telecom operators, with about 25 percent of the country's subscribers. That figure represents more than 11 million subscriptions (January 2005), of which just more than 10 million are mobile customers. With the market predicted to grow, Bharti is letting its ambitions take off.

Bharti's head of marketing, Atul Bindal, says the company expects the number of mobile subscriptions to grow to more than 100 million within the next 18 months or so. "And as the leader in this field, we obviously want to maintain our share of that," he says.

That sort of increase would effectively mean doubling the size. How is that possible? Bindal says the price of telephones is the decisive factor. "The average mobile user in India cannot afford USD 60–70 for a telephone. Mobiles for around USD 40 are right," he says. "That would bring down the total cost for the subscriber and we believe this would open up the market, creating the same breakthrough momentum we have seen in China."

The question is more what sort of mobile phone those 50 million new users will want. "We have a number of languages in this country and the customer segment we are aiming for will not be interested in an English-language SMS service, but rather one that works in the local language," Bindal says. "On top of that, we see that in smaller cities and villages in the countryside, mobile users have a lot of use for being able to compare prices and stocks and so on. So a way to pass on this information directly to the mobile would be a great way for us to open up the market. We need a combination of voice and other services."

Enterprise is a potential growth area for Bharti and already provides services to India's 800 leading companies. Below these are about 3000 businesses the SME (small and medium enterprise) segment has up to 25 million companies – and all of them are potential customers.

"If you look at the needs of these customers, they have no mobile office solutions or mobile solutions at all, and we feel that this could be one of the greatest opportunities for us," Bindal says.

facts: bharti tele-ventures limited

Bharti Tele-Ventures Limited, a part of Bharti Enterprises, incorporated in 1995, is one of India's leading providers of telecommunications services, with a total of 12.26 million customers including 11.39 million mobile customers (April 2005). The company also provides fixed-line services and internet access over DSL. It also has a submarine cable landing station at Chennai which connects the submarine cable between Chennai and Singapore.

Bharti Tele-Ventures was named Indian Mobile Operator of the Year 2005.

Read more at: www.bhartiteleventures.com

"I believe that the biggest competitive advantage is to have GSM, GPRS, WCDMA and, hopefully soon, HSDPA in the same telephone; well integrated and with the appropriate design."

Mobile telephony has evolved amazingly in recent years. A mobile is used not just for calls - other functions have become increasingly important. Market players are investing in text messages, images and music. At the same time, there is also a need for cheap telephones for normal voice calls. This development has led to an increasingly varied offering, which in turn means operators must provide different types of products.

The groups most in focus for Bharti are younger people and enterprise users – segments where there is more demand for non-voice services.

"You know, you can divide these sorts of services into two or three categories. Texts messages, such as SMS and P2P, are an obvious one. Based on that, we have launched services such as Easycharge, for example. It is effectively an electronic transaction service which could lead to mobile commerce later this year. The second area is 'infotainment'. We have a portal called Airtel Live, which has films, music, games and information. It is already available. And finally, for large and small companies, we have mobile office services using BlackBerry and other e-mail services," Bindal says.

Bharti is now forming new connections with leading vendor Ericsson: in a major expansion, Ericsson will take care of network capacity. The fact that Ericsson will also handle the services means Bharti can concentrate its operations on business and its customers. The agreement is worth an impressive USD 250 million and allows Bharti to expand its GSM/GPRS network into around 3000 towns and and villages in 15 regions.

One important consequence of the deal with Ericsson is the geographical expansion. The build-out starting now will mean that Bharti can reach subscribers in areas where coverage today is non-existent. The countryside today is greatly neglected.

Jan Campbell

Jan Campbell, head of Ericsson India, says the new agreement strengthens Ericsson's position as Bharti's partner for a long time into the future.

"The expansion allows Bharti to offer new and better services to its customers, and to reach new areas where there is no coverage," he says.

Ericsson and Bharti already had a long history of cooperation. This includes Ericsson taking care of Bharti's GSM-GPRS network in 15 of its 23 regions; the expanded coverage in India starts now in July.

Bindal sees only benefits from Bharti's partnership with Ericsson. He sees the greatest of these to be the relationship with the end user.

"We must be attentive to the end user's needs. I believe that, at the end of the day, this industry is much less about technology and more about marketing and ease of use, seen from a customer perspective. And the more we can do for them, the more value we can create from our partnership with Ericsson," he says.

"One of our biggest challenges is dealing with growth, and that is where we need all our partners onboard when we design different projects."

Leif Edwall.

By royal appointment

There are not many people who have the title "honorary consul" on their business cards. Leif Edwall, head of Ericsson in Nigeria, is one of them. He was appointed by King Carl Gustaf to represent Sweden as honorary consul in Lagos.

"My most important task is to promote relations between Nigeria and Sweden," Edwall says.

"My most important task is to promote relations between Nigeria and Sweden"

One important channel for this is the Nigerian-Swedish Chamber of Commerce, which Edwall helped found and of which he is deputy president.

"This appointment also means that I will have many chances in different contexts to discuss business opportunities between the two countries, and obviously not just involving Ericsson," he says.

Edwall started working for Ericsson in 1985, being appointed 18 months ago as head of Ericsson in Nigeria and in charge of Region West Africa, which covers 11 countries. •

from the archives

This robot, with a handset and dial of wood, took part in a Mexican festival in 1930.

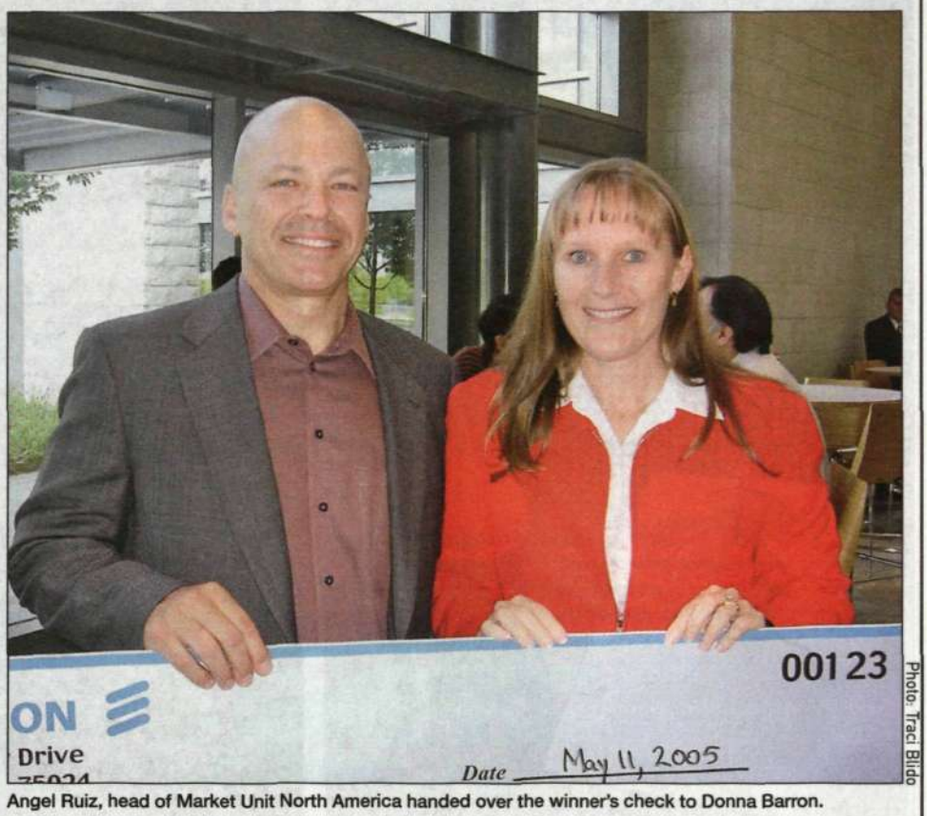


Photo: Traci Bildo

Angel Ruiz, head of Market Unit North America handed over the winner's check to Donna Barron.

Big check for good idea

Donna Barron's eye for efficiency has earned her the top prize in the Process Efficiency Competition – and a giant USD 10,000 check.

The contest was designed to generate ideas within Market Unit North America for cutting back inefficient processes and establishing new ones that will help simplify business and improve efficiency. The competition, which ran from March 7 to April 11, attracted 49 entries from the US and Canada, which were supported with documentation and business cases.

Donna, who works in Plano, the US, says her winning idea was to fix a process that compares budget to actuals and ensures that information is gathered and used by all the relevant parts of the organization. "This will help us to better understand and control costs and increases our margins," she says.

Angel Ruiz, head of Market Unit North America, says: "I was truly impressed with the thought and hard work that went into the suggestions and I look forward to seeing many of these implemented. Efficient processes are a key ingredient to our future, and continuing, success."

Donna, who has worked with Ericsson for nine years, is metrics manager within Global Services North America's (GSNA) Finance and Operational Development Organization.

"My job is to coordinate the quarterly GSNA business review, develop and track some of the metrics and work on process development," she says.

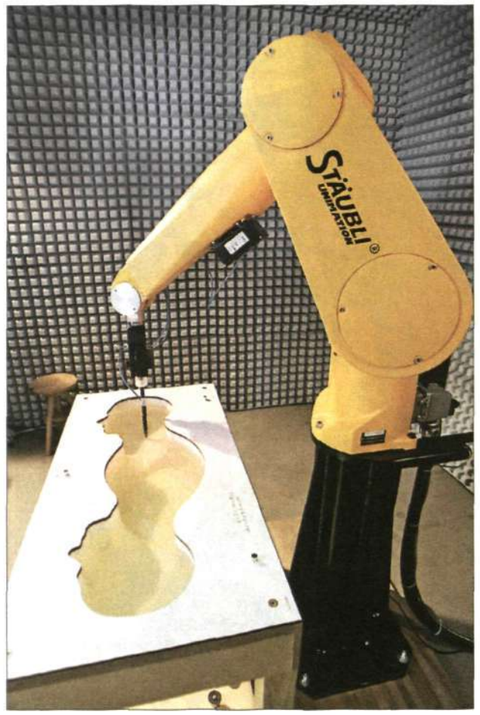
Donna is planning to use the winner's check to take her husband and their two sons on their first trip to Disney World. •

Congratulations Komunikacije

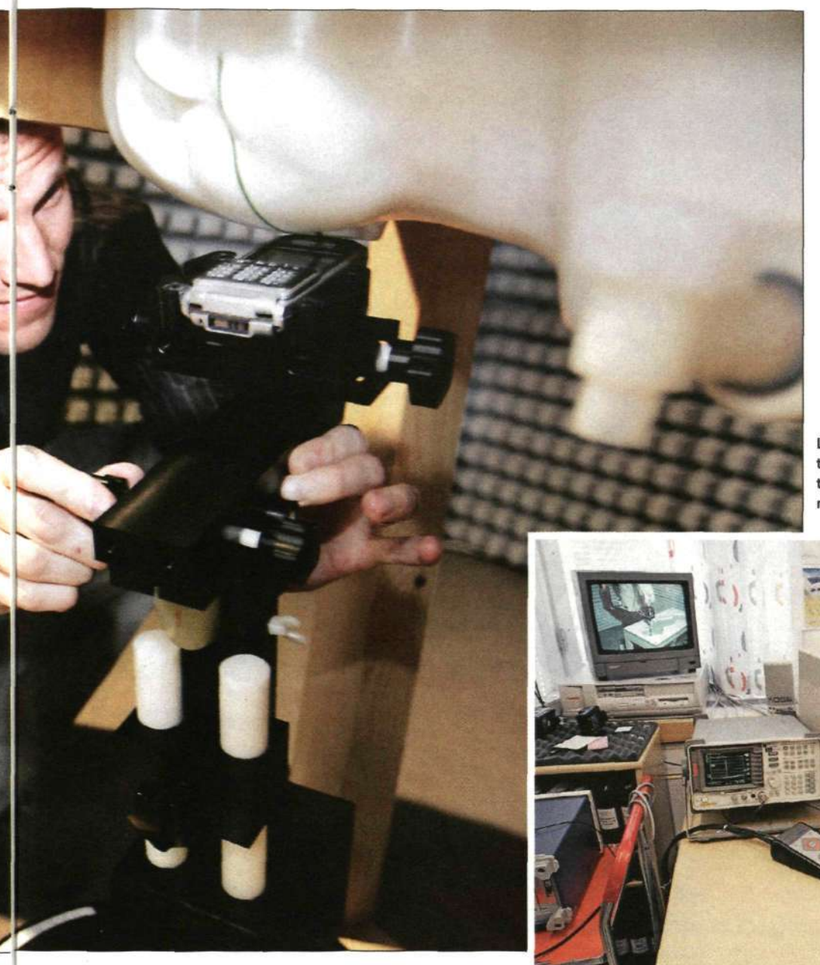
Contact would like to say "Happy Anniversary" to Komunikacije, the magazine for Ericsson in Croatia, which is celebrating its 40th anniversary. More than 430 editions of the magazine have been published since it began in March 1965. Some 5000 copies are distributed each month.

Snjezana Bahtijari, communication director at Ericsson in Croatia and editor-in-chief, says: "During the years the magazine has changed both name and form but the whole time it has been, and still is, one of the company's key internal and external communication channels." •

text: gunilla tamm | photo: hanna telemann



All Sony Ericsson telephone models undergo SAR tests before they are launched. The process uses a head-shaped model filled with liquid that has the same electrical properties as the human head. The measurements determine whether the telephones meet limits for exposure to radio waves.



Lennart Hamberg attaches a telephone to a holder under one side of the heads. He specifies the measurement points from the computer.

Thorough testing done in several steps

A plastic shell shaped like a human head and filled with water, sugar and salt plays a leading role when Sony Ericsson's mobile phones undergo SAR tests. The arrangement creates conditions resembling the human body and ensures that all mobile phones comply with relevant limits for radio wave exposure.

SAR, specific absorption rate, is a measurement of how much radio energy is absorbed in to the body when someone is using, for example, a mobile telephone. The level is stated in watts per kilogram. SAR information including the maximum value is provided with every new mobile phone.

Tests determine the SAR of every Sony Ericsson mobile phone model before it is released to the market to ensure that the level is below the established limits. The limits are based on many years of research. When Contact visited the SAR lab at Ericsson Research in Kista, Lennart Hamberg showed how SAR measurements are done using a Sony Ericsson P910 smartphone.

The process uses a plastic shell with the left and right sides of a head. The shell is filled with almost 30 liters of liquid that has the same electrical properties as the human head.

"The liquid I'm using for this test is for the 900MHz band and comprises water, sugar and salt," Hamberg says. "The absorption of radio energy in the liquid mimics the absorption in a real head when someone uses a mobile phone."

Before he begins the actual test, Hamberg attaches the telephone to a holder under one side of the head and positions the phone so it is placed directly next to the ear.

"The mobile has to transmit at full power for the SAR measurement to give the maximum exposure level," he says. In real life a mobile phone reduces the power to the level needed to get a connection to a base station.

The amount of energy absorbed by the liquid is measured using a probe housing three small antennas; these work as sensors, measuring the electrical field strength in three dimensions.

The probe is controlled by a robot, which in turn is controlled by a computer outside the shielded room used for testing.

Hamberg guides the probes down into the liquid. He then uses the computer to set the measurement points before he begins the test.

"I first do an overall coarse scan which involves measuring at a number of points to find out where the highest level is. Then I do a more precise scan of that area," he says. He begins measuring the levels at the many tightly placed points. It is from this precise measurement that SAR is calculated. The SAR value for the specific measurement is for the volume with 10-gram mass that gives the highest value.

For the Sony Ericsson P910 model a SAR value of 0.88 watts per kilogram is reported; the maximum allowed is 2 watts per kilogram in 10g.

It takes one to two weeks to run all the tests for each new telephone model. You can understand why it takes so long when Hamberg explains that each telephone model must be tested in all frequency bands – such as 900MHz, 1800MHz and 2100MHz – and for three different frequencies in each band. The telephone is also tested in two different standard positions, next to the ear, on both the right and left-hand sides. The phone is tested with the flip opened, closed and removed, and with different accessories. The SAR value stated for each telephone model is the maximum value found in all the tests.

"And because the use of hands-free sets is becoming more common, we also measure the SAR value in other parts of the body, not just the head," Hamberg says. •

SAR value an international demand

All Sony Ericsson telephone models have undergone rigorous tests to show they meet the relevant requirements for exposure to radio waves.

The European Union and many other countries use the limits determined and recommended by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). These limits, which include large safety margins, are based on many years of research into radio waves and possible health effects.

Mobile phone manufacturers measure SAR as part of the product approval process. Within the EU, the CE symbol indicates that the telephone meets the relevant safety standards and requirements, which also include exposure to electromagnetic fields.

Ericsson started doing SAR measurements in 1995. In 1996 they became compulsory in the US and then in Europe in 2001. Since then, Sony Ericsson has voluntarily provided SAR information to consumers.

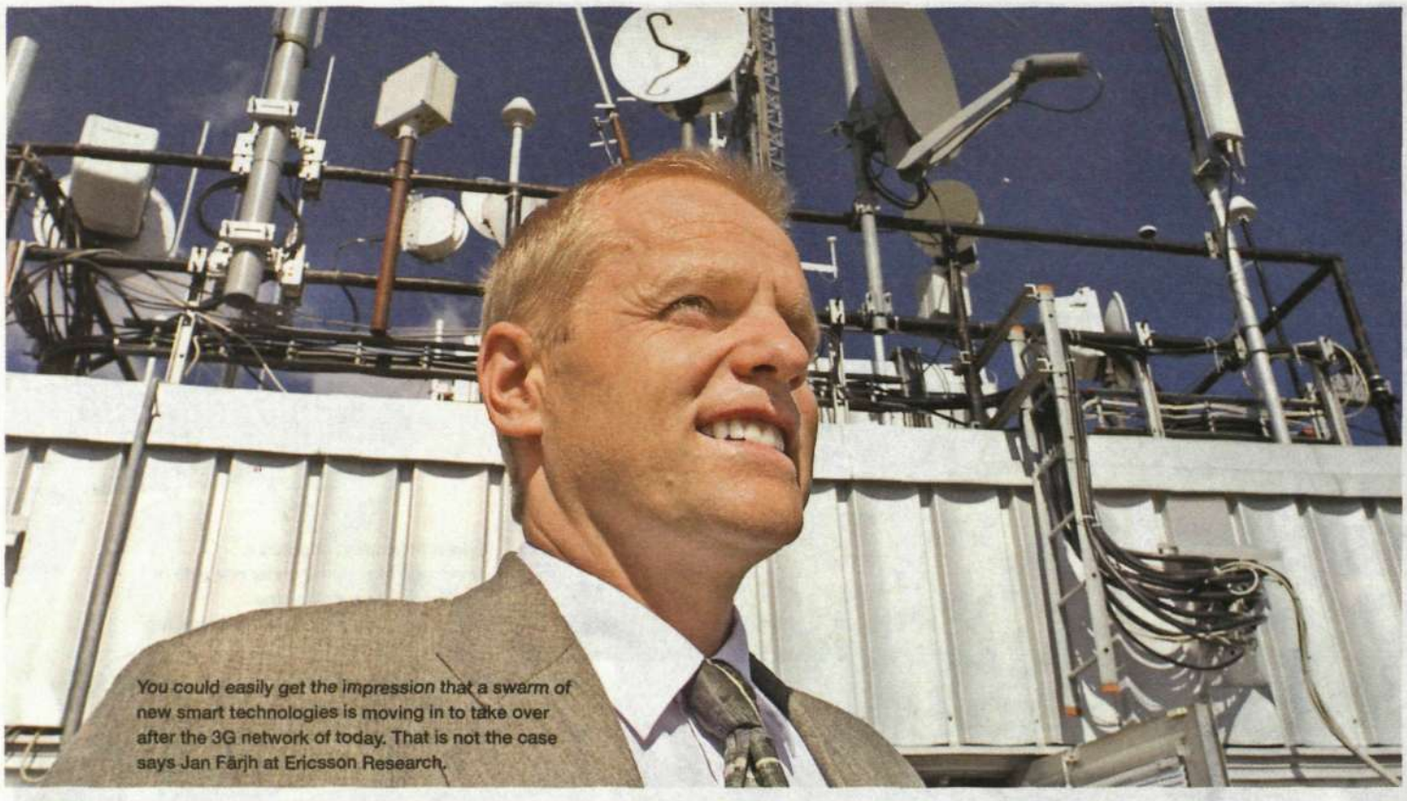
However, there is no reason to compare SAR values for different phone models because there is no difference in safety below the SAR limit.

SAR tests are carried out according to an international measurement standard published by the International Electrotechnical Commission (IEC). The IEC standard published last year is based on previous standards from Europe and the US. It covers measurements done with the phone beside the ear, but the IEC is also working on specifying test procedures for products worn on the body.

All telephone models from Sony Ericsson are tested for SAR in Lund or Kista in Sweden, in Tokyo, or at Research Triangle Park in the US, the same places where the phones are developed. The tests are done as a continuous part of development work and eventual product approval.

Links:
internal.ericsson.com/health
www.sonyericsson.com

text: lars cederquist | photo: håkan moberg



You could easily get the impression that a swarm of new smart technologies is moving in to take over after the 3G network of today. That is not the case says Jan Färjh at Ericsson Research.

No shortcut to 4G

The development of radio technology for mobile telephony is progressing rapidly. But as Jan Färjh from Ericsson Research says: "There is no magic here. It is all about methodical improvements, step by step."

A recent seminar on future radio technologies was told there are nearly 15 ways of achieving high speeds in the mobile network, including Super 3G, WiMAX, ZigBee, UMTS-TDD, Flash OFDM and Iburst. You could easily get the impression that a swarm of new smart technologies is moving in to take over after the 3G network of today. Färjh shakes his head, smiling at this thoughts.

"There is no amazing shortcut you can take in radio. It takes time to develop systems, and the radio technology in use in today's mobile networks is approaching the limit for what is theoretically possible. Now it's all about improving protocols and radio receivers, tuning the network and using antennas better."

The main track is today's 3G, which is based on WCDMA technology. The introduction of HSDPA (High-Speed Downlink Packet Access) has led to impressive performance in tests, comparable to ADSL on the fixed-line network. This refers to both the transmission of data, around 10Mbps through the air, and the capacity for many users with delays of less than 30-50 milliseconds. And it keeps getting better: the standard for what is called 4G has been set at 100Mbps on a large scale and 1Gbps locally, with delays of less than 10 milliseconds.

"A further development of 3G, Long-Term 3G Evolution, will bridge the gap to 4G," Färjh says. WCDMA Evolved with HSDPA and Enhanced Uplink technology already uses radio spectrum two to three times as efficiently as earlier systems, but the standardization body for Europe, 3GPP (part of the European Telecommunication Standards Institute, ETSI) has established a program to study different radio technologies for the future development of WCDMA. This program will run for a year, to the middle of 2006. With detailed specification ready by mid-2007.

One fundamental factor for 4G is high bandwidth and the International Telecommunication Union has now identified spectrum for the network of the future. WCDMA today has channels 5MHz wide, but 4G may need 100MHz. This might be around the 4GHz band, but it will take time for this to become available, so the system will probably not be released for 10 years. Bandwidths of up to 20MHz are now being discussed for increasing capacity in current 3G systems.

Technologies that could allow variable bandwidths – letting an operator choose how to exploit spectrum optimally – are now being examined to make the introduction of future systems as smooth as possible. One interesting technology is OFDM, Orthogonal Frequency-Division Multiplexing, used today for WLAN, WiMAX, digital radio and ADSL. OFDM divides the broadband channel into a large number of narrowband carrier waves, which are combined in the receiver/mobile. The aim is to minimize the effects of distortion and be able to exploit the frequencies that work best at any particular time.

"OFDM has certain advantages in particular radio environments, but WCDMA also has mechanisms that take care of such distortions," Färjh says. "That is why Ericsson is looking at OFDM as an alternative for higher bandwidths. There can be benefits to being able to scale down certain frequencies. AML OFDM (Adaptive Multi-Layered OFDM) for 20MHz channels can be scaled down and adapted for quality on the radio channel, differently sized cells, and high or low mobility."

facts: other technologies

- CDMA 2000, a narrowband version of CDMA, which now provides 3Mbps for a separate data channel. The possibility of combining several carrier waves to increase bandwidth when data services pick up is under consideration.
- WiMax is best suited to providing wireless broadband to an area with fixed-line subscribers. The high data speed in a WiMax network depends on a clear line of sight between the base station's and the receivers' antennas.
- WLAN has a radio signal of limited output and range. Replacing the mobile network with WLAN would demand thousands of times the number of base stations and transmission to all of them.
- TD-SCDMA (Time-Division Synchronized CDMA) has been specified by 3GPP but has been developed and used only in China. In principle, it covers the same environments as WCDMA. One difference is that TD-SCDMA operates in an "unpaired" frequency band. This means that the uplink and downlink share a 5MHz frequency band and transmit in different timeslots, which allows a choice of how much capacity is given to the uplink or downlink. Coordination between different cells can be a problem.
- Super 3G is a term for Long-Term 3G Evolution.

In antennas, Ericsson has been studying MIMO – Multiple In, Multiple Out – which uses two to four antennas in the base station transmitter and a similar number in the mobile. This advanced signal-handling technology is not yet in commercial products.

Theoretically, MIMO allows 56Mbps (four times 14Mbps) using HSDPA, but in practice it will stay around 20-25Mbps. This is partly because HSDPA does not give 14Mbps in most radio environments, and partly because the four data streams cannot be kept totally separate. "But we have done measure-

Antigua Race Week winner

Crewing their Najad 373 "Galatea", Will Collins and Gaby Hancock took on all comers in what is perhaps the most prestigious sailing competition in the entire Caribbean. They competed in a fully equipped cruiser, a Najad 373 designed for long-distance hauls and even sporting a windscreen to protect from buffeting winds and swelling seas.

But the intrepid duo of Collins and Hancock did more than just compete in this gruelling race – they won it too. In an open-ocean race lasting 5 days and covering a variety of stages, both the crew and the boat show their true mettle in competition against professionals and amateurs alike – and against Nature's elements.

The boats on the starting line represented just about every type and size, and most were meticulously prepared for ocean racing. After five completed races however, there was a winner – "Galatea". The Najad 373 is one of Najad's new range of fast and comfortable ocean cruisers.

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update

Illustration: Robert Hillmersson

New survey shows Ericsson best at IMS

Ericsson was identified as the leading vendor for IMS in a recent survey of telecom operators and vendors by ABI Research. As IMS begins to take off, Ericsson's common fixed and mobile IMS system, end-to-end offering and strong IMS track record will provide operators with the market leadership and know-how to make IMS a winning proposition.

In April, ABI Research asked 125 firms around the world 11 questions relating to IMS. These firms included fixed-network service providers, wireless service providers, infrastructure, handset, software and component vendors. Results of the survey show service providers and equipment vendors see faster service introduction as the main benefit of IMS. For service providers, blended services ranked highly, while network convergence, both fixed/mobile and voice/data, was important for equipment vendors. Ericsson's strong IMS strategy and product, as well as its successful track record of IMS contracts, helped propel it to top position when comparing vendors.

ericsson

Mikael Goldberg, responsible for convergence strategies at Ericsson, says: "Even if this type of survey can be carried out in many different ways, this result is favorable. The result corresponds with the signals we get from our customers and other analysts: that Ericsson is improving within IMS."

According to the survey, IMS availability will peak in 2007 and 2008. Oscar Gestblom, external marketing director for IMS at Ericsson, says: "IMS is still in the early stages and operators are evaluating and testing it. Being perceived as the market leader means that we are invited to the table when operators explore IMS possibilities. It also means that we are on track with our goal to this year be perceived as number one and to be established as the leading vendor in three years.

"IMS is a standard, but Ericsson's advantage is that we offer a complete end-to-end offering for both fixed and mobile systems and we can show interested operators concrete examples of our IMS systems in operation."

Ericsson is testing, or has contracts for, IMS with 27 operators, including Telefónica in Spain, TDC in Denmark, TeliaSonera in the Nordic region, TIM in Italy and Sprint in the US.

"Operators are interested in IMS because they want to introduce new and interesting applications and maintain their position in the market and value chain. IMS can help them increase revenues through new revenue streams and lower their network operation and service introduction costs," Gestblom says. •

Mobile grows in Pakistan

When it launched its GSM/GPRS network in May, Warid Telecom became the sixth mobile operator in Pakistan. Initially covering 28 cities, Warid quickly signed a further deal with Ericsson to expand its greenfield network operation to 20 more centers.

When Pakistan president General Pervez Musharraf launched Warid Telecom's Ericsson-supplied network in mid-May, he was quick to point out the enormous growth in telecommunications in his country, tying this to falling levels of poverty.

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In the past two years alone, mobile ownership has jumped from 600,000 to 10.5 million. Warid's entry into the market is single-handedly expected to boost the subscriber base by 3.5 million people.

Ericsson is now involved in all aspects of the network, from supply of core and radio network equipment, to design, rollout and full network operations and management.

Zibber Mohiuddin, head of Ericsson Pakistan, says the company fought off stiff competition from Nokia, Siemens, Alcatel, Motorola and Huawei for the contract.

Zibber Mohiuddin and Hans Vestberg, head of Business Unit Global Services, at the Warid network launch.

"Warid realized that managed services are part of our core business and that we could offer a superior solution financially, as well as in terms of our competence," he says. •

New R&D center in USA

Ericsson has set up a research and development (R&D) center at its North American headquarters in Plano, Texas, to meet the evolving communication needs of US consumers.

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President and CEO Carl-Henric Svanberg unveiled the new R&D facility on June 30. Svanberg underscored the importance of the American R&D center, saying Ericsson's technology leadership was based on consistently having one of the industry's largest and most successful R&D programs.

"Today, we have 11 global R&D centers. It is significant that we are launching our 12th facility here – in Texas – with our partner Cingular, the largest wireless company in the US," Svanberg said.

Apart from hosting traditional telecoms hardware and software R&D, the center will also serve as the venue for collaborative work with Cingular and other operators to drive communications convergence and interoperability. •

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Ericsson Power Modules is transferring large sections of its production from Kalmar in Sweden to China.

Restructuring in Kalmar

Ericsson has decided to restructure its power modules operation in Kalmar. In the period until 2007, large sections of the manufacturing process will be transferred to Ericsson Power Modules' plant in China.

In the future, the Kalmar facility will focus primarily on developing and industrializing new products. The restructuring process aims to ensure long-term profitability and an enhanced ability to develop new products. The unit manufactures power modules that are used in telecom equipment, such as radio base stations.

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A total of 130 of the employees at the Kalmar plant will be affected by the decision and formal layoff notices will be issued later in the autumn.

"The profitability of Ericsson's power modules has declined significantly this year and demand for certain products that were previously produced in large volumes has fallen," says Håkan Österberg, head of Ericsson Power Modules. "We must take action now to ensure long-term profitability. An important cornerstone of Ericsson's product strategy is to focus on the development and industrialization of new products in Kalmar."

The restructuring work that will lead to the reduction of fixed costs in the manufacturing process will start immediately and continue until the first quarter of 2007. Of the 130 persons being issued notice of layoff, 90 are employees with limited contracts. A total of 230 people work at the Kalmar plant. •

Acquisition strengthens offering

Ericsson has acquired Swedish company Teleca OSS to strenghten its offering in the highly competitive service layer and telecom management sector. Under the deal Ericsson will take on about 40 Teleca OSS staff, and gradually integrate them into Market Unit Nordic and Baltics, existing system integration team.

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Head of System Integration Franck Bouétard says the acquisition gives Ericsson an installed base within telecom management in the Nordic and Baltic countries.

"The competence in Teleca OSS fits perfectly with our competence and our leading systems integration offering," he says.

The new employees, who officially began work with Ericsson on July 4, will be brought into the organization at its Swedish premises by September 1. •

Music deal strikes right note

Hopefully it is music to the ears of music lovers. Ericsson has announced a partnership with Napster to offer the world's broadest digital-music-download service to mobile phones. The partnership is already in place and the new service is scheduled to go live in Europe later this year, after which it will be offered to operators in selected markets around the world.

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Designed to work on digital rights management capable handsets from all major vendors, the service will begin with music downloads but is ultimately expected to include on demand video streams, personalized radio and more. Napster was recently named by the influential magazine Music Week as the UK's best digital music service for 2005. •

The Boat in sea

The Ericsson Racing Team yacht reached the sea for the first time June 30. The boat was launched from the Lymington shipyard in the UK. The event ended several months of anticipation and intensive state-of-the-art boat building. The boat construction, which Ericsson's skipper Neal McDonald described as "incredibly complicated," began in November last year. Roughly 35,000 hours were spent on the construction. Shortly after the boat was put at sea in Lymington it was being towed to Gosport where the keel, mast and rudder will be mounted.

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"It looks great. It is nice to see it in the daylight for the first time. The colors are good and it is great to see Ericsson decals on the side," McDonald said. •

Photo: Rick Tomlinson

Neal McDonald sees the Ericsson boat in the sea for the first time.

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the last word

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Summer jobs are a Swedish tradition. Students make money and gain working experience during the annual break. David Lorentzon enjoys life as customer order manager.

Exceeding expectations

David Lorentzon had high expectations when he started his summer job at Ericsson in Borås, Sweden. After a few weeks, he is having the time of his life. That isn't so odd when you think he is working with things he wants to do in the future, in an industry that interests him and with the company where he wants to work.

Summer jobs are a tradition in Sweden, with high school, college and university students earning money and gaining valuable work experience during the annual break. During the warmest months in Sweden, Ericsson has about 560 young people working to ensure that the company's Swedish operations do not just snooze in the hammock. Ninety of them are working in Borås, where a successful factory within Business Unit Transmission & Transport Networks manufactures MINI-LINKs.

David was one of more than 300 applicants there, and the HR team says many of them were well qualified. David has long been interested in Ericsson, and when he saw on the company's home page that it was looking for summer employees, he applied. After an interview, he was offered 10 weeks work. There was no hesitation.

"I said yes straight away. I didn't need any time to think. I wanted to come here, applied to come here and was lucky enough to get to come here," he says.

This is David's first time at Ericsson, and since the second week in June the 26-year-old has been in the middle of operations as a customer order manager. "You could say we take care of the first and the last steps in an order," he explains.

As customer order manager for Belgium, the Netherlands, Luxenbourg, Bulgaria, Romania, Greece and Croatia, he receives orders from market units or direct from customers. The orders sometimes involve products from other suppliers. David's task is to coordinate everything so the right products are delivered at the right time. After going through the order, he passes it on to planning and production.

Once production is complete, David comes back into the picture to organize transport to the customer. The customer order manager is the Borås plant's interface with both the customer and other parts of Ericsson, as well as being the customer's voice at Borås.

"It is fun and educational in many ways," he says. "I get an overall understanding of the entire process and how the factory works. Many believe, just like I did, that a customer simply orders items for a specific time and then just waits to receive them, but there is a lot more going on with an order.

"And there has also been a lot of practical stuff. I am learning about different computer systems in a hands-on way, everything from finding e-mail addresses and telephone numbers for a customer in Greece, to booking and mastering SAP, the system we use for dealing with orders."

David finished his studies a week before he started his summer job with Ericsson. After graduating in International Business Relations from Karlstad University, he studied further to become a project manager. He has also studied in Germany and the US.

He says he has put extra time into studying IT and telecom because the industry interests him. In the future, he wants to work with a major company, preferably in an international context, in business control, economic management or financing. Sound familiar? His summer job fulfills most of his criteria.

"Working with this at Ericsson would be a dream come true," he says.