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Banking the billions 12-13



Companies
can cut
their wires

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Business



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Outsourcing of 800 when R&D slimlines

Ericsson is selling part of its development operations to Swedish-Finnish IT-consultant group Tieto Enator. The transaction is a step in Ericsson's strategy to concentrate its R&D activities and make them more efficient.

860 persons in Swedish cities Karlstad, Luleå, Umeå and Skellefteå will join the company from the beginning of November.

"Having more partners and fewer fixed resources is part of our strategy regarding development operations. Through this transaction, we can share our expertise with others, thereby balancing our need for development resources. Tieto Enator is regarded as an important future supplier," says Per-Arne Sandström, Ericsson's chief operating officer.

The sale price is approximately SEK 500 million, about EUR 55 million.

Tieto Enator estimates the order value of the agreement to approximately EUR 90 million per

year initially, coming from Ericsson but also other customers.

"We believe in telecom as a driving force for IT-development in the future. Both Tieto Enator and Ericsson will gain from this cooperation," says Åke Plyhm, Tieto Enator's deputy CEO.

In the northern part of Sweden, 400 persons in Luleå, Umeå and Skellefteå, working mainly with software development for mobile systems, will transfer as a result of the acquisition.

Research activities in Luleå and Skellefteå will remain within Ericsson, as will the military section and the development of test equipment (TEMS).

In Karlstad in central Sweden, 460 employees are affected, mainly involved in software development for signaling systems in core networks and radio base stations.

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Sony Ericsson's new model T100 is designed to attract modern young people.

Triple launch of products

Sony Ericsson has expanded its offering with three new products – the T100, a new affordable mobile phone for modern youth; HBH-60, a small and light Bluetooth headset; as well as a stereo FM-radio hands-free, named HPR-20.

Sony Ericsson T100 is designed to attract modern young people and offers core features at an affordable price. It weighs only 75 grams and features enhanced messaging capabilities (EMS) as well as mobile Internet browsing with WAP.

The new handset has up to 4.5 hours of talk time and up to 200 hours (more than 8 days) of standby time. The phone will be available both for GSM 900/1800 and GSM



The hands-free radio, HPR-20, and the new Bluetooth headset, H-60.

850/1900 networks. The hands-free control unit HPR-20 combines live FM radio in stereo with practical features, which make it easy to handle calls and allows the phone to remain in a pocket or bag at all times. When a call is coming through, the radio is muted and automatically comes back on when the call is finished. The device weighs only 20 grams.

The HBH-60 is a small and light headset which is possible to use with all Bluetooth mobile phones. Its ear-piece is 72 mm long and weighs only 22 grams. It offers talk time up to 2.5 hours and standby time up to 70 hours.

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R&D unit in Norway transferred to Teleca

The GPRS research and development (R&D) unit from Ericsson Norway will be transferred to Teleca, a European consulting group focused on new technology and R&D. The companies have signed a letter of intent to enter into an outsourcing agreement that is expected to be finalised in October 2002. As part of the agreement approximately 70 employees will be moved from Ericsson to Teleca in Norway.

"The agreement will be important because it will increase Teleca's strength in the Nordic region and further increase our competence in the global market for GPRS and 3G," says Nick Stammers, CEO of Teleca.

Ericsson delivers GSM to Sudan

Mobile operator Mobitel in Sudan has chosen Ericsson as its sole supplier for the build-out of its GSM network. The contract comprises all parts of the network being constructed in the capital city, Khartoum, and several other of the country's major cities.

"For Ericsson, this is a new customer in an entirely new market, which makes the contract even more interesting," says Edvard Gavdefalk, key account manager for MSI Cellular, which has its head office in the Netherlands.

The expansion means that Mobitel will increase the capacity of its network from 170,000 subscribers to 450,000. The country has 36 million inhabitants and is still relatively uncharted territory.



Kurt Hellström met journalists and analysts at the Strategy and Technology Summit in Shanghai.

Kurt Hellström meets media in Asia

More than 100 journalists from eight countries came to Shanghai to participate in Ericsson's second Strategy and Technology Summit for Asia and Oceania.

Speakers included Kurt Hellström, Torbjörn Nilsson, Ragnar Bäck and many others from senior management. Interest was substantial, both from journalists and analysts. They were also given an opportunity to look more closely at a number of services developed by Ericsson.

Most attention was paid to streaming services that allow text, sound, images and video to be downloaded to mobile phones.

Conditions for repayment to Ericsson determined

Ericsson and France Telecom have reached an agreement as to how Ericsson's loan to bankruptcy-threatened operator Mobilcom is to be paid back. The agreement means that Ericsson's credits to Mobilcom, which amount to approximately SEK 4 billion, some USD 400 million, are to be repaid in the form of convertibles in France Telecom for a corresponding amount. Ericsson's claims on Mobilcom and undertakings for the operator are thereby terminated and assumed instead by France Telecom.

All the colors of the spectrum in the Americas

The situation is not catastrophic, but it could be better. Head of Market Area Americas, Gerhard Weise, has the best and worst of the telecom world – and everything in between – on his desk.



"We're constantly reworking our strategies and I feel that this is being done thoroughly," says Gerhard Weise.

"The Market Area does have some bright spots, but overall business is not as good as we'd hoped it might be," says Gerhard Weise about the situation in region Americas.

The North American market is staying above water and is even showing some growth. In Central America and northern Latin America growth is good, with new contracts announced and increasing market share in the Caribbean.

In southern Latin America, however, the situation is not as encouraging. Due to political and economic instability in some of Ericsson's key markets, such as Brazil and Argentina, operators are ceasing all investments, leaving Ericsson to tread water.

"We're waiting to see what direction this will take, but it's clear that we depend on a turn-around. These things are cyclical, and we've studied history carefully," Gerhard Weise says.

The changing economic climate in the region is driving the development of new strategies.

"We're constantly reworking our strategies. When operators put the brakes on investments, we have to adapt to that as everything revolves around our customers," Gerhard Weise says, "and the top priority right now is not to lose market share."

On the contrary, he adds, the objective is a continually increased market share. Global Services also continues to be a reason for joy on an

otherwise rather nervous market.

As for the coming year, Gerhard Weise can make a few predictions. He expects the number of new subscribers to continue to decrease by as much as 20 percent in Latin America, compared to 15 percent last year. He considers a continued consolidation of operators to be likely, which should offer new challenges but also new opportunities for Ericsson. To prepare his region for this development, he has decided to make competence increasingly flexible.

"Our key contributors are already being given regional roles rather than national to a much greater extent than before," he says, "making it possible to move competence all over the market area to where it is most needed."

ELIN AHLDEN

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It is not sufficient to merely tread water. Lars Sköld and Gerhard Weise discuss new business opportunities.



The management of Market Area Americas tackles the best and the worst – and everything in between – of the telecom world. At the rear: Angel Ruiz, Peter Källberg and Urban Gillström. Front row: Lars Sköld, Kenneth Boiardt, Bengt Franzén, Kathy Egan, Jill Little, Gerhard Weise and Lars Lindén. Hans Vestberg is not present on the photo.

PHOTO: JACK RADGOWSKI

Hard times make room for opportunities

Market Unit North America is so far handling the economic downturn well. Refusing to patiently wait for the market to turn, the management team is adopting some rather aggressive business goals.

"We've had to bring the numbers down some, but we're still OK," Angel Ruiz says about the situation in North America.

A year ago he took over as head of the Market Unit. At that time, his main objective was providing a somewhat stable working environment for the employees, and the challenge still stands.

"I'd like to think that some things are more stable. But you must also realize that this ongoing flux has become a way of life for us here in North America. It's become clear that we need employees that not only survive, but thrive on change," he says.

Ericsson in the US now employs 1,600 people, compared to 3,300 a year ago. The internal changes and efficiency programs pose a challenge to the account teams, and according to Angel Ruiz, that challenge has been met.

"We have had some very intense roll-outs with GSM in the US, peaking at over a thousand base stations a



Angel Ruiz

month over the past few months. That's a lot of equipment going out. And the customer has not seen – and I would be the first to hear – any degradation in the service or the product. That says a lot about the people that we have out there," he says, adding that at the same time, customers, too, read the papers and follow the stock market.

"Some of them are questioning how vulnerable Ericsson is, and whether we are going to be around for the long haul. Giving them that confidence is our challenge, and this is where the relationships that we've worked so hard all these years to build come in handy."

The effects of the major operators' cutbacks are also starting to become evident, and are reason for concern.

"We're feeling a little bit of what everyone else has been feeling up till now," Angel Ruiz admits, "but at the same time, the GSM overlays that both Cingular and AWS are implementing this year have been running smoothly, making our market contribution for the most part healthy."

The strategy for the coming year is three-pronged,

and part defensive: maintaining market share, maintaining business, and making good on the commitment to the customer. But underlying that strategy, Angel Ruiz and his management team are adopting a much more aggressive perspective, and have no intention to patiently wait for the market to turn. Increasing the role of Managed Services, gaining new customers and breaking into new business segments are the three main goals.

Looming consolidation, mergers, and shared networks may, as Angel Ruiz explains, mean good outsourcing opportunities for Ericsson within Managed Services.

Recent contracts with for example Dobson and Sprint already prove that there are new customers to find. The same thing is true for finding new business segments – working with the US government is now a reality after the recent contract with the subcontractor DynCorp.

"Some of these could be considered small wins, if you look at the numbers, but they were significant because they open the door to new opportunities," Angel Ruiz says emphatically.

"In the kind of situation you have in the industry today, there is always a tremendous amount of opportunity. You just have to find it."

ELIN AHLDEN

Transmission & Transport Networks is continuing with the process of streamlining operations and fine-tuning the product portfolio. As part of Ericsson's overall strategy, the business unit is halting product development of optical networks and will focus on consolidating its leading position in microwave technology.



Ericsson has a leading position in microwave solutions and intends to continue with its own product development in this area, where MINI-LINK is one of the top-selling products.

Number one in microwave links

The Transmission & Transport Networks business unit (BTTN) focuses mainly on optical networks and microwave networks.

"Since we are number one in the market for microwave links, we plan to maintain the same course in this area and continue developing our own products, while at the same time we will naturally make constant adjustments to market trends," says Björn Olsson, head of the business unit.

This will mean cooperating closely with the unit's present customers as far as product development is concerned, while also constantly looking for new ways to bring products to market.

"Today, we collaborate mostly with operators and service suppliers in the mobile segment, but now we are trying to broaden our base for microwave products by finding new distribution channels," says Björn Olsson.

Successful products

In-house development in the microwave area is currently focused primarily on the successful MINI-LINK products. The technology is largely used for building mobile networks and will be a key component in future 3G systems. Ericsson will continue to purchase supplementary mobile-transmission products from network company Tellabs. In the optical networks area, the business unit will cease developing its own products and will purchase products instead. The reason behind this is insufficient market demand – customers are hesitant to invest in new technology, preferring to build on the existing infrastructure.

"Therefore we have no plans to develop a new generation of optical networks but will focus instead on developing the existing networks and expanding our installed base, using purchased products and partnerships," explains Björn Olsson.

For some years, Ericsson has had a partnership with Marconi for product development purposes. Marconi, a specialist in optical networks, will now assume full responsibility for product development, allowing the business unit to concentrate on product management and marketing and sales support.

Efficient division of labor

The program to cut costs by SEK 10 billion, approximately USD 1 billion, that was presented in conjunction with Ericsson's six-month report will naturally also have consequences for the business unit.

"We are trying to find scope for savings in the product portfolio, for example by cutting back on certain product lines or postponing projects or releases," notes Björn Olsson. "We are also examining our cooperation with the market areas in an effort to establish a more efficient division of labor and avoid duplication."

Measures to enhance efficiency generally involve personnel cutbacks, and Björn Olsson cannot rule out the possibility that more employees will lose their jobs. If this proves necessary, it is important that those affected understand the logic behind the decision, he emphasizes. All such decisions must be based on sound business strategy. It is a major challenge in difficult times to combine sound business



Björn Olsson, head of the Transmission & Transport Networks business unit, is trying to broaden the market base for microwave products by finding new distribution channels.

strategy with respect and consideration for individual employees.

"The decisions must be based on business criteria. Then they must be implemented in the best possible way in regard to customers, partners and employees. It is also vital to motivate the employees who remain, since they form the basis for the future progress of the company. We must show them that Ericsson is an employer worthy of their best efforts and a company that looks to the future," concludes Björn Olsson.

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Karl-Henrik Sundström stresses that Ericsson will gain market share in services if everybody works hard in Global Services.

PHOTO:
KURT JOHANSSON

Ambassadors for profitable growth

Ericsson's recipe for continued growth in services is based on local presence and close customer contacts. The key persons in the hunt for new business are the Services vice presidents, who function as Global Services' ambassadors in the market units. When the business unit recently held an extended management team meeting in Sweden, the Services vice presidents also shared their experiences with employees in Stockholm and Gothenburg.

THE RESPONSIBILITIES

Among the responsibilities for Services vice presidents lies:

- Line manager with full profit and loss responsibility
- Generate profitable sales and sales growth
- Drive for services consultative sales approach
- Competence/Resource management and Partner management

The Business Unit Global Services currently generates approximately a fourth of Ericsson's earnings. Market conditions have forced operators to postpone investments in new technology, but at the same time, it is necessary for them to increase capacity and attract new subscribers. Ericsson's range of services provides what they are looking for.

When Global Services' management recently held a conference in Stockholm, profitable growth was at the top of the meeting's agenda. A further four priority areas were also emphasized: the Services vice presidents function are to be strengthened, the business unit is to deploy a uniform global service portfolio and a uniform delivery system, and last, but not least, it is important to act as a single, unified Ericsson.

In one presentation, Karl-Henrik Sundström, head of Business Unit Global Services, gave an overview of current market conditions. He said that Ericsson has a leading position in the telecom service area, but the company and its competitors have captured only a relatively small piece of the cake. Extensive opportunities for growth exist. Above all, potential exists to take over much work currently conducted by the operators themselves. He spotlighted the Services vice presidents as key players in the hunt for profitable business.

"They are our ambassadors at the local market and our business operations are completely local. Those of us who do not meet customers on a daily basis must pay attention to their experience," said Karl-Henrik Sundström.

Colin O'Reilly is Services vice president for market

unit Australia/New Zealand. During his visit to Stockholm, he shared many of his experiences from successful involvement with Ericsson's customer Hutchison in its 3G rollout in Australia.

"Primarily, our task as Services vice presidents is to encourage sales of services in the market units. Together, we form a global network and gain a great deal through exchange with one another. I maintain frequent contacts with colleagues in other market units to be able to learn from what they have done and to obtain a perspective on my own operations," says Colin O'Reilly.

Hutchison is a new player in the Australian market and the operator has a small customer base in CDMA. It is now working intensively to become the leading 3G operator.

"Initially, we helped with the design of their network. We are now involved in the implementation and Hutchison will soon launch their network. We will operate the network for the first year but also hope to be able to continue with this task into the future."

Colin O'Reilly offers three pieces of advice to his colleagues around the world.

"When presenting an offer to a customer, you must be careful to get the dimensions right. Being able to



"Being able to keep your promises is crucial," says Colin O'Reilly.

keep your promises is crucial. Another important aspect is to utilize the global network. Here you can gather knowledge and comparisons not available at head office. A third matter which is important to bear in mind is not to get entrenched in the old division between operators and salespeople.

"We must work extremely close to the operator to be successful. It is when the

boundaries between companies vanish that we become most efficient and successful."

Edmilson Aguiar Toledo, Services vice president for market unit Brazil agrees and sees many advantages in meeting his global colleagues.

"We can, for example, compare prices and other aspects which are difficult to evaluate just sitting looking at our own markets," he says.

His advice to colleagues within Ericsson is to try new ways of approaching customers.

"Sales of services are no longer an appendage to hardware sales. Many new contracts involve services alone and no physical products, such as when operators outsource their network operation to Ericsson."

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World's first handover on live network

Ericsson and the 3G industry are marking the success of historic milestone on September 23. "Handover" functionality and high-speed packet technology in 3G have proven to be reality in a live network demonstration for Hi3G, Telia Mobile and Svenska UMTS-nät AB.

Via a handover, a call initiated on a WCDMA network can continue on a GSM network without interruption. It's one of the standard requirements before Swedish operators launch the next generation of telephony.

The systems were developed by the WCDMA team at Ericsson's Business Unit Systems. Part of the demonstration was to introduce the latest accomplishment by Ericsson Mobile Platforms.

"We have a working dual mode commercial plat-

form ready for developing end-user products for 3G," declared Tord Wingren, president of Ericsson Mobile Platforms.

"Customers see that they can build phones that work in both WCDMA and GSM networks with full functionality."

For consumers, it means one phone will work for both WCDMA and GSM. For operators, it enables a smart and secure launch and coverage everywhere, from Day One.

That's good news for operators currently running 2G networks, like Telia, who can start with small 3G coverage areas and expand.

It's not just incumbents that will benefit from handover. Niclas Lilja, communications director for Hi3G, says:

"We will have 3G coverage in a limited area in Sweden, and 2G outside that area. With handover solved, we can launch earlier. So it's very critical for us."

As a greenfielder and holder of one of Sweden's 3G licenses, Hutchison-owned Hi3G was interested in seeing high-speed transmission, e.g. Internet on the

mobile. The Ericsson demonstration showed them data moving at 384 kilobytes per second.

Peter Lundberg, head of the core engineering team at Hi3G, says that enables exciting applications.

"When you want to do intelligent services and you want to have a lot of media content, you need a lot of bandwidth so you don't have to wait for downloads. You should have the same quality as fixed broadband."

Sony Ericsson was also present as a partner in developing the dual-mode platform.

"Now we have the components to build the Sony Ericsson 3G handset," says Jan Wäreby, head of Sales and Marketing for Sony Ericsson.

"People need no longer question whether 3G is coming - it's here."

Jan Häglund, director of Integration and Verification for Ericsson, summed up the day.

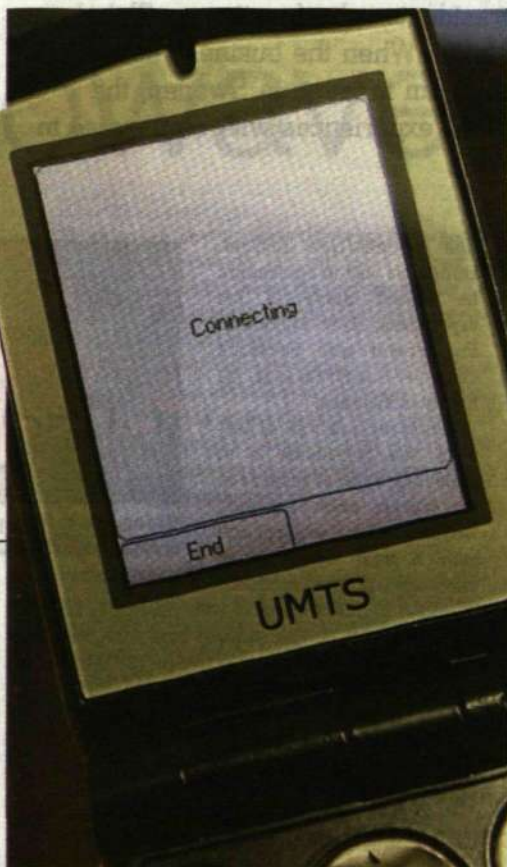
"We showed that the technology is mature. We proved to 2G operators that they can launch 3G and still cover every user through handover, and we proved to 3G operators the enabler for 3G, high-speed Internet services, is ready."



Tord Wingren

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Mikael Elseus, senior vice president of Svenska UMTS-nät AB, and Lars-Erik Samuelsson, senior vice president of Telia Mobile, talk to each other over a 3G network, using a test terminal. After a minute, the call was transferred to GSM.

WORLD'S ONLY ANALOG

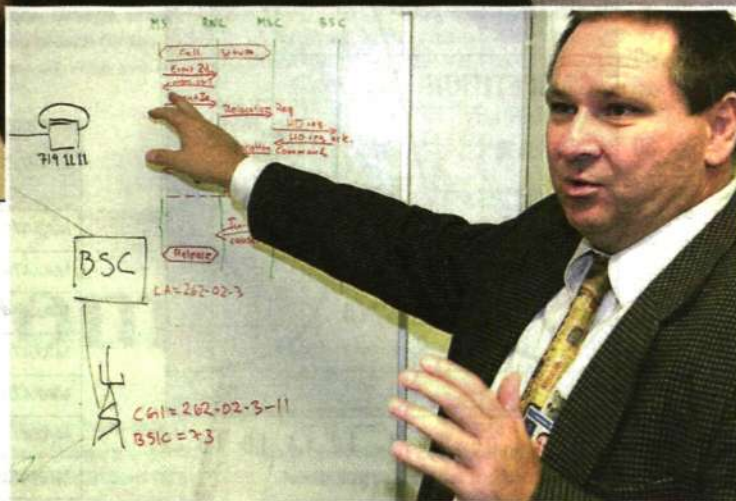


Per Josephsson, Ericsson EMP, Niclas Lilja and Peter Lundberg, HI3G, examine high-speed data rates via WCDMA. To the right: Per Bengtsson, Ericsson EMP, Kista, explains the technology behind handover.

PHOTO: ECKE KÜLLER



Really curious. Per Josephsson, Ericsson EMP talks Mikael Elseus, Svenska UMTS-nät AB, through a demonstration of high-speed packet technology.



Video services will increase traffic

There are more reasons to gain confidence in Ericsson's 3G capability. Besides the technical preparedness and proving handover as well as high-speed data transfer, Ericsson has at least one true 3G service waiting at the starting gate.

When operators launch 3G, video telephony will be the first service on 3G that is more than telephony. It's more than sending text, or still pictures. It is real-time, real live video and voice conversing.

"If any man on the street were to define 3G, they would probably say video," says Fredrik Alatalo, general manager, Product Development Unit (PDU) IP Connectivity and Control. "It's something they can see is different from 2G – and that's what operators are after."

Video telephony has been under development with customer cooperation for about a year and a half.

"This is a straightforward service," says Stefan



Fredrik Alatalo

Sjöberg, director of Product Management, PDU IPCC. "You get video from one mobile to another, or from a mobile to a computer, or vice-versa."

Though it's not expected to be a mass-market application, it means big business growth for operators.

"They get access to a whole new customer base with the combinations of mobile to PC or PC to mobile. Besides," Stefan Sjöberg adds, "it's all about increasing traffic in the networks. Video as a hot new service will increase the traffic!"

A first call between a phone and a computer was completed recently at a field trial in Italy. The first contract for video telephony could be around the corner.

"There's been big interest on the market for just this kind of application," reflects Stefan Sjöberg. "Key operators have approached Ericsson."

Fredrik Alatalo notes that Ericsson is ahead of competition in developing this service because of an early start, and because teams could build on products that already existed in Ericsson's portfolio. Enthusiasm is high in teams working with Stefan Sjöberg and Fredrik Alatalo.



Stefan Sjöberg using several senses.

"This kind of communication gives you more presence, you use more senses," says Stefan Sjöberg.

For Fredrik Alatalo, it's about fun. "You don't have to be a tech geek to find it amusing," he muses. "My parents would like it!"

But on a serious note, Fredrik Alatalo adds that video telephony has a huge responsibility, as being the first true 3G service made available to operators.

"The success of video telephony could determine the health of the whole business. The main thing is, show the possibilities."

DODI AXELSON

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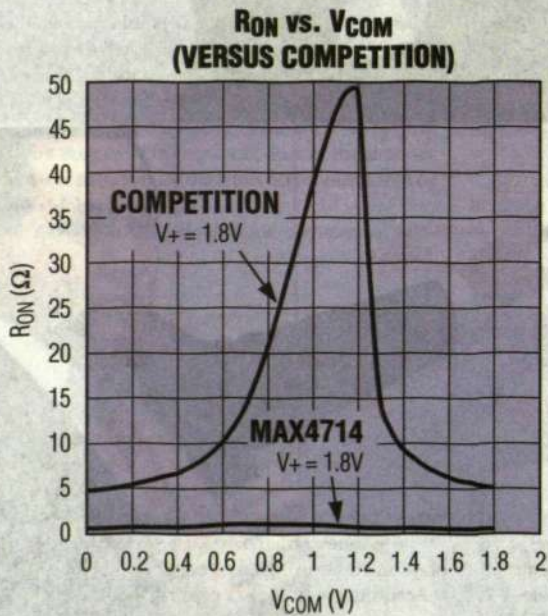
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MAX4753	Quad SPST NO, NC	0.9	2.5	16-QFN/14-TSSOP	1.20
MAX4714	SPDT	0.8	2.5	6-SC70	0.95
MAX4736	Dual SPDT	0.8	2	12-QFN/10-µMAX	0.95
MAX4734	4:1 Mux	0.8	2	12-QFN/10-µMAX	0.95

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Michel Bon, president of France Telecom, has resigned for not having succeeded in turning the debt-ridden telecom giant's fortunes from loss to profit. However, the Group's mobile operation, Orange, offers some compensation and was, in contrast with the parent company, able to report strong growth for the first six months of the year.

PHOTO: LAURENT REBOURS/PRESSENS BILD

Turbulence at France Telecom

France Telecom is experiencing difficult times. Recently, gloomy figures and headlines resulted in the resignation of Michel Bon. However, despite the crisis in the parent company, mobile operator Orange continues to exceed all expectations and is now able to proudly report increased sales.

France Telecom is Europe's second largest telecom operator. Only Deutsche Telekom is larger. In the debt stakes, the French operator is also a front-runner. France Telecom's debt burden amounts to nearly USD 68 billion (EUR 70 billion). USD 7 billion of this amount must be repaid during 2003. During the first six months of the current year, the company made a loss of USD 12 billion.

The French state owns 55 percent of France Telecom, meaning that the Group's financial struggle affects not only its 1.6 million shareholders but the entire nation.

Gloomy prospects

Since CEO Michel Bon has not succeeded in turning around the loss trend, he has now decided to resign. He holds a gloomy view of the company's future prospects: "France Telecom cannot continue to survive when no one wants to lend us money and, on the contrary, when everyone wants to be paid on the nail. In current markets, the refinancing of our debt is simply out of the question," explained Michel Bon to the Financial Times.

A company with USD 68 billion in debts experiences difficulties in obtaining advantageous credit and it has been frequently rumored that France Telecom is planning a new share issue to re-establish equilibrium in its coffers. However, these rumors were denied shortly after the Board meeting at which Michel Bon announced his resignation.

But there is one bright spot. Mobile operator Orange, of which France Telecom owns 85 percent, was able to report strong growth in its six-month report. Sales increased by almost 14 percent and operating income by 52 percent.

"Orange's strategy is working. These figures exceed expectations altogether. We have passed a financial milestone and are now able to further raise our financial targets for the year," says Jean-Francois Pontal, president of Orange, in a press release.

3G on schedule

Orange is also careful to report that its 3G build-out plans remain firm.

"We are entirely on track with 3G. More than half of our investments involve the integration of 2.5G and 3G capacity. Additionally, it is also increasingly clear that we will be able to raise the standard of our 2G networks to offer customers a '3G experience,' and this is what we're doing," says Graham Howe, deputy CFO at Orange.

SARA MORGE

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"Germany should repay license fees"

Finland's Communications Minister, Kimmo Sasi, is demanding that the German state repay the money Finnish operator Sonera invested in its German 3G license. He feels that Germany should repay the USD 49 billion (EUR 50 M) paid in total by the six operators that purchased German 3G licenses. One of the buyers was Sonera of Finland.

The other license holders are Telefónica, Deutsche Telekom, Vodafone, British Telecom and Mobilcom. According to Kimmo Sasi, the repayment of the license fees would give debt-burdened operators a chance to get back on their feet. He feels that this is the only way to once again add momentum to the telecom industry.

Tele2 and Telenor cooperate on network

Tele2 of Sweden and Telenor of Norway have signed a Mobile Virtual Network Operator (MVNO) agreement. The agreement, which is the first of its kind in the Nordic telecom market, allows the operators to utilize one another's GSM and UMTS networks in Sweden and Norway.

For a year, Tele2 has been involved in a feud with the Norwegian authorities regarding the pace of the build-out of 3G networks. The operator finds it difficult to see that its 3G investments in Norway can become profitable within the near future and wants to delay building out its 3G network. This has resulted in speculation that the MVNO agreement with Telenor could mean that Tele2 intends to hand back its Norwegian 3G license. However, Tele2 states in a press release that the agreement will not affect its UMTS license in Norway.

Chinese operator orders CDMA phones

China Unicom recently announced that it would buy phones from Samsung for USD 400 million.

"We have agreed with China Unicom to deliver 700,000 CDMA phones between October and December 2002," says Samsung spokesman James Chung to Reuters.

The phones ordered will have color displays and built-in digital cameras.

According to Internet magazine Totaltele, Samsung is planning to invest USD 258 million to meet increased demand for mobile phones.



Hong Kong tops mobile development index

"Internet for a Mobile Generation" is the title of a report recently presented by the International Telecommunication Union. The report outlines the possibilities created by combining of mobile communications and the Internet through 3G services.

The report includes an index quantifying the conditions of more than 200 economies with regard to mobile telephony and the Internet and how likely they are to draw benefit from new developments in this field. The ITU's index places Hong Kong highest, closely followed by Denmark and Sweden.

In the report, the ITU affirms that it is difficult to forecast in which country Mobile Internet will have the greatest chances for growth.

Certain countries, such as the Philippines, may be advanced with regard to mobile services while having lower Internet penetration. In India, on the other hand, many use the Internet, while mobile telephony has not expanded to the same extent.

Treasure chest for the new billions

It has been a hectic and instructive year for Corporate Treasury, which handles the Group's foreign-exchange transactions. Corporate Treasury is always in the limelight in conjunction with the company's reports and also played one of the main roles in the rights offering. The unit's most important task now is to manage the new billions generated by the rights offering.

Corporate Treasury consists of a small cohesive group of nine persons, with their offices on Wigmore Street in London. For the past three years, Vidar Mohammar has been head of Corporate Treasury and responsible for all of Ericsson's foreign-exchange transactions. His working weeks are filled with meetings with bank directors, financiers and representatives of Ericsson's various companies. Favorable cooperation with external banks is of major importance for a company of Ericsson's size, particularly now that the telecom sector has experienced a recession.

"A company's relationship with a bank is about the same as that of a private individual. In good times, you can borrow fantastic amounts at very favorable conditions, in poorer times, the bank is less willing to take risks and attaches much higher importance to credit-worthiness," he says.

However, a large company nevertheless has considerably better resources with which to influence the bank than a private person and it is Vidar Mohammar's responsibility to prove to the banks that Ericsson is a company in which it is worth investing.

"It is obvious that in times like these we feel increased pressure both internally and externally, but at the same time, this encourages us to do a good job. It is important to always maintain an even balance in our relations

with the bank, whereby both parties can place demands on one another," he continues.

The importance of this has been further highlighted in connection with Ericsson's rights offering. Corporate Treasury has been involved from the start and, among other tasks, participated in the production of the prospectuses that formed the basis of the rights offering.

"It has been a challenging task for everyone involved – particularly to get five different banks to agree on important issues under rather tight time constraints. At the same time, however, it was inspiring and exciting work – a rights offering doesn't happen very often within a company and for many of us this was the first time."

It is now clear that the rights offering was successful and that Ericsson has received SEK 30 billion, which was its target. It now remains for Corporate Treasury to invest the new billions in an efficient manner.

"The money is now being managed by our internal bank, Treasury Services in Stockholm. It will be invested in secure interest-bearing investments in accordance with the company's policy."

JENZ NILSSON

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WIGMORE STREET W1 CITY OF WESTMINSTER



The work on Ericsson's rights offering has dominated Corporate Treasury's operations in recent months. Vidar Mohammar, right, is head of Corporate Treasury and spends a large amount of his time in meetings with representatives from the bank world to persuade them that Ericsson is a company worth investing in. He is pictured here in conversation with Henrik Stenmo, who is responsible for financing at Corporate Treasury.

PHOTO: JENZ NILSSON



Ericsson's internal bank, Treasury Services in Stockholm, is handling the SEK 30 billion, approximately USD 3 billion, received by Ericsson in conjunction with the company's rights offering. Carina Bengtsson, liquidity manager at Treasury Services, and her colleagues around the trading table, have been given the important task of finding secure, interest-bearing securities in which to invest this capital.

PHOTO: ANDERS ANJOU

Calm reigns over Ericsson's internal bank

Ericsson's internal bank, Treasury Services in Stockholm, manages the company's cash. The bank's employees handle billions of kronor daily and ensure that the various Ericsson companies always have access to capital.

On the ninth floor of Ericsson's head office at Telefonplan in Stockholm, calm reigns supreme. This is a little surprising considering that this is the center that handles all of the really big money within the company. I had expected, if not Wall Street hysteria, at least stressed-out looks and spontaneous swearing about rising exchange rates and falling share prices. Instead, there is a group of quiet and focused people pedantically monitoring their computer screens. In other words, the same atmosphere as at any other bank.

"We are organized like an external bank, the difference being that our customers are Ericsson's various local companies. We approve credit limits and lend money in various currencies just like any ordinary external bank," says Magnus Strömer, president of Ericsson Treasury Services.

For Ericsson, with its specific structure, in which nearly all sales are made outside the borders of Sweden, it is a definite

advantage to have its own bank with 24-hour control over transactions.

Unnecessary fees avoided

"The company is often paid in large amounts of foreign currency. The money must be handled in an efficient manner so that Ericsson does not incur unnecessary losses related to fluctuations in the foreign-exchange rates," Magnus Strömer says.

For major transactions, such as when Ericsson sold its shares in the American router manufacturer Juniper at the beginning of 2001, the personnel at Treasury Services work under high pressure. In the case of Juniper, the shares were listed in the US, meaning that Ericsson was paid a large amount in US dollars.

"On such occasions, it is important that we have total control of all the practical details – what are the conditions for the transaction? Exactly when will we receive the money? To which account or accounts will the money be paid? Have all the parties involved agreed to this? All of these questions must be clarified," says Magnus Strömer, and continues:

"A missed call to a bank can mean that Ericsson loses out on millions due to missed interest over a weekend, for example."

Heavy responsibility rests on the workforce gathered around the centrally positioned trading table. Every day, an average of 250 transactions are conducted internally and externally through Treasury Services. Translated into Swedish kronor, this means several billion.

The traders' task is to take care of the external transactions with the market and ensure the management of the transactions Ericsson already has.

"The Group has a large number of loans that must be monitored so that we are not affected by unnecessarily high interest-rate exposure. We also have a large number of bond loans that are sold and distributed to Ericsson from the banking sector. These bonds are traded in a secondary market by all sorts of investors, bankers, wealthy individuals and pension funds," continues Magnus Strömer.

Favorable terms

Previously, the company's foreign subsidiaries conducted foreign-exchange transactions, loans and investments through their own local banks. Today, this is virtually always handled by Treasury Services.

When the company's subsidiaries require money, they must apply centrally for a credit level. The money is then lent in accordance with market conditions, which must be at least as favorable as the terms offered by the local banks. The intention of having "large-scale management" is to facilitate the matching of loans and invest-

Currency handling to become even more efficient

The tool for making Ericsson's foreign-exchange management even more efficient is called the Treasury Change Program.

The Treasury Change Program is the result of a market survey that the consulting company PriceWaterhouse Coopers conducted on behalf of Ericsson slightly more than two years ago.

As the new head of Corporate Treasury, Vidar Mohammar wanted to acquire a clear overview of the status of his organization in comparison with the treasury operations of other major international companies.

The findings of the survey indicated that there was rather a lot to be desired and a plan was prepared to eliminate the shortcomings that existed within the organization.

"We asked what sort of treasury operations we wanted, what could the company expect of us and in which parts of the company we contribute most. Gradually, a number of areas appeared that we considered to be most important," says Ronan Slater, head of the Treasury Change Program.

The goal is for every area to achieve at least "best practice standard" in accordance with the yardstick used by PriceWaterhouse Coopers in

the market survey. To achieve the established goals, a number of subprojects are currently being conducted, both within Treasury and among the customers (the subsidiaries).

"It is important that we make maximum use of the resources within the company. We are constantly looking for where we can achieve the greatest effect of the program for the least consumption of resources in the form of time and money," says Ronan Slater.

"We have progressed about halfway in our work, but challenges remain. In particular, we can become better at handling the company's foreign currency on a global level," he says.

Ronan Slater highlights the Global Cash Management Solution project as the single largest and perhaps most important project.

"This project is aimed at giving us standardized and efficient payment processes in relation to our external banks. The larger the volume of single payment services we purchase from a bank, the lower the price will be for these services," he says.

The Global Cash Management Solution is already used within Ericsson Shared Services in Sweden. In September, implementation will begin at the corresponding unit in the Netherlands. After this, it will be the turn of Australia and New Zealand.

JENZ NILSSON



Ronan Slater

TREASURY SERVICES

A part of the Corporate Treasury unit, Treasury Services handles the financial flows that arise from business operations and reports to Corporate Treasury weekly on the financial situation of the various Ericsson companies and current transactions.

A total of about 40 persons work at Treasury Services at Telefonplan in Stockholm. The regional Treasury Services offices are currently located in the US, Singapore and Ireland.

ment requirements between various Ericsson companies, which in turn leads to a reduction in Ericsson's total transaction costs.

The major challenge for Treasury Services in the future is to try to be a greater supporting partner for the subsidiaries: "Naturally, profitability remains our principal goal, but I am convinced that we will be even more effective if we work more closely with the companies, which means helping them to interpret figures correctly and ensuring that they have the correct hedging structure in place. When we have a clear picture, we are able to contribute by suggesting alternative solutions," Magnus Strömer says.

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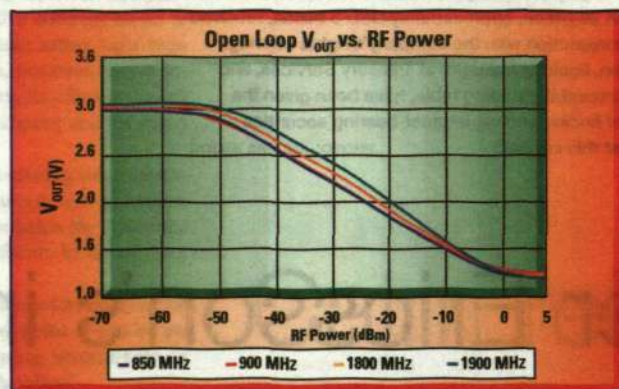
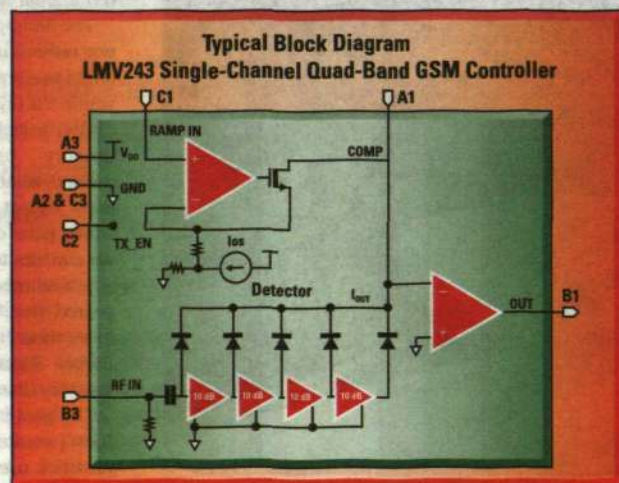
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New money from old equipment

Ericsson's program for recovering materials and parts from used products is expanding to become global. As of 2003, operators throughout the world will be able to return used equipment. In addition, Ericsson is unique in having established a take-back system that also applies to old products.

Through the Ericsson Ecology Management Service, the company offers to take back used equipment. The "Take-back" program began in November 2000. To date, the program has only covered Europe, but from the start of 2003 it will cover the entire world. The regional centers are located in Rijen in the Netherlands, Kuala Lumpur in Malaysia, and Dallas in the US.

Monly Tsoi is global product manager at Global Services and she heads the Ecology Management Service. She explains that there are several reasons for Ericsson offering to take back equipment.

"In the EU and many countries throughout the world, there is extensive legislation in this area. The operators must comply with the requirements and they expect this type of service from Ericsson. As a global company, we must maintain a high minimum standard, even in countries where legislation is not as strict. This is also a competitive tool. One goal is for environmental commitments to become a component in the marketing of products," says Monly Tsoi.

"A uniform program for the entire world establishes procedures and generates economies of scale, mean-

ing that we are able to take back the equipment in a cost-efficient manner."

Ericsson's offer to the operators is organized on two levels. Either the customers themselves can deposit the equipment at the collection sites, where Ericsson accepts it at no charge, or Ericsson can come to the customer's premises and dismantle the equipment for a fee.

"To start up the program and achieve large volumes, we are offering to accept the equipment free of charge. In this way, we will have the volumes required to make it profitable to recover valuable metals, for example. It also makes it easier for the customer to see the value of the service for which we are charging."

Material recovery is not part of Ericsson's core operations and agreements with regional recovery companies have been a significant feature of the process. All of the recovery companies have ISO 14001 certification.

"These are carefully selected companies. Ericsson must not be associated with unethical partners and the same requirements apply to partners of the recovery companies."

When the program has started to function globally, it will be important to have comprehensive reporting from local and regional levels.

"We need detailed information about developments



Environmentally hazardous equipment is handled by Ericsson's ISO-certified partners. Valuable metals and other expensive equipment cover large parts of the costs of the recovery work.

PHOTO: KEES BROEDERS

in order to fine-tune the process and minimize the costs of the service," says Monly Tsoi.

JESPER MOTT

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Monly Tsoi

Europe shows the way for recovery

In November 2000, Ericsson started a pilot project for recovering materials and parts in Rijen, in the Netherlands. Kees Medendorp, who is responsible for the operations in Rijen, explains that, in principle, materials recovery and recycling of parts pay for themselves. The facility in Rijen is the center for Ericsson Ecology Management in Europe. Since its inception, four contracts have been completed and about 600 tons of equipment have been recycled. The process received ISO certification in January 2001.

The equipment is collected both in Rijen and

at the market units, where collection points are established as required. The actual recovery process is undertaken by Mirec, a company that specializes in recovering materials and parts from electronic equipment and is Ericsson's regional partner for all of Europe.

The equipment received can be used for recovering either materials or reusable parts. The recovery of valuable metals and other materials can generate large amounts of money. By reusing fully functional old parts in service operations, Ericsson can also make substantial savings.

"As a result, recovery of materials and parts is constantly increasing. When volumes increase, economies of scale result, meaning that we earn more from our operations," says Kees Medendorp.

Ericsson is in contact with several operators in Europe who are interested in recovering materials and parts from old equipment. These operators are located in Spain, Italy, Switzerland and the UK.



Kees Medendorp

JESPER MOTT

Full mobility at work

Intranets, telephony services and mobile telephones are all features that are taken for granted in modern companies, but they are often used separately. Now Ericsson Enterprise has picked up its needle to sew the technologies together into a single system. The result is called the Ericsson Mobile Enterprise Communication Solution.

For more than 30 years, Ericsson Enterprise has been supplying customers with solutions for their internal communication needs. The key product in this area has been the MD110, a PBX for wireline and mobile telephony that offers more than 500 telephony services.

Now Ericsson is taking a new grip on the market. The Ericsson Mobile Enterprise Communication Solution (MECS) is designed to give companies tailor-made solutions that enable limitless mobile communications between enterprise networks and other networks.

"This is an entirely new way of reaching the corporate

market," says Magnus Leonhardt, who works for Ericsson Enterprise's System Integration Sales department.

"We no longer offer individual products but provide complete solutions to problems. Ultimately, it is a matter of selling the commercial advantages that mobility brings."

MECS functions as a kind of toolbox for systems integrators. The backbone of the solution consists of the communications platform, the end-user applications and secure



Magnus Leonhardt

access, which the systems integrators can then combine to suit the special needs of the company.

The result is a multifunctional integrated communications solution for mobile voice and data services that can carry all types of traffic. Users have access both to their company's intranet and to the various services provided through the company switchboard - outside as well as inside the office - while the roaming function eliminates the need to actively connect up to various networks when the user is on the road.

"One of the cornerstones of this concept is its simplicity for the user," notes Magnus Leonhardt. "The idea is that users should not need to be aware of or worry about how the technology works."

The launch of MECS has been initiated on a small scale in Sweden and will then be selectively extended to other markets during next year. The marketing strategy aims to focus primarily on those markets that are ready for advanced mobile enterprise solutions. MECS will be sold through a number of partners, who may include operators or systems integrators like IBM, EDS and Accenture. There is a strong demand from compa-

New concept stands the test

One company that has already tried out Ericsson's Mobile Enterprise Communication Solution, MECS, is the consulting company Accenture. It has been conducting field trials for several months, giving some 50 employees a foretaste of what full mobility entails in their work.

IT and management consulting company Accenture works daily with corporate customers on consulting and outsourcing assignments, helping them to find suitable solutions.

Now Accenture is conducting field tests of MECS in order to fine-tune the solution prior to its market launch.

"We have been using the applications in our own portable computers and mobile phones, then giving feed-back to Ericsson's development group, so that they can rectify any faults and develop the solution

further," explains Jonas Malmgren, strategy consultant at Accenture.

About 50 consultants have been involved in the testing, and their reactions have been highly positive. The consultants appreciate the value of being able to read e-mails on their mobile phones, establish trouble-free mobile connections on their portable computers and use GPRS to download presentations and information from the intranet, according to Jonas Malmgren.

IP-based solutions have two advantages for Accen-

ture's customers: they offer cost reductions for both wireline and mobile telephony, and they enable employees to work more efficiently.

"In the present business climate, our customers regard the cost reductions as the main advantage, but I believe there will be increased interest in investing in mobile services as soon as IP-based solutions become more standardized."

Accenture is not only a customer but also a potential partner for sales and integration of mobile enterprise solutions based on MECS.

"Since our customers expect us to know all about mobile solutions, it is a major advantage for us to be involved at an early stage and be able to use, evaluate and help to optimize a solution such as MECS," concludes Jonas Malmgren.

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with new solution

nies for smoothly functioning mobile solutions, according to Magnus Leonhardt.

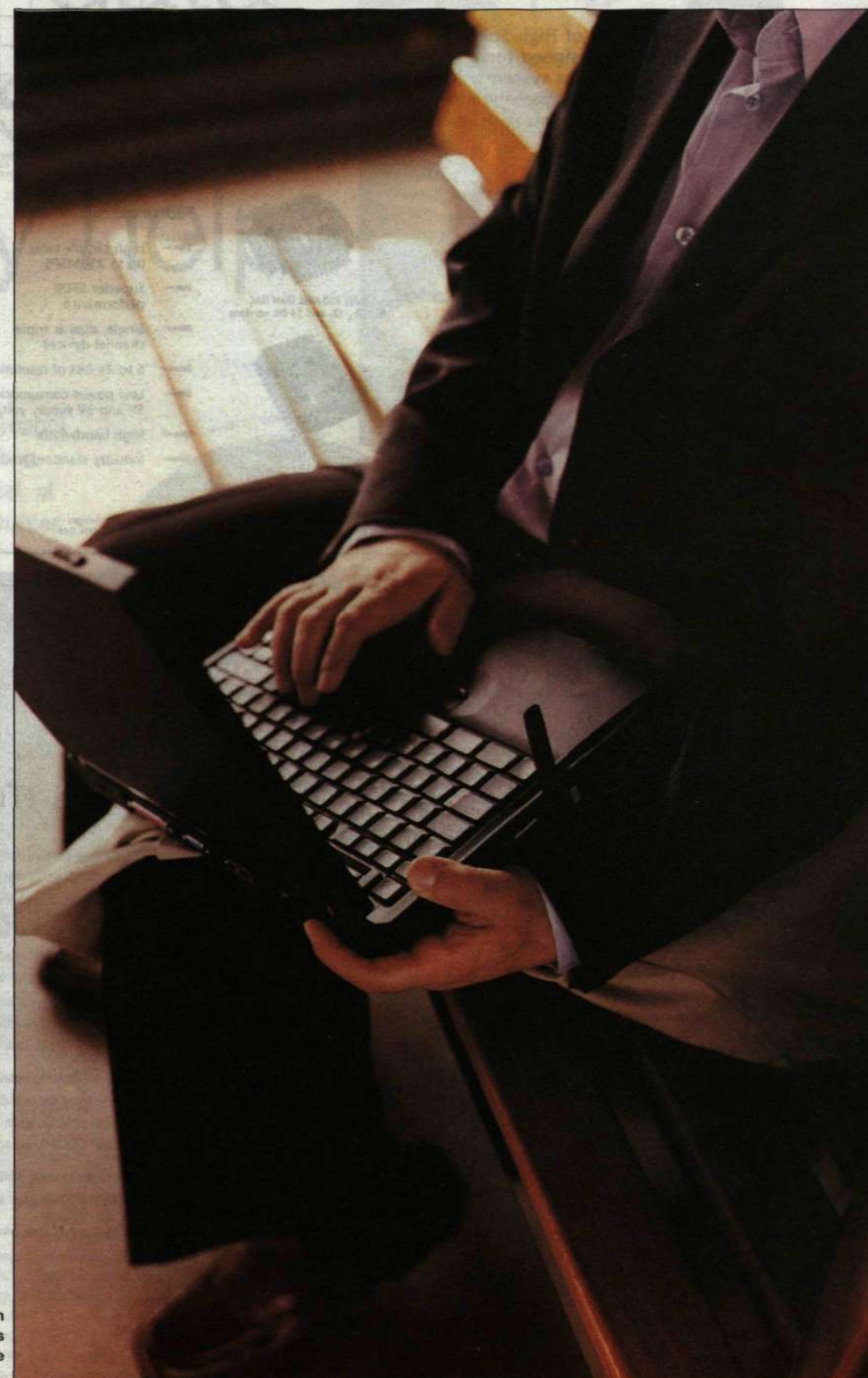
"The potential customers are often companies at the cutting edge in terms of new technology, since they are aware of the major advantages to be gained from customized solutions, and this means that they are prepared to invest in the relatively high integration charges and traffic tariffs that are involved. They include, for example, some of our first customers for GPRS and 3G."

Competition in this market is just as tough as in other markets. But Ericsson Enterprise's many years of experience and special expertise enable them to stay at the forefront when it comes to providing these types of solutions.

"Ericsson's trademark is mobility. We know mobile systems and we know what companies need. This unique combination makes us unbeatable in the enterprise market," concludes Magnus Leonhardt.

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Full mobility in or out of the office. Ericsson Enterprise's new concept gives employees access, via their mobile phones, to all the services in their company's switchboard.

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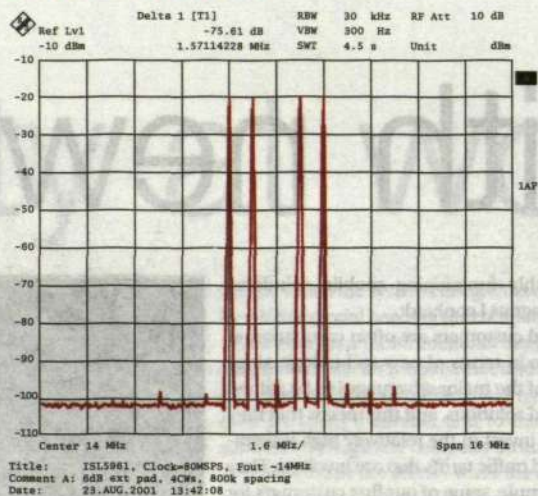
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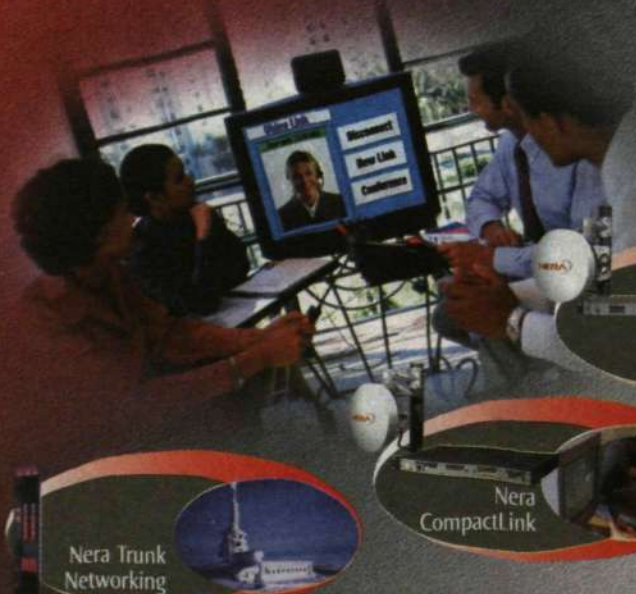


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Mobile data delivers speedy help

By speedily making his way to people needing medical assistance, Anders Lindberg can provide first aid and, at the same time, assess what resources are required at the location. He receives his assignments on a terminal designed for mobile data services on his specially equipped motorcycle. A trial has been under way in the Stockholm area with physicians on emergency motorcycles.

"I receive the initial alarm through the headphones in my helmet. At the same time, a red light flashes on the terminal and I confirm the assignment," explains Anders Lindberg, pointing at the equipment he has on his motorcycle.

He is a physician and anesthesiology specialist at the paramedic section at the hospital Södersjukhuset in Stockholm. In cooperation with his colleague, Lennart Johansson, he has conducted a two-month trial, riding a motorcycle fitted with medical equipment, blue light and sirens. An important component of the motorcycle is the communications equipment, consisting of a radio, GPS (Global Positioning System) and Mobitex, Ericsson's narrowband wireless system for transmitting packet data.

"This is also part of the communications equipment," says Anders Lindberg, holding up his GPRS phone, a T68i from Sony Ericsson.

Robust and reliable

In Sweden, there are two Mobitex operators: Telia, which operates a nationwide network, and Mowic, with a system that covers Stockholm, Gothenburg, Malmö and their surrounding districts. Mowic placed its network in operation four years ago. It is expanding in terms of both users and coverage.

"Mobitex is a robust and highly reliable system that

is suitable for rescue services among other operations. Our part of the test with the emergency motorcycle is to supply communications between the emergency services center and the bike," says Michael Palmlöf, business area manager at Mowic.

At the emergency services center, the personnel can see on a digital map exactly where the motorcycle is located. The GPS position is updated every thirty seconds.

Can save lives

"As paramedic on a motorcycle, it is my primary task to quickly get to whoever needs medical assistance and to assess the situation. Sometimes, there is no need to call an ambulance, in which case I inform the emergency services center. If an ambulance is required, I can administer the first aid necessary on site and then assist the ambulance personnel. In this way, valuable time can be saved and sometimes also lives," says Anders Lindberg.

The trials with motorcycle doctors has been conducted from 6:00 a.m. to 6:00 p.m. on workdays, when the traffic is heaviest and a motorcycle can move through traffic faster than an ambulance.



Michael Palmlöf

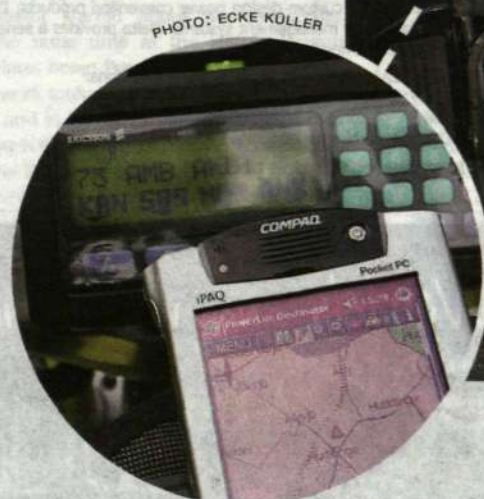
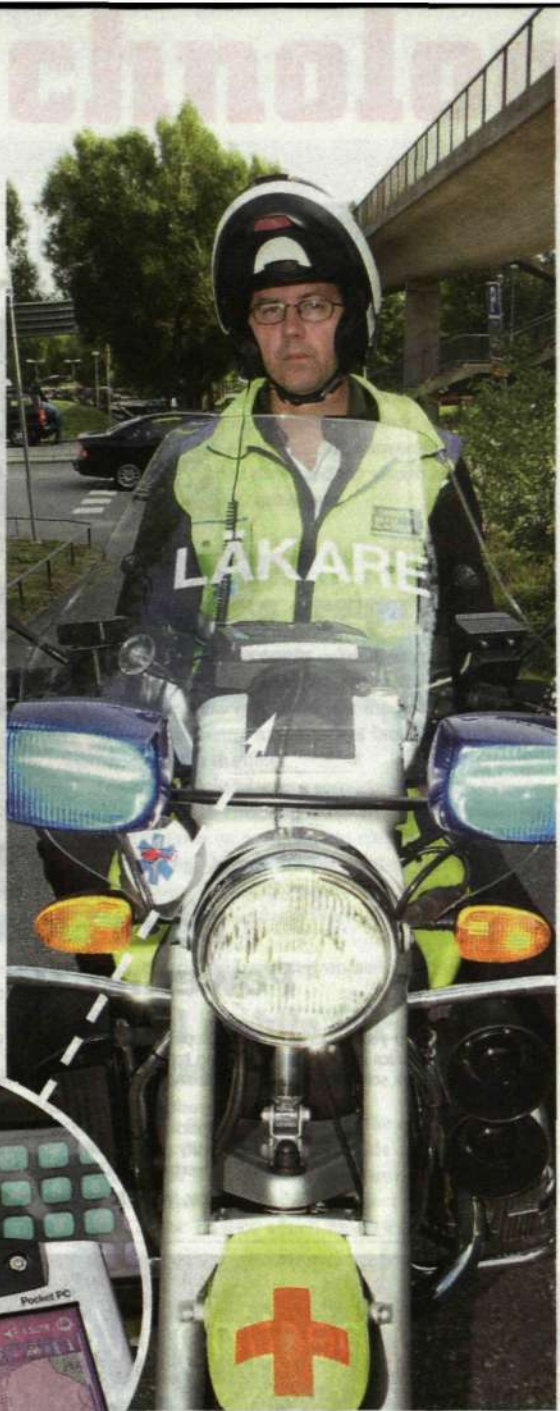


PHOTO: ECKE KÜLLER



The specially equipped motorcycle is fitted with communications equipment, including a terminal for mobile data services. When the alarm is sounded, the terminal starts to flash red, at the same time as the physician, Anders Lindberg, hears the alarm through headphones in his helmet.

Anders Lindberg, who has ridden a motorbike privately for many years, has received training in emergency driving, together with his colleague, from the motorcycle police in Stockholm.

Outside Sweden, for example in Germany, there are emergency doctors who use motorcycles. The trial in Stockholm, however, is probably unique because of the communications solution with Mobitex that is being used.

"The trial here in Stockholm is an excellent example of how mobile data services can help to save resources and time in paramedic care. Paramedics on motorcycles should be an attractive solution for many major cities," concludes Michael Palmlöf.

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A workhorse in WCDMA networks

The RNC (Radio Network Controller) node is a relatively unknown workhorse in the new WCDMA networks. Small but strong, the RNC handles most of the radio functions in the network.

When the first mobile networks were taken into operation in the early 1980s, a base station was sufficient for communication with mobile phones and the mobile switches, MSC, that kept track of subscribers and their movements in the network. By the time GSM was introduced, however, traffic had already increased to the point where there was a need to separate the radio components for services and the core network. A new node called the BSC (Base Station Controller) was therefore introduced to reduce the load on the mobile switches.

The RNC is the WCDMA network's equivalent of the BSC. It controls the radio network, sets up radio links, regulates transmission power, ensures that mobile terminals are connected to the correct base station and allocates the appropriate codes for each connection. (Codes are specified in a tree structure and the portion of the code tree allocated increases with the bandwidth required by the user.)

The RNC can handle up to 500 base stations, which means that in a network consisting of 10,000 base stations, each of which can handle several hundred calls, and a couple of mobile switches, there are between 20 and 30 RNC nodes, which are often placed centrally close to the switches.

"By now, we have delivered a large number of RNC units to the new WCDMA networks in Japan and Europe. We believe that Ericsson now has a small head start with its RNC 3810," says Bengt Gestner, RNC product manager.

Similar but different nonetheless

Although the RNC is similar to a BSC, there are important differences. These are primarily due to the fact that WCDMA uses a different radio technology (DS-SS-CDMA) than GSM's TDMA.

Code Division Multiple Access (CDMA) places all calls on a single broad frequency band and distinguishes calls by allocating a unique code for each one. All cells use the same frequency, and the codes function so that each user perceives other calls as weak noise.

One consequence is that CDMA networks require a soft handover for a mobile that is moving between two cells in order to maintain power regulation. This means that the mobile phone does not disconnect from a cell until it has connected to the next one. The

same applies if the phone moves from one RNC area to another.

"For this reason, a new interface between RNCs has been defined," says Bengt Persson, who has been working with RNC specifications for more than five years. This means that the RNC functions more as a switch and offloads the MSC, which does not need to be aware of all traffic in the network.

Another important difference is that the speech codec, which compresses speech so that several calls can be transmitted over a given frequency band, has been moved to the Media Gateways, which can be located at the interface to the fixed network. As a result, transmission capacity is saved. In terms of hardware, the speech codec is a large part of the BSC. In the 3G system CDMA2000, which has a BSC much like the RNC, it was decided not to relocate the speech codec.

First on the market

Ericsson's 3810 RNC is the first commercially available product of its kind that adheres completely to the 3GPP standard.

"Development started about five years ago, at about the same time as the standardization process," relates Bengt Persson. Although most development work took place in Kista and Linköping, in Sweden, and in Jorvas, in Finland, much of the responsibility is now being transferred to Dublin.

One of the Ericsson RNC's strengths is that it is based on the CPP technical platform, meaning that a limited number of components are required to build several different types of nodes, resulting in large volumes and stable products. A node containing standard circuit boards becomes an RNC when the software is loaded. The 3810 RNC is scalable from 22 to 375,000 users. The operator can start with a single magazine and expand in pace with subscriber growth in the network. Fully configured with nine magazines in three cabinets, it occupies just 0.75 square meters of floor space. The RNC is based on ATM transmission but prepared for IP.

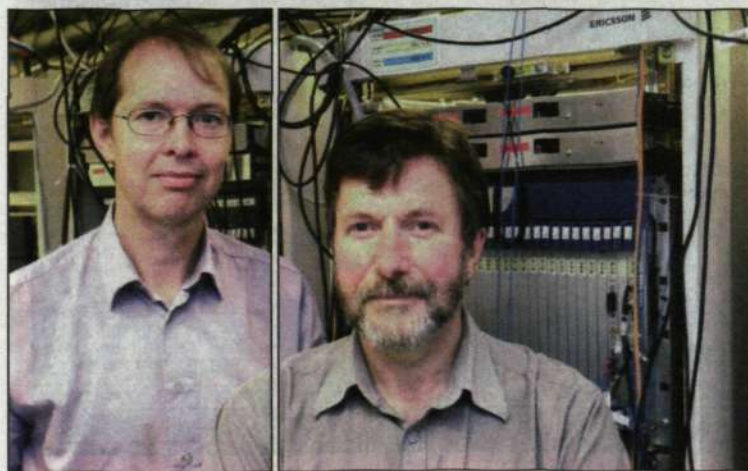
"We see the 3810 RNC as a milestone for us. We have specified an architecture for the hardware and software that we believe will last for a long time," say Bengt Persson and Bengt Gestner.

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Read more in Ericsson Review no. 2, 2002

www.ericsson.com/review



Bengt Persson and Bengt Gestner see the RCN 3810 as a milestone. "We believe that this solution will last a long time."

PHOTO:
ECKE KÖLLER



An image of a damaged circuit obtained with an electron microscope. A short circuit, caused by lightning or something else, has damaged the silicon and sent the component to the IC graveyard.

New process for reliable design

There is now a process called Design for Reliability that ensures that products are both reliable and robust. The new process can eliminate the costly and sometimes embarrassing reminders of faults and failures of products out in the field.

Design for Reliability is a response to the ever-diminishing size of electronic circuits which pack more and more functions on a single chip and demand testing at an early stage before the production technology has been chosen. Reliability requirements can be specified at both the system and unit level.

Systech.ericsson.se/sysprop/services/reaibil

Useful mobile services for Stockholm

A project called mCity (mobile city), currently in progress in Stockholm, will provide users with useful services that simplify daily life. Sanna Koritz from the City of Stockholm is both the project manager and the owner of the project, which has Ericsson as one of its sponsors.

"We have focused on users and are first studying what they need, not how they want to use the technology. When we know what their needs are, we can develop simple solutions based on existing technology," says Sanna Koritz.

A number of projects have been started to date, including projects for the health care, educational and business sectors. Examples of services are scheduling of substitute teachers, mobile parking, absentee reports for schools and property management.

"We contribute on a commercial basis and as a generator of ideas," says Jan Gustafsson at Ericsson, adding that Ericsson is operating a Mobile Business Office that is intended to simplify daily routines for management companies. This is to be accomplished using existing technology that can quickly be implemented in new services.

www.time.stockholm.se



About PC client licenses. Ericsson and Microsoft have entered a global licensing agreement that includes such applications as Word, Excel, PowerPoint and Outlook. Ericsson pays so that everyone at Ericsson with a PC at their workplace can use these applications.

A limited number of licenses for Project, FrontPage and Visio are also included in the agreement. These applications may be ordered from the local help desk. Remember that licenses should not be purchased, since they are included in the agreement. When you no longer need an application, uninstall it so that the license, which has already been paid for, may be used by someone else who needs it.

Do you use other applications than Microsoft's? Make sure that you or your department pays the license fee for these applications.

Infosverige.ericsson.se/it_stod/our_it_environment/ -> orders and licenses

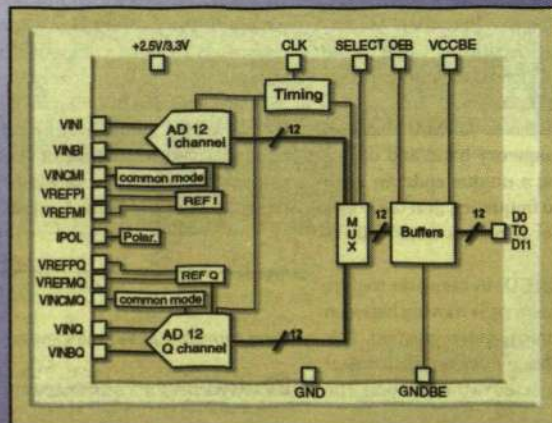
WANT 40Msps HIGH PERFORMANCE DATA CONVERSION PLUS
SUPER LOW 230mW CONSUMPTION AND STILL SAVE SPACE?

GET IT WITH ST's TSA1203 12-bit Dual A/D CONVERTER

The TSA1203 is a new generation of high speed, dual-channel Analog to Digital converter processed in 0.25 μ m CMOS technology. Specifically designed for applications like 3G base stations where very low noise threshold, high SFDR and good isolation between channels are of prime importance, these advanced A/D converters have the industry's highest ratio of speed-to-power consumption. The TSA1203, performs 40 million samples per second (Msps) while consuming just 230mW.

Among the noteworthy features offered by this advanced dual-channel ADC are an internal voltage reference that reduces component count and saves space (if preferred, an external voltage reference can be used), proprietary track-and-hold circuit featuring a 1GHz input bandwidth, common clock signal for both channels, selectable I or Q channels, 2.5V supply voltage with 3.3V-compatible I/O signals, 2Vp-p differential or single-ended analog inputs, tristate outputs, and good channel isolation.

- Low power consumption: 230mW
- 0.5Msps to 40Msps
- SFDR= -68.3 dBc @ Fin=10MHz
- 1GHz analog bandwidth Track-and-Hold
- Common clocking between channels
- Multiplexed outputs
- Single supply voltage: 2.5V
- Independent supply for CMOS output stage with 2.5V/3.3V capability



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plus space and power saving, go to www.st.com



Helping lead the way

Big info – small format

Market Units and customers receive a crash course in Ericsson's wireline offerings via the new Engine Pocket Guide with accompanying multimedia CDs.

"This is a quick overview of Ericsson's offerings for Multi-Service Networks," says project leader Carina Christiansson. "Everyone should know what we sell and why operators should buy it."

Scenarios loosely based on actual customer situations comprise one of the guide's ten chapters. Other sections describe the Engine offerings and solutions, while Global Services has its own chapter. The CDs offer short videos about the Engine concept, Engine Softswitch, and Public Ethernet. A separate internal



Light to carry and easy to follow. There has been demand for a pocket guide for Ericsson's Engine offering.

CD also includes sales training and a PowerPoint slideshow. Distribution is ongoing, and some customers have already praised the issue.

"The pocket guide is easy to carry and the information is easy to absorb. So far it's been really appreciated," exclaims Carina Christiansson.

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Tina Nordström, Linda Östberg, Nils-Åke Danielsson and Per Wiberg learn more about supply.

PHOTO: JONAS UDDMAN

Learning about supply

Ericsson University has developed the Supply Chain Game, a board game based on the same idea as the Beer Game from MIT, in the US. The game simulates a complete supply chain at Ericsson, from the subcontractor to the operator, aimed at sharing how costly and frustrating the consequences can be when information and prognoses are incomplete.

The game has been tested in Sweden and Mexico during the past six months, and training sessions can be ordered via the Web site.

inside.ericsson.se/supply/training/game.shtml

Sing along with Ericsson

On its way to the top of the charts, the Ericsson hymn *Network Intelligence* remains at number four on the top-20 IT list (with our competitors nowhere in sight). The list is published weekly by ZDNet in the UK, and is based on number of downloads. Take a moment to listen to *Network Intelligence* and don't miss the other musical treasures, such as KPMG's rhythmically enhanced *Jungle* mix version of *Our vision of Global Strategy* or Deutsche Bank's *Global technology is no easy game to play*.

www.zdnet.co.uk/specials/2002/it-anthems/

new assignments

Catrin Dysing has been appointed vice president of Human Resources at market unit Eastern Europe & Central Asia. She was previously Human Resources manager at the business management function at business unit Systems.

Nils Viklund is the new head of Strategy & Technical Business Support within core unit Core Network Development.

Melker Norlund is the new vice president of the Global Services Delivery unit.



from the archives

Guests are always welcome to LME at Telefonplan in Stockholm. Miss Maj-Lis Mattsson provided the smiles from the concierge's office during the summer of 1958.

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Some 600 guests participated in the art festival in Stockholm. To the lower right is the organizer Jelena Rundqvist. PHOTO: JOHANNA OLOFSSON

Mobile art in Stockholm

Someone in a chicken suit hugs strangers. People who don't know each other trade clothes. A caller reads love songs to anyone who answers. It's all part of a Stockholm art experiment built around the mobile telephone.

The event, one Saturday afternoon in August, was named "0703-161523." This is the same number given to potential participants who could contribute their ring signals to a planned telephone-concert.

A total of 17 artists/telephone operators and ten musical artists participated in the twelve-hour fest. "I wanted to make a memory," says Jelena Rundqvist, one of the organizers. "Contact through a mobile phone is quite a private experience, because a mobile phone is one's own."

About 600 guests came to participate. They left their mobile phone number at the door, went to the party, and waited for interaction from one of the artists. Some merely got phone calls, some

were invited to a surprise meeting with the artist, other times an SMS was sent to multiple recipients. The idea was to make a large-scale, simultaneous shared experience. (Think: Simultaneous beeps from 100 telephones.)

"This experiment was about communication, between an artist and a stranger," said Jelena Rundqvist.

The exhibit was organized by a non-profit organization promoting experimental music and arts. Rundqvist avoided sponsorship so that the art project would be independent.

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LARS-GÖRAN HEDLIN
corporate editor

Silence is silver, talking is gold

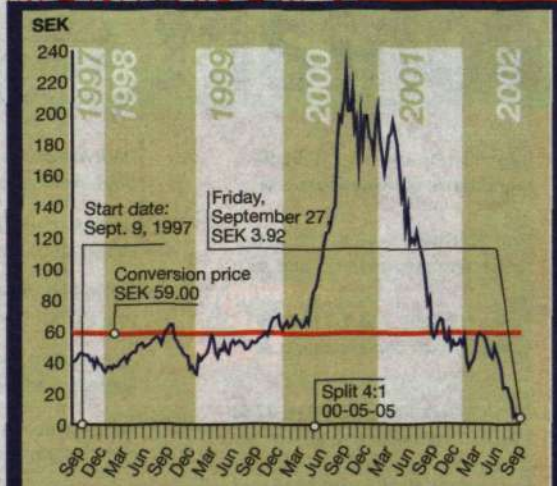
By the time you read this, the competition will be closed and the jury will almost be ready to announce the deserving winners. I am thinking of our great "Talk Time" contest, which has been conducted in market area Europe, Middle East and Africa (EMEA). This has nothing to do with filibustering—the parliamentary tactic of holding the floor as long as possible—but rather of finding ways to stimulate voice traffic on mobile networks, a high-priority task for Ericsson right now.

Naturally, getting people to talk to one another is not a bad idea. Think of all the strife on this planet that could be avoided if people talked to one another more. This is an old insight, appreciated at the highest levels. After Kennedy and Khrushchev almost went to war over the Cuban missile crisis, a direct phone line was established between the Kremlin and the White House to avoid a repetition. This was the original "Hotline," which inspired the name for Ericsson's "Hot Line" range of mobile phones.

But seriously, what is this Talk Time competition about? Well, it is about the most important activity of all right now—adding momentum to Ericsson's business. If people talk more on their phones, networks will become more congested and operators will have to invest in build-outs. And because talk brings cash jingling into operators' coffers, they will also have the money to do this. You could call this a win-win-win situation. That is, all the people talking more win on a social level, operators win on earnings and Ericsson wins on increased sales!

There are several examples of how good ideas can help progress in this direction. In Contact, we will report on the results of the EMEA competition and similar initiatives. During the autumn, we will help to disseminate all of the tips and ideas received that support Ericsson's business, we will describe all of the innovative, clever ways of working and all other suggestions that serve the same praiseworthy purpose. Just like Senior Management, we believe that the focus of attention must now be switched from improvements in efficiency to invoicing. Sell, sell, sell is the current battle cry—an approach with which one can only agree.

the ericsson b share



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