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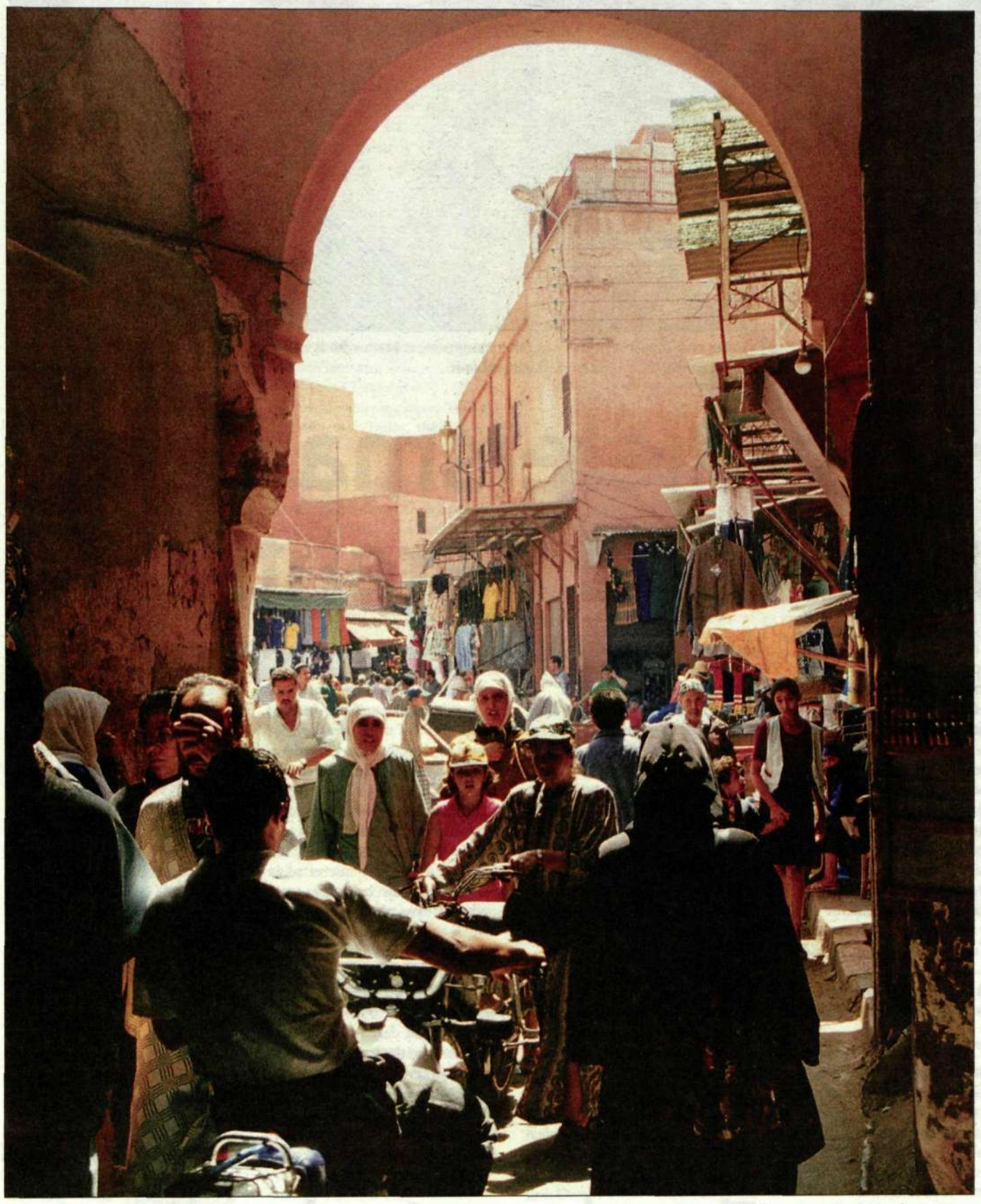

The souk is the marketplace in Marrakech. Some of the 300,000 Moroccans with mobilphone subscriptions have bought their phones at the souk.
Photo: Nils Sundström

The gateway to Africa

The labyrinthinemarket, souk, in Marrakech is an enormous market for everything from spices, wood carvings, metalwork, and Berber carpets and now mobile telephones. The number of mobile users is rising rapidly. By 1999, the subscribers in Morocco are expected to triple to 300,000. Major international interest for a second mobile telecom license is attracting additional attention to the Moroccan market. **15–17**

Coordination of new technology

Ericsson's new organization is beginning to take shape. With its new Corporate Technology Function, the company has strengthened its role in coordinating the development of new technology. **3**

NEWS

Analysts pleased with openness

The information provided at Ericsson's capital market days is receiving praise from both analysts and investors. The new corporate executive team was there and answered questions about markets, technological developments and growth goals. **5**

Kids designing phones

Ericsson has constructed some mobile phone prototypes designed by children, which are now on display at a gallery in Stockholm. The idea behind the project was to increase childrenís awareness of industrial design. **13**

Phone buyers with style

Ericsson's new mobile telephones generated a great deal of attention at the recently held IT trade show in Milan. In Italy, style and feel play an important role in the choice of a telephone. It is not uncommon for the whole family to be involved in the purchase. **10–11**

Read about IT in Access

Find out who Ericsson's new IT heroes are in Access, the supplement on IT issues. You can also read an interview with Michael Thurk.

CORPORATE

Meet Haijo Pietersma, the new Executive Vice President of the Enterprise Solutions business segment. **2**

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Haijo Pietersma from the Netherlands is the only member of the executive management team who is not from Sweden. He has worked at Ericsson for 20 years, most recently as head of the Public Networks business unit. Photo: Thord Andersson

Haijo Pietersma dares to think differently

"We must have an attitude and a culture based on curiosity, trust and cooperation. In addition to this, a strong dose of business acumen is needed so that we can make money. Leadership is based on finding new paths," says Haijo Pietersma, Executive Vice President of the Enterprise Solutions business segment.

The telecom industry is in the midst of the convergence between voice and data.

One of the challenges is to climb the industrial value chain.

Haijo Pietersma believes that the commercial impetus behind the convergence lies in the business sector, where the consumer and network operator segments meet.

About half of the operators' revenues stem from business users.

Offer total solutions

"In the new organization, we must become even stronger by utilizing everything that Ericsson has to offer, both in terms of fixed and mobile solutions. We must be front runners by offering customers professional total solutions."

When Haijo Pietersma was offered the position as Executive Vice President of Enterprise Solutions, he had only been head of Public Networks for a few months.

Taking this step was not an obvious one for him. He had only recently started his new job, but was already very committed to it. He is now giving his successor, Einar Lindquist, a helping hand when necessary.

Necessary changes

"I felt that Enterprise Solutions could develop into a spearhead for bringing forth the necessary changes that the market demands and which Ericsson with its collective strength can offer. This is where the development of IP should be conducted," he says. "It should be able to use the solutions we develop ourselves throughout all of Ericsson."

Not worried

It doesn't worry Haijo Pietersma that the Enterprise Solutions business segment is starting from a relatively low level.

"When we talk about the ongoing revolution, we must remember that we have never seen a revolution that has succeeded with great armies. It's more a question of positioning oneself in the new telecom world."

New areas have been added in addition to the efforts now underway to integrate the Internet and data functionality in today's systems solutions.

"The focus of these areas is 'professional services' and 'the wireless office.' Both of these areas are designed to directly meet the emerging needs of customers in a changing world," he says.

Thus, Ericsson can offer complete customer solutions in a way that no other competitor can. Haijo Pietersma is very interested in people and their behavior, especially the dynamics between individuals and the factors that lead to new developments and change.

"I want to be able to contribute new and even strange ideas in order to get people to think in a new way. We must dare to be different in order to be the leader," he maintains.

"A large portion of our skills are located closest to the market. Look at all the sales and marketing personnel who gathered at the Enterprise Networks business unit's sales meeting in Orlando recently. Of the more than 1,000 attending, most meet our customers on a daily basis. These resources, along with the resources we have closer to home, can produce enormous momentum."

IMPORTANT MILESTONES

Haijo Pietersma began working at Ericsson in the Netherlands in 1978 and came to Sweden soon thereafter as a designer of business switches. He later began working with the public networks sector, in which he has held several leading positions, both in Sweden and the Netherlands. He was president of Ericsson in the Netherlands from mid-1994 to June 1998.

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The only non-Swede at the top

Forty-five year-old Haijo Pietersma is the only non-Swede in Ericsson's executive management team. This blond Dutchman doesn't mind being called a hybrid Swede, a nickname he once received from Lars Ramqvist.

It will soon be exactly 20 years since he began his Ericsson career as a designer of business switches in Bollmora, Sweden.

Haijo was born in the city of Franeker in Friesland, a part of northern Netherlands. With a technical education as a basis, he began studying astronomy at the university in Groningen. But after a few years, it became a bit too theoretical for his taste. He then discovered a department that developed satellites with a heavy emphasis on electronics, which he enjoyed.

Haijo Pietersma has a strong background in the humanities. He refers often to the 15th-century Dutch philosopher Erasmus of Rotterdam, the leading figure of Northern European humanism, and relates that he reads books on philosophy when he has time.

His family, which consists of his wife Roelien and two daughters, Marije and Floortje, mean a great deal to him. They have now moved into a house just north of Stockholm and have sold their home in the Netherlands. One daughter has remained in the Netherlands to complete her studies.

The multifaceted Haijo plays the piano as a hobby. It is an electronic model and he plays using earphones in order to discover new musical dimensions.

From his office window in Nacka Strand, he looks out over the autumn foliage in the Stockholm archipelago in order to get inspiration for new ideas.

Thord Andersson

Major eastern expansion of NMT 450 network

New cell planning and developments in base station technology have increased the capacity of NMT 450 networks fourfold, providing an incentive for major investments in the Nordic Mobile Telephony (NMT) system in Eastern Europe. At the same time, Swedish telecom operator Telia is shutting down its NMT 900 network.

Ericsson achieved its best-ever sales results of equipment for NMT networks in 1997.

That success has continued this year, primarily in Russia and Eastern Europe, where NMT 450 systems are being installed.

Among Ericsson's clients is the Bulgarian operator Mobicom, which has tripled its number of NMT subscribers in the past two years.

Constantly updated

"NMT 450 is a very effective system for sparsely populated countries, since it provides coverage to large geographic areas at a low cost," says Torbjörn Ståhl, head of NMT marketing and product management at Ericsson Radio Systems.

"The technology is constantly being updated, adding functionality and increasing frequency usage. In the future, using new antenna technology, it will be possible to increase capacity tenfold compared with the current systems. That means that we could eventually also see opportunities for expansion of NMT 450 networks within the Nordic countries," says Torbjörn Ståhl.

Five different services

Existing NMT services include pre-paid, the possibility of sending and receiving e-mail, Short Messages Services (SMS) and faxing, as well as connecting to the Internet.

Altogether, there are a total of 4.5 million users of NMT networks in some 40 countries. Of those, approximately two million are subscribers to NMT 450 networks, which are currently expanding. The number of subscribers to NMT 900 networks is shrinking, however.

A continuing trend in Western Europe, following political decisions, is to let the rapidly growing GSM systems take over NMT frequencies in the 900 MHz band. The Swedish operator Telia recently decided to set December 31, 2000 as the date for shutting down its NMT 900 network. Today, the network has almost 400,000 subscribers.

Converted to GSM

"In the past two years, we have seen our customers choosing GSM, both new customers and customers from the NMT 900 network. Almost half of all NMT network customers have converted to the GSM system in the past two years," explains Christina Lundman Lagerstedt, manager of the corporate accounts division at Swedish mobile operator Telia Mobitel.

As a result of this decision, Telia's GSM network will receive significant additional capacity and room for mobile services. At the same time, Telia is investing SEK 200 million in order to provide the GSM network with the same coverage that the NMT 900 network currently has, especially in the northern interior of Sweden.

Ericsson achieved its best-ever sales results of equipment for NMT networks in 1997. That success has continued this year, primarily in Russia and Eastern Europe, where NMT 450 systems are being installed. Photo: Ingrid Morejohn

Unaffected by decision

Telia's NMT 450 network will not be affected by the decision. The network has long had a steady customer base in Sweden of approximately 260,000 subscribers.

"We have many loyal NMT 450 customers. It is a competitive alternative with good coverage for customers such as trucking companies which have equipment installed in their vehicles. Currently, we are only making investments to maintain the network's current level of quality," says Christina Lundman Lagerstedt.

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New organization needs new products

Ericsson's new corporate functions are beginning to take shape. Synergy will be a key element in the quest to develop completely new products under the new combined Corporate Technology function, which will serve the business segments.

Jan Uddenfeldt

Under Ericsson's new organization, the coordinating role of the corporate functions has been strengthened.

The strategic guidelines within the technical area have been established by the Corporate Technology which is based, primarily, in Kista.

"Our function is to act as 'lubrication' for the business segments. Input should be made in the early stages of a project, and operational work dealing with technological development should be conducted by the respective product units," explains Jan Uddenfeldt, Senior Vice President of Corporate Technology.

"This work will be especially important in, for example, achieving synergy within circuit switching for wireless and fixed telephony. It also means that we will be able to devote more expertise towards the development of new products in wireless IP telephony and IP speech," says Jan Uddenfeldt.

Responsibility shifted

Another important thing to clarify is that responsibility for profitability is being shifted to every product unit. In the same way that product units will be receiving greater overall responsibility, every research and development center will also take on greater responsibility for its share of technical development.

Corporate Technology, in conjunction with the product units, will create road maps whenever new technology is introduced. The road maps pertaining to base stations for various mobile systems, developed by the technical organization of the Mobile Systems business area, are an example of this.

Within Corporate Technology, Erik Örnulf will serve as head of the systems area, while Gösta Lanne will oversee the access area. There are plans to form a network of experts to develop a common network architecture for systems work. The goal is to build products using a small number of platforms.

As Ericsson's new development manager, Eva Lindqvist will work on streamlining developmental work, shortening lead times and developing synergy between applications for public fixed networks and mobile telephone networks.

Björn Troili will assume responsibility for standardization issues, while Bernt Ericsson will be responsible for research and cooperation with universities and colleges. Senior Vice President of Corporate Technology, Jan Uddenfeldt, will initially also be responsible for strategic partnership issues – focusing on microelectronics and software in the early phases of the development process.

Joint research

For the first time, a joint research unit is being created within the company. Ericsson Research will oversee all of the company's research units and labs, using a model created by the Mobile Systems research unit. Responsibilities include reporting directly to the corporate executive team.

"The idea behind Ericsson Research is not to develop new products, but rather to assist the business units and help them develop new concepts and ideas," explains Jan Uddenfeldt.

Håkan Eriksson, who is currently in charge of technology in the AMPS/D-AMPS business unit, will manage Ericsson Research.

Nils Sundström

IN BRIEF

Almost 30,000 use Outlook

➤ Eventually all of Ericsson will be using the e-mail program Outlook, based on Microsoft Exchange. At the moment, about 30,000 employees have converted from other systems such as Memo.

There are still some ten different e-mail systems currently in use at Ericsson, however.

Ericsson Data , on the request of Rolf Skoglund, Senior Vice President of Corporate Information Systems and Technology, is implementing the conversion throughout the company.

The switch to Outlook is part of the Ericsson Global Infrastructure Program (EGIP).

http://esgp.ericsson.se

http://erimail.ericsson.se

Personnel shop changes name

➤ Ericsson Promotion Services is the new name of what was previously known as the Personnel Shop.

And it isn't just the name that is new. In the future, product selection will consist of items which support the Ericsson trademark. Included among these will be gift items and promotional articles, but not clothing which does not bear the Ericsson logo. The shop at the Telefonplan location will remain. Other sales will be conducted via the Web.

http://www.rem.ericsson.se/eps/

http://www.rem.ericsson.se/PersonalShop

AXE Access 910 a first in Finland

➤ Vaasa Förvaltning of Finland is the world's first company to put Ericsson's AXE Access 910 into operation.

An access node has been activated in a test of the system, connecting 700 of the company's subscribers. The product will be launched globally next year.

"The telecommunications market is expanding so rapidly that customers need to be sure they have chosen a node that can handle both new services and increasing traffic," says Börje Lindén, director of technology at Vaasa Förvaltning, which is part of the Finnet corporation.

"AXE Access 910 offers customers a number of new services. For example, our subscribers can take advantage of ISDN service without having to change their telephone numbers," says Börje Lindén.

AXE Access 910 makes it possible to offer a number of different services with minimal financial risk.

Phone Doubler for the first time

➤ Ericsson has signed the first IP-telephony contract with a Swedish telecommunications operator, Tele2. The Ericsson Phone Doubler service is called 'Dubbellinjen' (Double Line) at Tele2's IP Telephony company Call2Web. Tele2's more than 300,000 subscribers have been able to buy the new service since the beginning of October. The new service enables subscribers to receive a phone call and surf the Internet simultaneously. Furthermore, Tele2 subscribers are able to make carrier class phone calls over the IP network at an exceptionally low cost.

Enterprise Solutions met the market in London

"Great!" said one of the thousand customers at the global launch of new Enterprise Solutions in London on November 2. The Business Design Centre was chosen as the launching pad, a 125-year old, cast-iron and glass structure that can accommodate 5,000 persons.

It was a day of intense presentations. During the morning session, 250 specially invited customers attended an Executive Briefing.

"Enterprise solutions build bridges between operators and various customer categories, and that's one of the reasons why Enterprise Solutions is one of three business segments in Ericsson's new organization."

That was the message conveyed by Haijo Pietersma, Executive Vice President of Enterprise Solutions, as he addressed customers and about 75 journalists who attended a press conference later in the morning.

"Enterprise Solutions represents a critically strategic link in Ericsson's strength both in the wireless sector and in determined efforts to create reliable networks in the IP sector."

"Business customers are usually among the first to place greater demands, for example, being able to use the same telephone, regardless of where they might be," explains Lars Svensson, manager of the business unit.

The Business Design Centre was crowded on November 2, as customers and journalists milled throughout the area.

"This is a crystal ball sector," said one customer, "but we know we can rely on Ericsson." The next time customers would have an opportunity to gaze into the crystal ball was at a similar presentation in Singapore on November 9, followed by another show in New York on November 23.

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Approximately one thousand customers accompanied Sven-Christer Nilsson and Lars Svensson on their journey into the new world of telecom.
Photo: Thord Andersson

Wide range of new products presented

During the launch of Enterprise Solutions in London, Ericsson presented a broad range of new products, including the CG1000, a voice-controlled radio exchange for small offices – a new system that attracted widespread interest.

OneBox, another product that appropriately describes itself, is designed to process all types of messages.
It also converts e-mail messages to voice that can be transmitted by telephone. Voice mailboxes can also be accessed from virtually anywhere and fax messages sent to almost any address.

The word "product" is becoming synonymous today with applications downloaded onto a server somewhere in a company's LAN.

The latest version of Ericsson's MD110 business switch, which was presented in London, is increasingly similar to a wireless communications server with switching functionality.

It offers integrated mobility for as many as 20,000 users, improved call center functionality and IP interface.

Aside from the MD110 and related solutions, there is a growing trend toward platform dependency. Ericsson offers solutions for call centers, mobility and computer-controlled telephony.

Ericsson's product portfolio for enterprise solutions also includes various combinations of Enterprise Office, Personal Efficiency, Network Integration and Interactive Customer Communications. Many solutions are applicable in several different business environments.

Thord Andersson

CG1000, a new service from Enterprise Solutions for small offices, was one of several new products introduced at a global launch by Enterprise Solutions in London.

Call center solution offers effective service

Ericsson is introducing a new generation of call centers for data and telecom solutions. The integration of server-based applications with business switches offers companies increased accessibility and more effective customer service.

Strong and solid customer relations have become more important in today's business world, as the intensity of competition continues to increase in parallel with growing demands for fast and effective service.

Large and small companies are facing the need to provide accessibility around the clock, and to effectively help customers via telephone, fax and e-mail.

Providing customer service over the telephone through call centers is an everyday feature in most industrial sectors today, often combined with technologies that encompass multimedia and Internet services, commonly referred to as Computer Telephony Integration (CTI).

Ericsson is the market leader for call centers in Europe.

Intelligent framework

The overall world market for call-center solutions is valued at USD 3 billion annually.

The latest CTI solution from Ericsson was introduced recently at "Scandinavian Call Center and CTI Expo 1998" in Nacka Strand. Ericsson's new "Next Call Center" is an intelligent framework concept used to process a company's data and telecommunications with customers.

"Every company with any form of customer contacts will benefit from this new technology. Our business concept is based on providing customized solutions to meet customer needs," explains Jason Andersson, product and development manager for call centers at Ericsson Inc.

Ericsson's new Next Call Center is based on the company's MD110 business switch in which computer applications such as e-mail, voice recognition and voice messaging services are based on Ericsson's open CTI platform, or Open Application Server (OAS).

Links to the most qualified

Skill-based routing quickly links customers with the most qualified contact person at the company after the customer specifies the nature of his/her call. It also enables the company to differentiate and identify services required by customers; simpler questions are answered by recorded voice messages, while VIP customers are quickly switched to personal service provided by the most suitable contact person.

The solution also creates opportunities for new customer services provided via the Web.

"By pressing a 'call-me-back' button on the company's home page, customers are able to communicate directly with company representatives via the Internet. In parallel, the company is able to control which Web pages are presented on the customer's screen during the conversation," Jason Andersson continues.

The first systems based on Ericsson's new generation of call centers will be delivered early next year.

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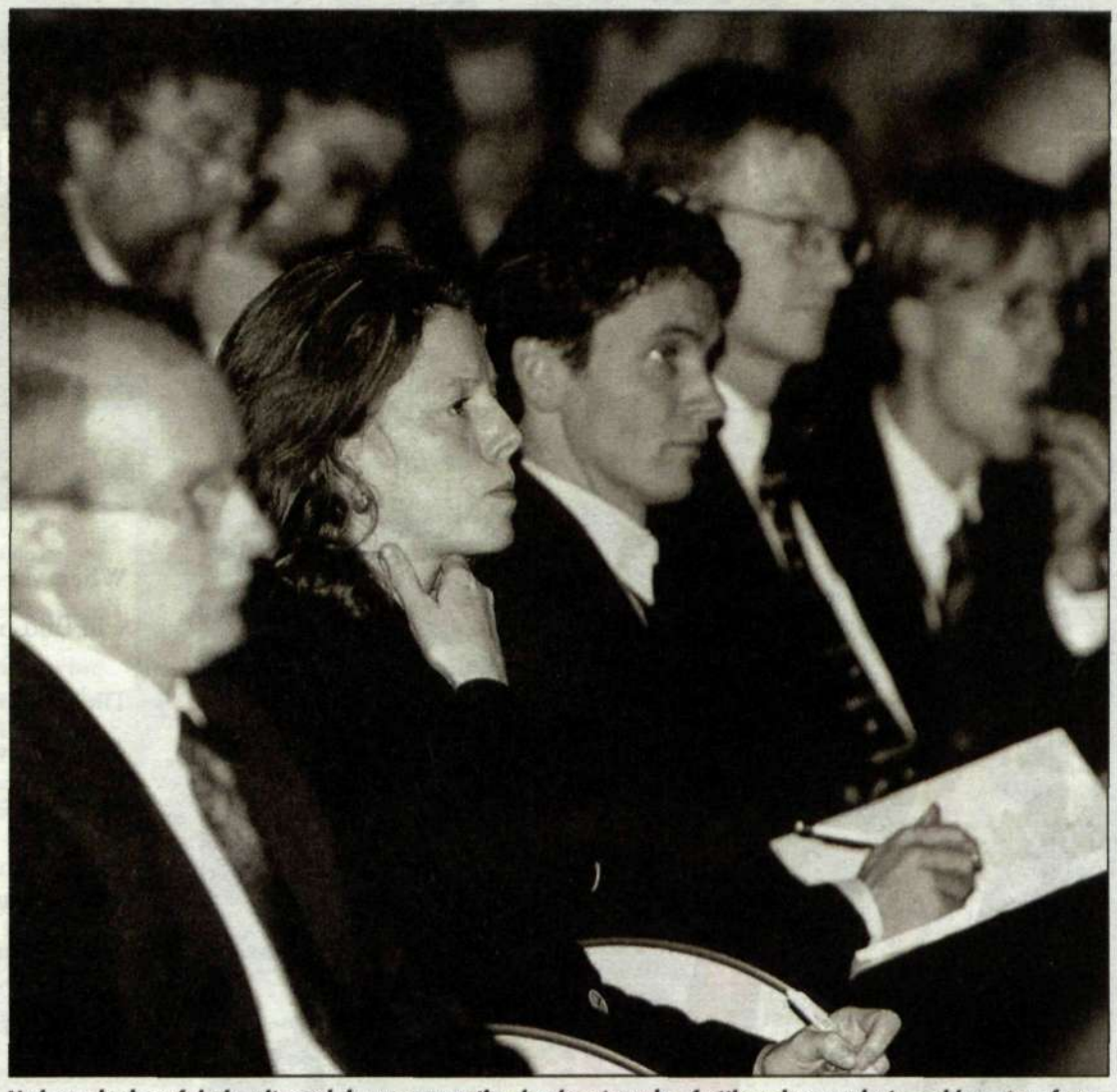
Investors praise candor

Ericsson's new management staff is receiving praise for its candor during the recent 1998 capital market days.

About 250 analysts and investors were provided with information about the company's long and short-term business potential. They were also promised a more detailed Annual Report beginning with this year's edition.



Various shades of dark suits and dresses were the dominant mode of attire when analysts and investors from all parts of the world gathered at the Ericsson capital market days at the Museum of Modern Art in Stockholm. Many of the invited guests were extremely pleased by Ericsson's candor and the opportunity to meet with Ericsson's new executive management staff. Photo: Ulf Berglund

"This underlines the need for candor and greater detail. Ericsson's capital market days provided the perfect opportunity to put all the cards on the table after mounting criticism in the wake of the recent interim report. It was also extremely important in terms of introducing the new executive management staff and providing analysts and investors with an opportunity to familiarize themselves with Ericsson's new structure and strategies," said Per Bengtsson, head of Ericsson's investor relations in North America.

Criticism directed at Ericsson in the past for the company's failure to release adequate information to the financial market was virtually wiped clean during the capital market days. Every member of Ericsson's new executive management staff was present, and opportunities were afforded after each presentation for members of the audience to ask executive management staff members specific questions about markets, technological development and business growth forecasts.

Long-term growth

CEO Sven-Christer Nilsson declared that Ericsson's long-term objective is to achieve faster and stronger growth than average market growth, which means annual sales increments of at least 20 percent.

The announcement of Ericsson's business growth goal, combined with the company's technological development and forecasts of new telecom market needs, resulted in a 7.3 percent increase in the price of Ericsson shares on the Stockholm Stock Exchange.

During the second day of Ericsson's capital market days, however, the share price declined again due in part, some analysts believed, to a presentation of short-term sales through year-end 1999 by CW Ros, Chief Financial Officer.

According to his projections, Ericsson's short-term growth will stay between 10 and 20 percent, partly because of world economic conditions and because new growth markets are not expected to reach full bloom as early as forecast.

One announcement particularly welcomed by analysts and investors at the conference was Ericsson's declaration to present more detailed information in the company's annual reports, starting with the 1998 report.

"Our presentations of year-end financial reports will contain more specific information about the earnings of our various business segments. We shall also present annual sales figures and review various strategies pursued by our business units," declared Johan Fant of Corporate Finance Control.

Ericsson's new candor in terms of financial information to the market was welcome news to many investors and analysts.

"Excellent presentations, better than Nokia," said Gregor Eberle of Enskilda Securities. Mats Alarik, a portfolio manager at Carnegie Kapitalförvaltning, summarized the meeting as "well-balanced at a very good tempo."

"More information is part of the definition of my profession, but I believe Ericsson has responded to our criticism in the past and started to open up," said Mats Alarik.

Thomas Langer of WestLB Research GmbH in Germany underlined the importance of receiving information about various aspects of the new structure directly from members of Ericsson's new management staff. Hans-Jürgen Schäfer of Deutsche Asset Management agreed, but said he would also like to see more information about new products, market launch dates and projections of short-term growth in important markets such as Brazil and China.

Experience in U.S. is important

"For me personally, I think it's important that so many members of Ericsson's new executive management staff have experience from working in the U.S.," said Harvey Schuster of California Investment Counsel.

"I'm also pleased that Ericsson is no longer a pure technical engineering company and is starting to become more market-oriented.

"I would now like to see more information about the future of Infocom in the network operator segment and strategies for development of mobile telephones with respect to color and design."

Karin Almqvist Liwendahl, manager of corporate investor relations at Ericsson, emphasized the importance of regularly scheduled conferences with Swedish and international financial market analysts and investors.

"Our contacts with the financial market are expanding constantly. It is extremely important, therefore, to conduct regularly scheduled meetings like this conference to present more comprehensive and detailed information as part of efforts to meet financial market expectations," Karin Almqvist Liwendahl said.

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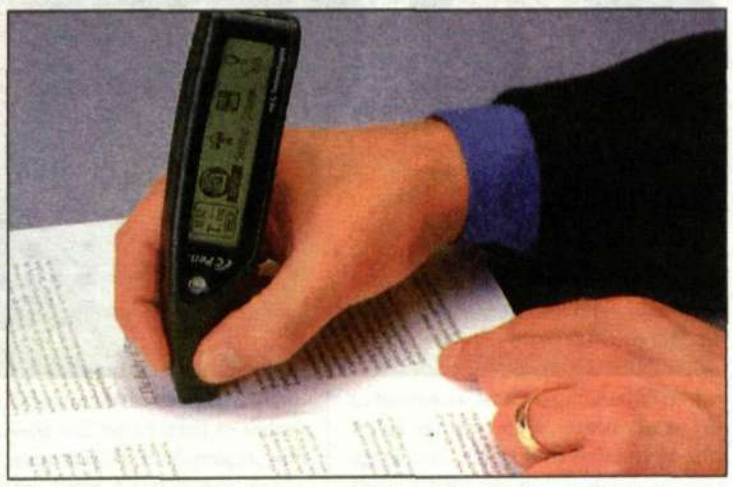
Digital highlighter gives Ericsson an advantage

Ericsson has acquired a minority shareholding in C Technologies AB, a Swedish company that developed C Pen, the world's first digital highlighting pen.

The investment will provide Ericsson with access to a new technology with applications in portable information equipment. C Technologies AB is based in Lund, in southern Sweden.



Ericsson recently acquired a minority interest in C Technologies AB, a Swedish company that has developed the world's first digital highlighting pen.

The new pen supplements today's mobile telephones and will be used to support future products and technologies.

It weighs 100 grams, with a storage capacity up to 3,000 A4 pages of text, equivalent to 8 megabytes.

"C Pen's best feature is that allows users to highlight only the parts of printed material they want to store," says Magnus Manhem of C Technologies.

"It offers an excellent tool for highlighting job-related and personal material. I use my pen to store telephone numbers, dates and times of meetings, information about good restaurants, my children's ice hockey practice times and a wide variety of other information."

50 images per second

The C Pen is a composite digital video camera that takes up to 50 images per second and a processor and software for text recognition, called *Optical Character Recognition*, which converts images stored in the pen to characters that require much less storage space.

Links to mobile telephones

Text stored in the pen can be transmitted via infrared links to mobile telephones, PCs and handheld computers.

The technology offers a broad variety of opportunities that might soon be integrated in Ericsson's product range.

"C Pen and future versions of the product are a strategic complement to Ericsson's products and technologies for wireless data transmission, including Bluetooth, for example," says Jan Ahrenbring, manager of marketing communications for Mobile Phones and Terminals.

"I believe some forms of various applications will be available in Ericsson products as early as next year," he continues.

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www.cpen.com

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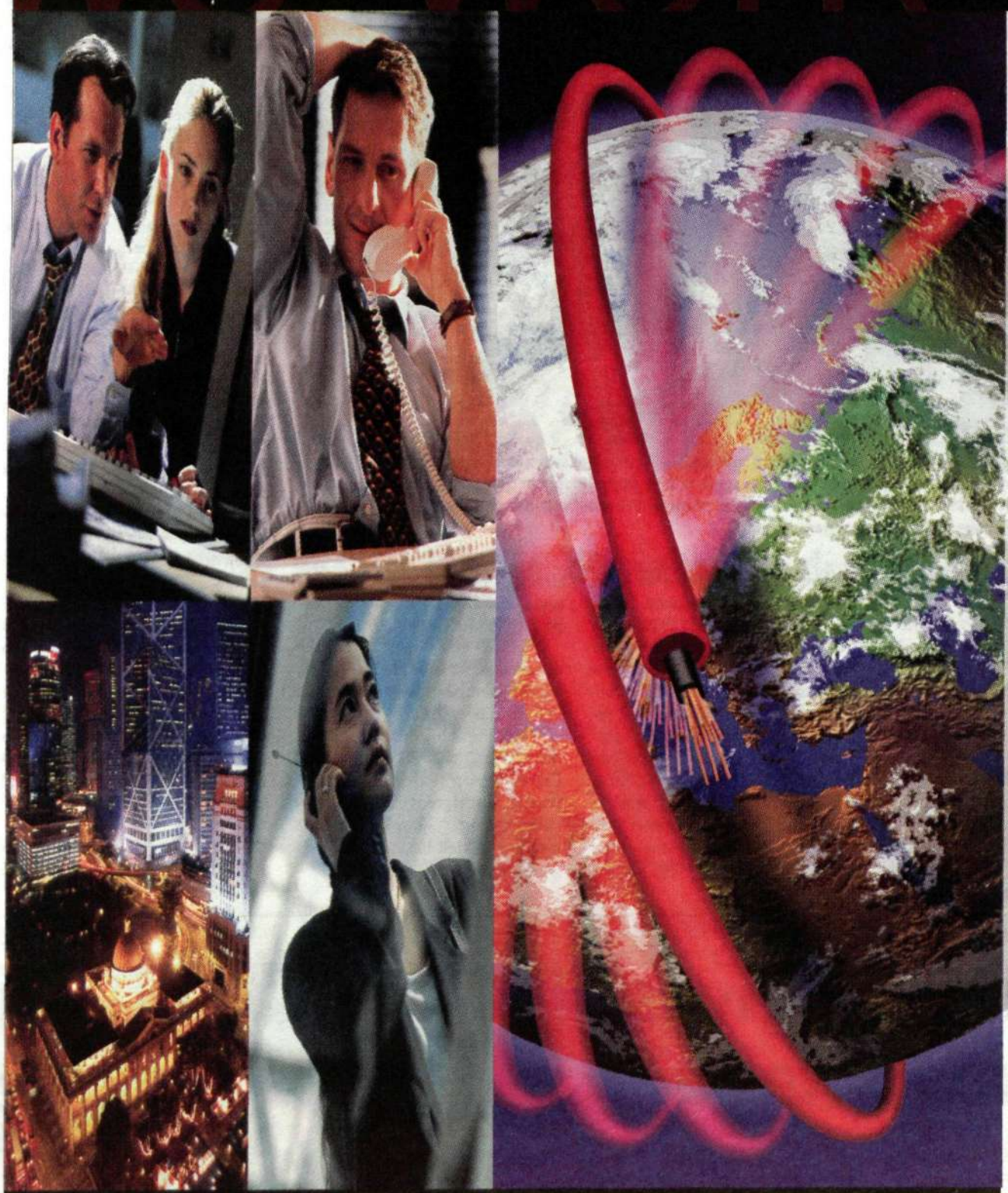

Wherever information flows, you will find us.

The world is now a global information society in which knowledge and data are being exchanged faster than ever, and many of the channels through which they are carried are networks and solutions from Ericsson.

Lying deep beneath the world's oceans or threaded through the fabric of offices and buildings, Ericsson cabling and networks link people together.

We are a knowledge-based organization with vast experience in every area of cable and network solutions for telecom, infocom and power networks. Among our other specialties, we can provide total passive systems and solutions for fiber optic networks.

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And it works.

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ERICSSON

Iridium placed on-line

Iridium, the new satellite telephony system, was officially inaugurated on November 1st. Original plans called for earlier on-line commercial operations, but problems arose with various software packages.

Al Gore, Vice President of the U.S., inaugurated the new satellite system by placing a call to Gilbert M. Grosvenor, a descendent of Alexander Graham Bell, inventor of the telephone.

The system functions with the support of 66 communication satellites placed strategically in space to provide global coverage. Users can now make mobile telephone calls from some of the most inaccessible and remote areas of the world. The system has 12 ground stations that serve as links between the land-based network and satellites. The entire Iridium system is controlled from a command center in Virginia, in the U.S.

A total of 79 satellites have been launched into orbit around the earth, providing a number of reserve stations that can be deployed when core satellites are being repaired.

Motorola and Kyoceras of Japan are the only two companies today that supply telephones for the Iridium system. At 500 grams, the telephones are heavy compared to modern mobile phones, but they can be used to call all parts of the world. Iridium telephones can also be used in combinations with GSM or DAMPS, for example.

The telephones cost about USD 3,750. A call to the other side of the earth will cost about 9 dollars per minute. A subscription fee of about 100 dollars per month will also be charged. A personal paging service is also available via the Iridium system. It will be substantially cheaper than the system's telephone service.

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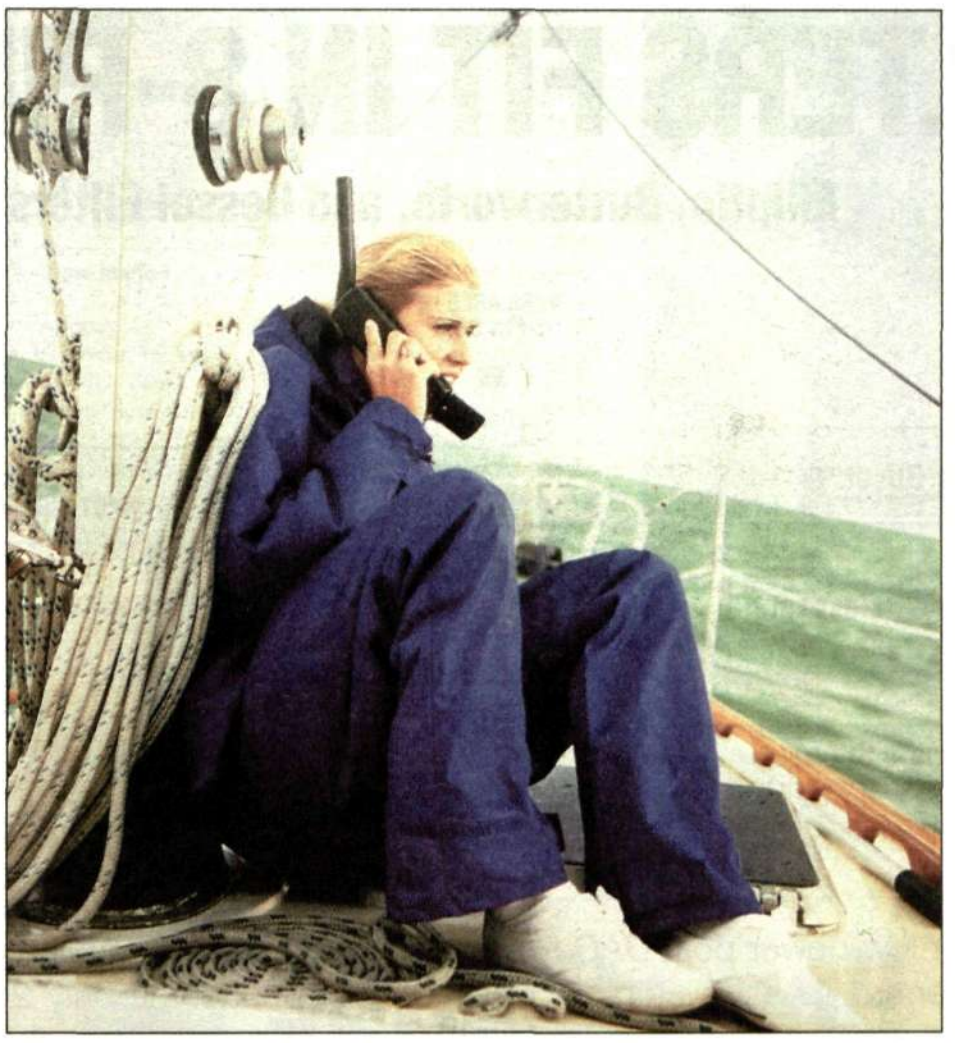

Telephones for Iridium's global satellite system are large, heavy and expensive. They weigh about half a kilo and sell for approximately USD 3,750. For the time being, however, Iridium is the world's sole provider of global satellite telephony.

Growing importance of mobile solutions

One billion people will have mobile telephones by the year 2004. The estimate was presented by Ericsson at the capital market days with financial analysts and investors in Stockholm recently.

There are about 250,000 mobile telephone subscribers in the world today. According to Ericsson, lower call charges, increased utilization of pre-paid subscriptions and new mobile multimedia services will create more dynamic development in the mobile telephony market, both in terms of total subscribers and conversation times.

Internet applications will also increase sharply as more people continue to "go on-line" during the next few years. Ericsson projects one billion Internet users in the year 2004, compared with today's 150 million. Based on the company's new, long-range forecasts, the number of Internet users in the year 2004 will equal the number of wired and mobile telephony subscribers.

"This does not mean there will be three billion subscribers, since we will see a large number of combined subscriptions as the convergence of different technologies continues to increase," explains Torbjörn Nilsson, Senior Vice President, Corporate Marketing and Business Development.

Judging from its latest forecast, Ericsson is more optimistic than Nokia about sales of mobile phones. According to Nokia's projections, the world market for mobile telephony subscribers will not reach one billion until the year 2005.

The volume of data traffic will surpass voice traffic in wired networks before the year 2000, according to Ericsson's forecast. The market for wireless data communications will then start to soar with GPRS and EDGE for GSM and D-AMPS, for example, combined with third-generation mobile telephony.

"Mobility is our strength, and we shall combine our mobility with a strong commitment to IP technologies. Our objective is to retain our position of market leadership in wireless voice communications and establish a position of prominence in wireless Internet applications," Torbjörn Nilsson continues. He believes the number of wireless Internet users will increase to about 200 million by the year 2003.

Ericsson's objective in wired telephony, Torbjörn Nilsson adds, is to remain one of the market's three leading players and to establish the same position in real-time IP for wired data communications.

Nils Sundström
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Nokia introduces new NMT phone with built-in radio, fun and games

➤ Nokia recently presented the world's smallest and lightest mobile telephone for the analog NMT 450-band. The new 650 mobile phone model from Nokia offers an added attraction in the form of a built-in FM radio. The headset for hands free operations also functions for the radio, with the cord serving as an antenna.

The new model weighs only 170 grams and operates on the same batteries as Nokia's 5100 and 6100 series. Calling times with the large "marathon battery" are about 2.5 hours, with stand-by time at an impressive 120 hours. The phone with the larger battery weighs a total of 190 grams. The telephone also offers several other GSM telephony functions featured in the older NMT series. It supports 25 languages and offers a range of about 35 ring-signal melodies. Naturally, it is also equipped with four different games users can access in their spare time.

The Nokia 650 supports a range of functions that have long-since been available for GSM phones, such as calendar functionality, conference calling and profiles for incoming calls.

Nokia's new 650 mobile phone will be launched on the market during the first quarter of 1999.

Microsoft invests in telephony

➤ Microsoft plans to establish a joint venture in cooperation with Qualcomm to join in the battle for wireless data communications. Analysts see the move as a counteraction to cooperation established through Symbian by Nokia, Ericsson, Motorola and Psion. Symbian combines Psion's Epoc operating system with mobile telephony technologies. Symbian has decided not to use Microsoft's operating system.

Telecom analyst Bo Edvardsson told Dagens Industri that it's difficult to predict the short-term effects of Microsoft's plans with Qualcomm, but, he said, it's never good to have Microsoft in a rival camp.

Wave of restructuring

➤ A wave of restructuring and organizational change is starting to sweep through the telecom industry. Alcatel recently announced that the Telecom sector of its Group operations will be adapted to today's dynamic market development, with greater focus on customer needs. Like Ericsson, Alcatel will build its structure around three customer segments and three central functions.

One cannot help thinking that Alcatel eavesdropped on the message conveyed at Ericsson's meeting in San Diego last month.

http:www.alcatel.com

INDUSTRY NEWS

Telecom parks in cooperation

➤ Telecom City in Karlskrona, Sweden; Telecom Valley in Sophia-Antipolis in France and Telecom Corridor in Texas plan to establish links with each other in the near future. All three are telecom research and development parks.

A cooperation agreement has been reached whereby the Web sites of all three telecom parks will be linked as one, offering job vacancy ads and other forms of information. The objective is to facilitate technical transmissions and create a single forum for remote training and education, investor relations and other services.

Source: Ny Teknik

NTT DoCoMo goes public

➤ Nearly SEK 240,000 for one share. That was the initial price offering per share when NTT DoCoMo, the Japanese mobile telephone giant, went public recently and listed its shares on the stock market. Demand was strong despite the seemingly prohibitive price. NTT DoCoMo management announced it could have sold more than the 545,000 shares offered through the initial listing.

NTT DoCoMo commands more than two-thirds of the mobile telephone market in Japan. The company is growing in leaps and bounds, with earnings in 1998 are expected to reach SEK 11 billion.

Source: Ny Teknik

Nokia's Snake now on the Net

➤ The Snake game is now available to all and sundry on Nokia's Web site. Snake is one of the games featured on Nokia's recent mobile telephone models. The game offers users something to do between calls.

Users of Ericsson's mobile phones have been advised to fend for themselves more constructively in between calls. By working, for example.

Snake has also served as a link to Ericsson's business watch page on the Web, constituting one of its most popular features during recent months.

http://www.nokia.com

http://bic.ericsson.se

Roaming between GSM and AMPS

➤ The same telephone numbers can now be used for GSM and AMPS networks. ICO Global Communications, a satellite communications company, is offering the service.

Until now, the same telephones could not be used on GSM and AMPS networks, and customers have been forced to borrow or lease telephones when they travel outside their service areas. An agreement has now been reached with the German operator T-Mobil and GTE Wireless, a major American provider. ICO Global also plans to introduce the service in several other European countries.

By the year 2000, ICO Global Communications also plans to offer satellite telephony. According to current negotiations rumors, charges will be much lower than call charges for the recently inaugurated Iridium system.

NEW 8TH-ORDER LOWPASS FILTERS FIT IN 8-PIN SO

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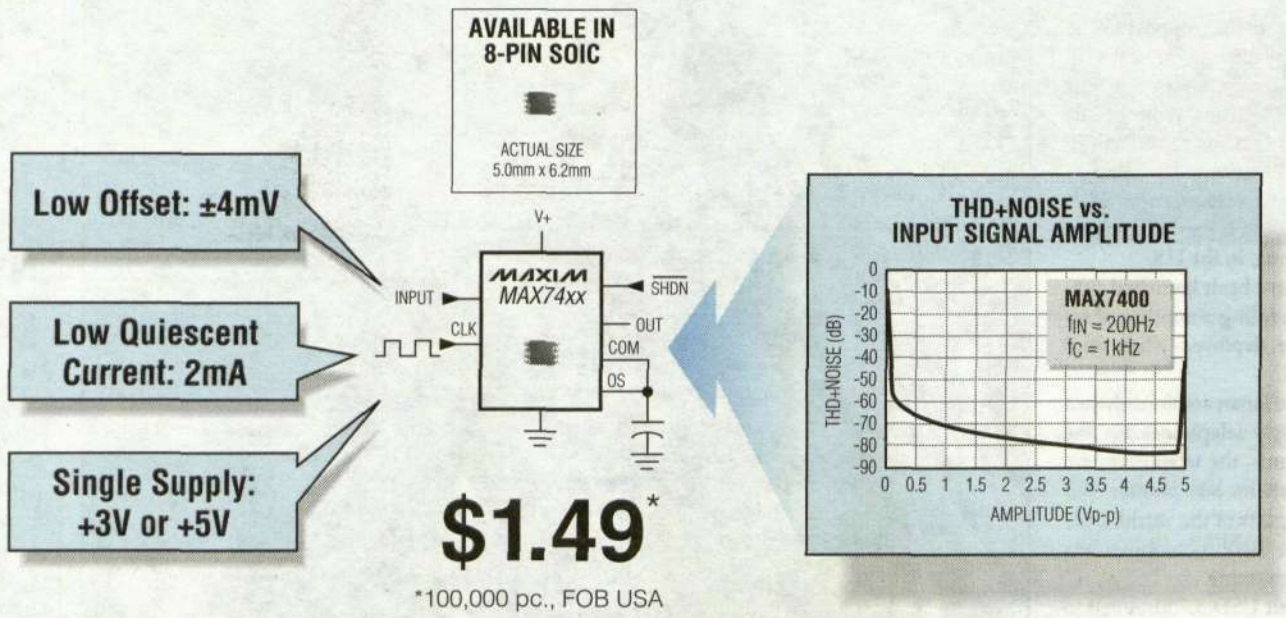

Ideal for low-power post-DAC filtering and anti-aliasing applications, Maxim's 8th-order, low-pass, switched-capacitor filters consume only 2mA (or 0.2µA in shutdown) and are available in 8-pin SO and DIP packages. Corner frequencies are clock tunable from 1Hz to 10kHz, with two clocking options available: self-clocking or external clocking.

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MAX7401†	+5	Bessel	Linear phase response
MAX7402†	+5	Butterworth	Maximally flat passband and stop-band response
MAX7403†	+5	Elliptic	Steep rolloff and 60dB of stop-band rejection
MAX7404†	+3	Elliptic	Steepest rolloff and 83dB of stop-band rejection
MAX7405†	+3	Bessel	Linear phase response
MAX7406†	+3	Butterworth	Maximally flat passband and stop-band response
MAX7407†	+3	Elliptic	Steep rolloff and 60dB of stop-band rejection

†Future product—contact factory for availability.

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World telephone soon here

Dual band, dual mode. Soon there will be a telephone that really deserves to be called a world telephone.

Ericsson will be launching its world telephone at the end of 1999. It will be able to operate on the 900, 1800 and 1900 megahertz GSM bands as well as AMPS 800 and the 800 and 900 megahertz D-AMPS bands. That is something that has never been done before, nor is it a simple task.

Nate Marion

Clearly, this is a technological challenge. But it is not just about technology. Much of the work involves conducting user tests and discussing with operators how to resolve practical issues.

Systems could either be coordinated, or it might involve parallel subscriptions. Just how invoicing will work is another serious question being looked into.

"I can briefly summarize by saying that we will be integrating multiband GSM and AMPS/D-AMPS telephones. They will function together in the same telephone and be integrated in such a way that stand-by and talk times will not be affected," says Nate Marion, world telephone development manager.

Getting the telephone to work throughout the world could be solved using roaming agreements between operators of the various standards. Another solution could be a system where users have several different subscriptions, all of which utilize the same telephone number.

Most of these questions are not technical in nature, and have more to do with how users and operators want things to work.

"We will be talking with many of the major operators in order to be sure that they can handle the telephones when they reach the marketplace. D-AMPS operators, for example, are unfamiliar with using the GSM system's SIM cards.

The idea behind creating a world telephone has existed for approximately a half year. But it was in the past three months that actual work got under way.

"The work is being conducted through a multidisciplinary group. It includes developers, manufacturers, acoustics experts, marketing people and others, all working parallel with each other," explains Nate Marion.

Since time is of the essence, it was necessary to utilize existing solutions.

"Externally, we are basing the telephone on the Esmeralda platform. In other words, it will look like a somewhat fatter 788," says Nate Marion. "That means we won't have to spend so much time on external design."

Those who are involved with the telephone at Ericsson's Research Triangle Park facility in the U.S., have been travelling around to the various development centers in order to utilize solutions that have already been developed elsewhere.

"Even though we have the external design finished and the technological framework is ready, it isn't possible to simply put the two separate dual-mode telephones together in one phone. A great deal of work will be required to get the various printed boards to function together using the keypad and display."

So far, the world telephone is still in the prototype stage. A great deal of the technology still needs to be worked out. It will be introduced at the end of next year.

"That is what we call human-machine integration," says Nate Marion.

Regular production of the telephone will most likely take place in Lynchburg in the U.S. and/or Linköping in Sweden.

"We are convinced that we will be able to pull this off, but there are still many questions surrounding the project that need to be worked out," says Nate Marion.

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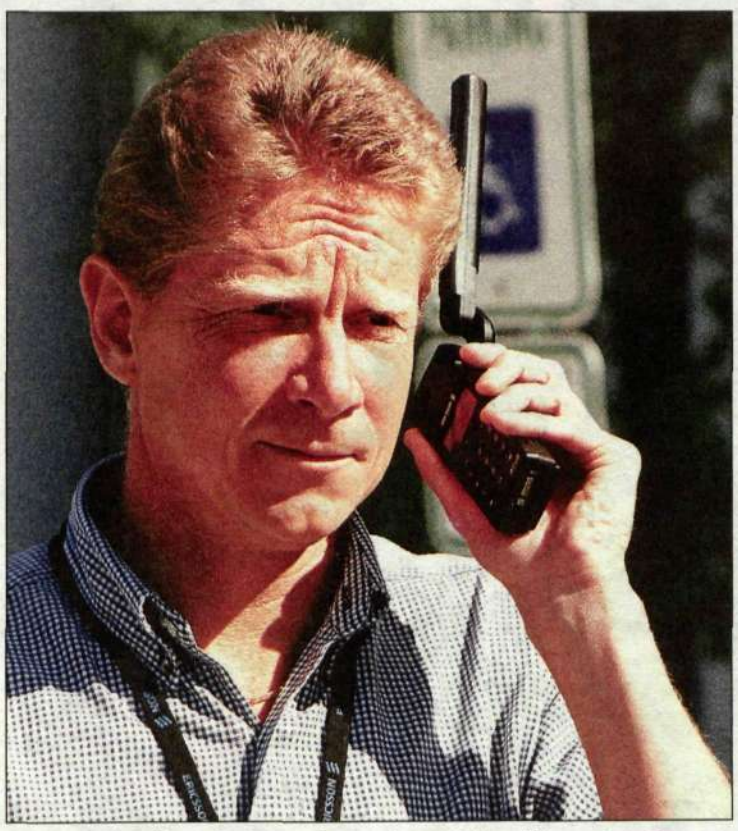


Ericsson's satellite telephones for Southeast Asia will be out on the market in about a year. They will be able to operate using either the satellite or existing GSM and AMPS systems. Photo: Patrik Lindén

Satellite will improve coverage in Asia

Work is now under way to complete Ericsson's satellite telephones for Asia. In May, Asia Cellular Satellite System will be sending up its satellite, providing coverage for Southeast Asia. The first real tests will be conducted at that time. By the end of the year, Ericsson will begin delivery of 250,000 telephones.

The telephones will operate in a region that extends from Pakistan to Japan and from southern China to Indonesia. They were designed to operate in conjunction with the geostationary satellite, whose movement will be in synchronization with the earth's, so that it will always be located over the same spot.

"The telephones are based on Ericsson's 888 model, but have a larger antenna and utilize more advanced technology. When users find themselves outside the regular coverage area, the telephones will still function with existing GSM and AMPS systems in the area," explains Göran Nordin, who works on telephone development at Ericsson's Research Triangle Park facility in the U.S.

The phones will weigh 250 grams, including the 50-gram antenna. The antenna is one of the most advanced that Ericsson has developed. The relatively weak signals from the satellite make the technology complex.

Ericsson has already developed three different generations of prototype telephones which have been tested and delivered according to contract. But it will not be possible to see that everything really works until the satellite is in place. The launch has been delayed but Ericsson remains on schedule.

"The reason this system was built for Southeast Asia is the terrain. It is very expensive and complicated to expand the infrastructure in Indonesia, for example, a country which consists of thousands of islands. Other areas where regular mobile telephone systems do poorly include mountainous terrain."

Development of the telephones for the Asian system has been conducted at Research Triangle Park. The telephones will be manufactured in Linköping. Ericsson also conducts global mobile telephone systems research at its Basingstoke facility in the U.K.

Patrik Lindén

North Carolina research area attracts companies

Approximately one hundred firms from around the world, including Ericsson, are represented at the Research Triangle Park in the American state of North Carolina. Research and development is conducted in close cooperation with the area's three universities. That has not always been the case, however.

In 1959, North Carolina was one of the poorest states in the U.S. Despite several good universities in the area, the state's residents made their livings in such market sensitive industries as tobacco, textiles and furniture. Once people received their degrees in the state, they moved on, causing a brain drain. In order to solve this problem, three universities in Raleigh, Durham and Chapel Hill (the three corners of the triangle) joined forces and formed Research Triangle Park in order to attract major corporate research operations.

Once IBM moved parts of its operations there in 1965, things quickly took off and the research park began attracting more and more companies.

Today, over 40,000 people work in the area. There are over one hundred companies in the area, about half of them multinationals.

Ericsson first established a presence there back in 1990 with a dozen or so people. Today that number is approaching 2,000.

It is not possible for simply anybody to establish themselves in Research Triangle Park. One requirement is that at least part of a company's operations be tied into research and development.

Manufacturing operations are not allowed to dominate. Leading-edge technology companies from all fields have been recruited to set up shop here.

The park also maintains restrictions as to how and where companies can build. Buildings must conform to certain minimum setbacks from each other, and companies are not allowed to put up tall structures. The goal is to retain a park-like feeling with large areas of green space between facilities.

The Research Triangle Park foundation has developed artificial lakes, several running paths and volleyball courts in the area. The philosophy is that construction should not alter the character of the area.

Most of the work at Ericsson has involved research and development of mobile telephones. A large number of employees are world leaders within their respective fields.

Much of Ericsson's, and the world's, most advanced mobile telephony research is conducted here, and everyone's perspective extends several years into the future.

In addition to its proximity to good universities, Research Triangle Park has many other advantages.

Since the area offers a high quality of life and excellent recreational opportunities, it is easy to recruit qualified people.

The Atlantic coast is only two hours away by car, and in just over three hours one can be up in the Appalachian Mountains.

Patrik Lindén

Ericsson's mobile telephones have become increasingly popular in the rapidly-growing Italian market. This was especially apparent at the recent IT trade show in Milan, where the Ericsson Telecomunicazioni S.P.A. display received a great deal of attention.

Italians choose phones with feeling & style

The trade show, Europe's second largest, attracted 480,000 visitors this year, and it was the Ericsson display which topped television news stories on opening day.

In addition to the steady stream of business clients, many others were drawn to the display with its large stage and various events, which included everything from music to fashion shows.

Benedetto Condreas, marketing manager for Ericsson Telecomunicazioni, explained that the stage was one way of drawing attention to the message "Make yourself heard" ("Fa sentire la tua voce"). It offered promising young talent a chance to show off and, at the same time, give Ericsson telephones a more youthful image.

While Italy lags behind most other European countries in many IT areas, Italians have taken mobile telephones to heart. Almost 18 million subscribers make theirs the highest figure in Europe.

Benedetto Condreas explains why mobile telephones are so appealing to Italians – they are small and simple, yet incorporate several classic Italian traits such as style, feeling, conversation, contact, love and status. Unlike many other consumer products, when an Italian purchases a mobile telephone, the entire family is usually also involved. That is why it is so important to establish the proper image in order to sell telephones in Italy.

Motorola was the first company to sell small telephones in Italy, and holds a unique position in that country. According to market research, however, Ericsson's telephones are currently the second most popular after Motorola's. Ericsson has benefited from a little free superstar publicity, including soccer star Ronaldo, who has an Ericsson telephone in his team colors of blue and black, and Sven Göran Eriksson, trainer for the Lazio soccer team, who is often asked if he also manufactures telephones.

Mats Lewan

Ericsson gets a little publicity from Italian soccer star Ronaldo, who uses an Ericsson telephone in his team colors of blue and black.
Photo: DFP

Omnitel builds network using MINI-LINK

The fixed telephony market in Italy was deregulated at the beginning of this year, opening the door for MINI-LINK.

Now, Europe's second largest mobile telephone operator, Omnitel, is purchasing Ericsson Microwave's radio link to connect its mobile network base stations.

Omnitel is Italy's second mobile telephone operator and the only private alternative to the state-run Telecom Italia Mobile (TIM). In October, Omnitel was expected to surpass 5 million subscriptions making it the second largest in Europe.

Omnitel launched its mobile network at the end of 1995, and since then has leased connections for traffic between its base stations.

Now Omnitel is aiming to connect all of its mobile network's base stations using radio links. The reason for this is primarily economic. Despite the large initial investment costs, over the long run it will be cheaper than leasing fixed connections.

Ari Ratia of Finland is responsible for the construction of Italian Omnitel's radio link network. Photo: Niclas Henningsson

"We expect that the investment will pay for itself already within two or three years," says Ari Ratia, who is overseeing construction of Omnitel's fixed network. "Furthermore, by having our own network, we will be more in control of traffic between our base stations."

Omnitel has chosen two radio link suppliers, Ericsson Microwave and the Italian company SIAE. Ericsson Microwave's MINI-LINK will be used in the southern and central parts of Italy, while SIAE's links will be installed in the country's northern regions.

"Support was an important factor in our choice of suppliers," says Ari Ratia. "Since Omnitel does not have an organization of its own to install the links, it is purchasing both the links and installation services from Ericsson and SIAE."

Niclas Henningsson

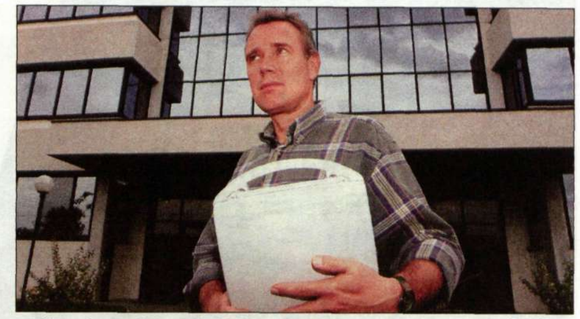
DIRECT SALES

Most MINI-LINK terminals are sold as components of entire Ericsson mobile systems.

Sales are conducted through Ericsson Radio with Ericsson Microwave serving as a subcontractor.

Just a few years ago, that sort of arrangement stood for 80 percent of all MINI-LINK sales. Omnitel, on the other hand, which has not bought its base stations from Ericsson, is purchasing links directly from Ericsson Microwave through Italian Ericsson Telecomunicazioni.

Direct sales have become increasingly common in recent years, and now account for 40 percent of all MINI-LINK sales.



In Milan, Ericsson Microwave is developing a point-to-multipoint system. Project manager Dag Jungenfelt expects the first delivery by the end of 1999. Photo: Niclas Henningsson

From zero to sixty in eight months

Ericsson Microwave's product development center in Milan is teeming with activity. Since startup in April, over 40 engineers have been hired and work is proceeding at full speed to develop a point-to-multipoint system. The first prototype is expected to be completed as early as March 1999.

The point-to-multipoint concept is an advancement over the radio links currently in use. Networks constructed using point-to-multipoint technology result in significantly fewer links compared with networks constructed using paired point-to-point MINI-LINK connections, since several terminals are able to communicate with the same node.

Ericsson Microwave has been developing a point-to-multipoint system since the end of 1996. Difficulties in recruiting experienced engineers led the company, in April of this year, to move its operations from the main office in Mölndal to Milan in northern Italy. Organizationally, the Milan unit belongs to the company's Italian subsidiary, but it is financed and operated by Ericsson Microwave.

Very rapid expansion

In less than six months, the Milan operation has gone from nothing at all to employing over 40 engineers today.

"Before the end of the year, we will have at least 60 people here," says Dag Jungenfelt, who oversees the product center. "Sure, there are problems associated with starting up a whole new operation and expanding as fast as we have, but we are managing them well. Mostly, because we have such a clear and concrete goal: to develop a functional point-to-multipoint system."

Behind this rapid expansion lies a conscious strategy of hiring experienced engineers. Milan is an important European center for radio and microwave technology, and has several universities and technically-oriented companies nearby. Both Alcatel and Siemens have located their microwave operations in the region, and numerous subcontractors are following in the footsteps of the major companies.

This concentration of companies provides a sizable base of experienced engineers to recruit from.

"We have, above all, utilized our pioneering spirit to attract experienced people away from our competitors," says Alessandro Giacalone, manager of the Milan facility. "Our development office is very small in comparison with Siemens, Alcatel and the others, and we are building a new operation from the ground up. Those engineers whom we have managed to hire generally view this as a stimulating challenge."

In addition to the 40 engineers in Milan, there are some twenty people at Ericsson Telecomunicazioni S.P.A. in Rome, fifty people at Ericsson Telecom in Stockholm and a group at Ericsson Microwave in Mölndal engaged in the point-to-multipoint project.

Development work is intense and the time frame hectic. The first prototype is scheduled for completion by March, 1999. The first commercial systems are expected to be delivered by the end of 1999.

Unexpected development

When the project began, the system was being developed for two separate applications – communication between base stations in mobile telephone networks, and distribution of broadband services to companies and households. But the mobile market has not developed as anticipated, and the mobile application has been excluded from the system now under development.

It is hoped that the point-to-multipoint system will appeal to operators of fixed telephony networks. The technology is especially suited for customers who have a fiber-optic cable network, for example, but who lack a connection to end users, or prospective subscribers.

"There are several examples of such operators," says Dag Jungenfelt. "Today it is commonplace for companies to lay fiber-optic cables during railway, highway and power line construction projects. Using the point-to-multipoint technology, these networks can be connected to both corporate and home subscribers."

Niclas Henningsson

POINT-TO-MULTIPOINT

In current point-to-point systems, such as Ericsson Microwave's MINI-LINK, every connection requires two terminals to be pointed towards each other. In point-to-multipoint systems, however, several terminals are able to communicate with each and every point.

There are several advantages to this. For one, fewer links are required to build a comprehensive network. Most important, however, is the fact that the network does not have to be dimensioned for maximum capacity. In a point-to-multipoint network, capacity can be directed to the connection where it is most needed at that moment. Since distribution of capacity only takes a fraction of a second, every link in a network always experiences maximum capacity.

Ericsson Microwave's point-to-multipoint system is being developed to distribute broadband services for both corporate and household customers. The goal is to create a system that can handle transmission speeds of 38 megabytes per second.

University cooperation to produce results

Cooperation with regional universities is important to the product development center in Milan. Future technologies will be developed through joint research projects, and the universities are custom designing courses for the center's new employees.

The Milan region has developed into one of Europe's most important centers for radio and microwave technology research. An important reason for this is the impressive technical know-how available at the region's various universities. The University of Bologna has a long tradition in radio electronics, while the University of Milan specializes in microwave technology. Ericsson Microwave's product development center is taking advantage of the universities' know-how, and is cooperating in several different areas, explains site manager Alessandro Giacalone.

"At the moment, the courses we contract from the University of Bologna are the most important. The courses are tailored to fit our operation and are part of a two-month introductory program that the product development center's recently graduated engineers take."

Alessandro Giacalone

Alessandro Giacalone predicts that cooperative research projects with universities will be extremely important to future operations of the Milan unit. They have not, as yet, had a chance to become especially comprehensive, but Alessandro hopes that there will be more productive cooperation to come in the development of the next generation of technologies.

Niclas Henningsson

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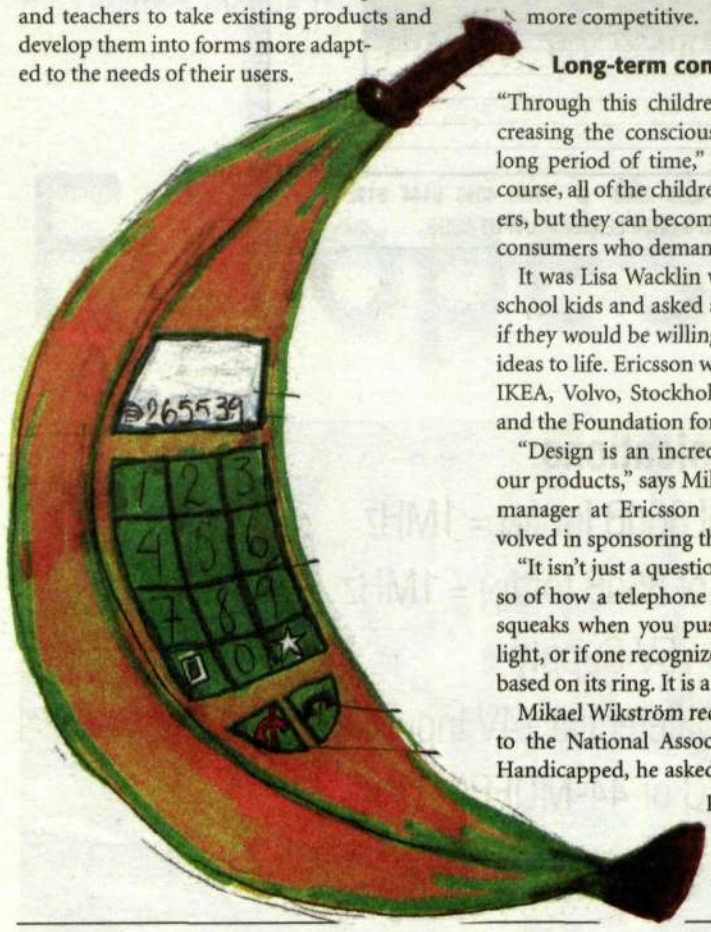
Design simple as child's play

A mobile telephone in the shape of a banana is one of the many design ideas created by children which are on display this month in Stockholm.

Children who visited the Museum of Technology in Stockholm earlier this year were encouraged to fantasize about future communications devices. More than two hundred of them contributed highly personalized versions of mobile telephones. Some of those drawings and product models are now on display at Volvo's exhibition hall in Kungsträdgården park in Stockholm.

Initiative for the project was taken by Swedish Industrial Design (Svensk Industridesign), under the auspices of the Stockholm Cultural Capital '98 program. They sponsored a project for Stockholm's primary schools which aimed at stimulating children and teachers to take existing products and develop them into forms more adapted to the needs of their users.



"*In the beginning of the project, when we* asked children where products come from, they replied out of the back of trucks," says Lisa Wacklin, project manager at Swedish Industrial Design. "Now they know that they are made by people who have designed them, and they are aware that a product can take on different forms. With that knowledge, they are better able to take control of their environment and influence what their everyday existence looks like. That alone improves children's self-confidence and gives them an appreciation for quality at an early age."

Swedish Industrial Design, which is partially financed by the Ministry of Industry and Commerce, strives to make Swedish products more competitive.

Long-term consciousness

"Through this children's project, we are increasing the consciousness of society over a long period of time," says Lisa Wacklin. "Of course, all of the children won't become designers, but they can become product purchasers or consumers who demand quality items."

It was Lisa Wacklin who interacted with the school kids and asked a number of companies if they would be willing to bring the children's ideas to life. Ericsson welcomed the idea as did IKEA, Volvo, Stockholm Cultural Capital '98 and the Foundation for Future Culture.

"Design is an incredibly important part of our products," says Mikael Wikström, product manager at Ericsson in Lund, who was involved in sponsoring the exhibition.

"It isn't just a question of appearance, but also of how a telephone feels in one's hand, if it squeaks when you push a button, if it is too light, or if one recognizes an Ericsson telephone based on its ring. It is a total experience."

Mikael Wikström recounts of how, on a visit to the National Association for the Visually Handicapped, he asked a woman why she had purchased an Ericsson GH 768 telephone in particular. "I became attached to it at first sight," she explained. "It felt good in my hand, lightweight, easy and comfortable to hold."

Hundreds of drawings

Prior to the exhibition in Kungsträdgården, Ericsson went through hundreds of drawings.

The work group found that the drawings could be divided up into four categories: stuffed animals (a teddy bear that one could talk to), fruit (a telephone shaped like a banana), high tech (the complete mobile phone with fax and TV), and glamorous (telephones built into a bracelet). Ericsson's design firm in Singapore then made mock-up models from every category, taking their inspiration from the children's proposals. These mock-up models are now on display along with a couple of the children's drawings and posters of the final designs.

Ericsson's contribution is just one part of the exhibit, which also includes clay models and drawings of other products, such as a toothpaste tube and a hairbrush in one unit, or a bicycle helmet with room for a pony tail.

"Swedish Industrial Design is advocating something very important," says Mikael Wikström. "They are trying to influence the government and parliament to make more room in the school curriculum for industrial design. The more industrial design competence we have in Sweden, the more companies will be able to benefit."

Miki Dedijer

Sitting out the crisis in unstable Russia

Ericsson is one of many foreign companies that will experience some fallout from the political and economic impasse in Russia. Whatever happens in the next few months, it will be some time before the economy is back on its feet. Growth forecasts have been revised downwards and the situation is a lot less positive than it was a few months ago.

Ericsson is represented in Russia by the three former business areas – Infocom Systems, Mobile Systems and Mobile Phones and Terminals. Public Networks has a number of projects in progress at the moment. The largest of these is the contract to provide a backbone transit network for MGT, which is the public operator in Moscow. The contract is worth more than USD 70 million and is entering its final phase. Work will be finished by the end of this year or early next year. Many of the contracts entered into with local public operators have been funded through or with the help of Ericsson and foreign banks.

Payment delays

Ericsson Telecom has not experienced any payment problems so far. "We do expect some disturbance to the payment schedule but we are confident that all payments will be made in the end," says Gunnar Forsgren, director of Global Marketing Europe at Public Networks. "On a practical level, the implementation of projects may be slowed by delays in the banking system, or compounded by bureaucratic problems with import permits or customs clearance," he says.

There is also the local staff to consider. According to Yngve Redling, former president of Ericsson in Russia, "Our local staff are worried. All salary deposits into SBS AGRO Bank are blocked and in the meantime the value of the rouble is crumbling. The situation is compounded by rumors that foreign companies are either closing down or laying off people."

Hope for the future

It is clear that a reduced number of contracts will be signed in the next year and that revenues will either remain constant or decline. Although various prognoses for Russia see negative growth over the next year Gunnar Forsgren takes the long-term view. "There is no doubt that Russia will bounce back and that there is a market here in the long run. We have little choice but to sit this out. If we leave now we are finished as a contender in the future," he says.

Staff are in the process of moving into new premises, which it is hoped will cut costs and improve efficiency. "There are plans to maintain marketing, engineering and planning initiatives in order to be prepared for the upswing," says Gunnar Forsgren.

Nicolas Claude

Ericsson is one of many foreign companies sitting out the crisis in Russia. Growth forecasts have been revised downwards in Russia and the rouble is falling.

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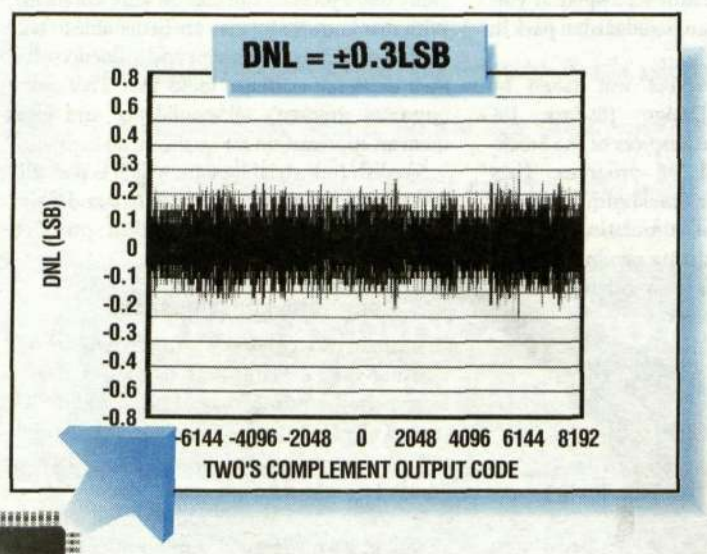

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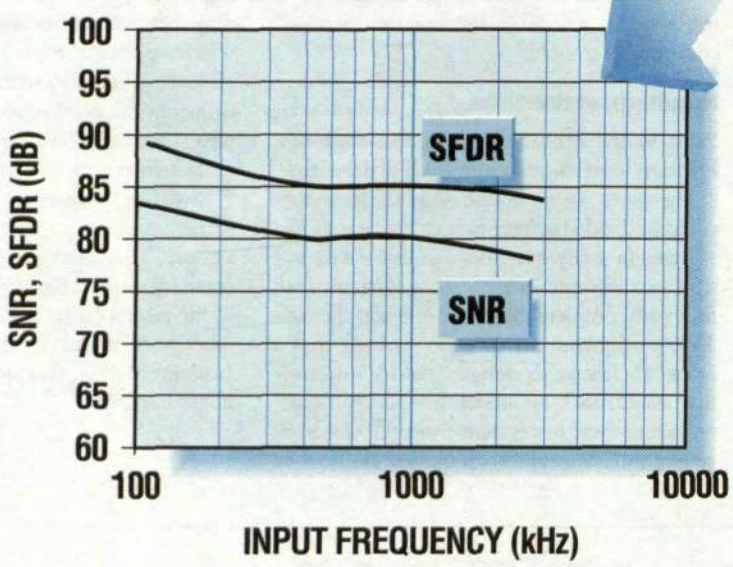

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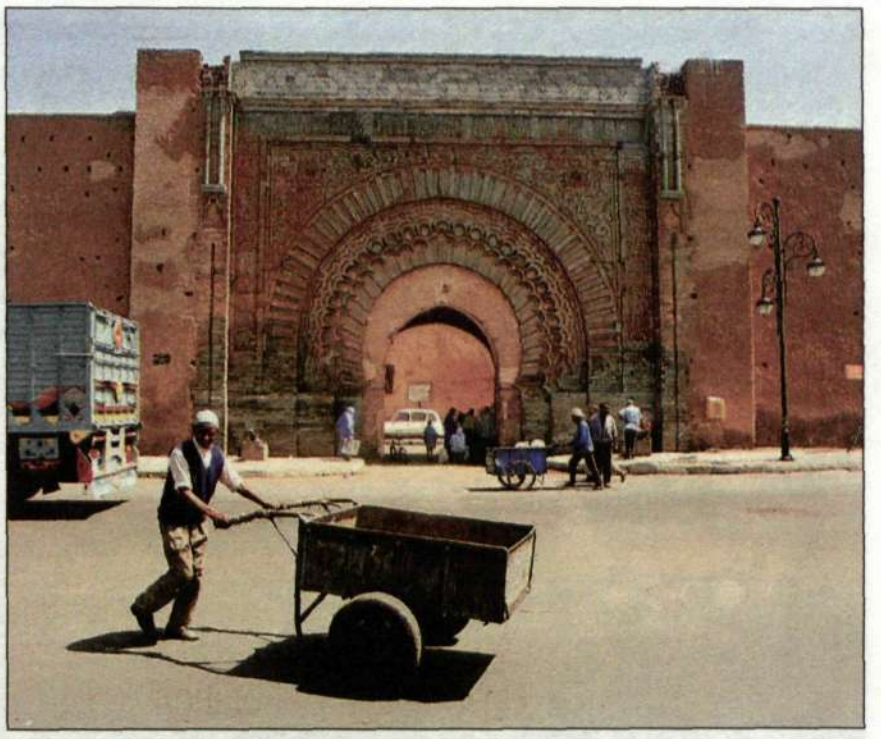
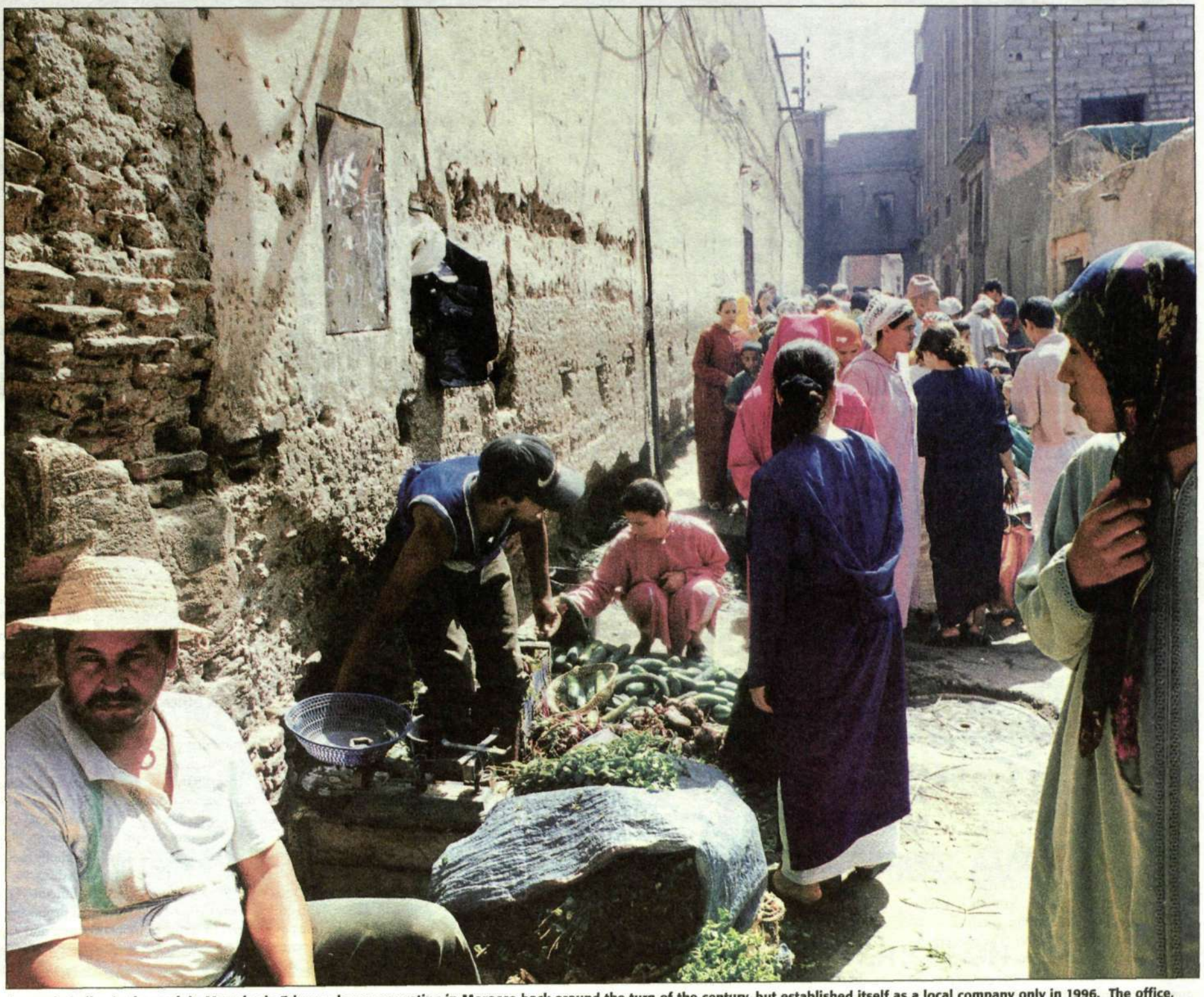


Throughout history, Morocco has served as a link between Europe and Africa. The country's telecom sector is now being modernized and expanded, and the international interest in a second mobile network license is focusing increased attention on the Moroccan market. Ericsson made a significant breakthrough in the country's mobile telephony sector last spring.

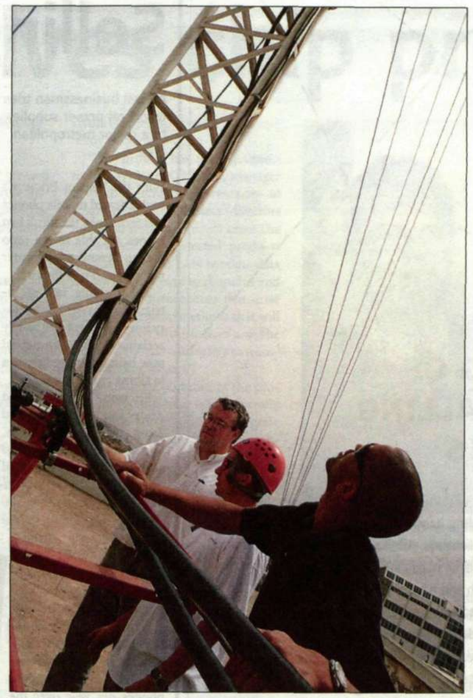
Europe's link to Africa



A crowded alley in the souk in Marrakech. Ericsson began operating in Morocco back around the turn of the century, but established itself as a local company only in 1996. The office, with approximately 30 employees, is located in the capital city of Rabat.

Photo: Nils Sundström

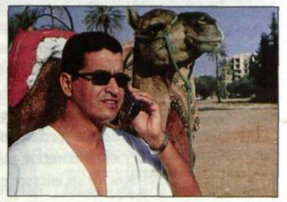
Ferry traffic across the Oned Bon Regreg river in the capital city of Rabat.

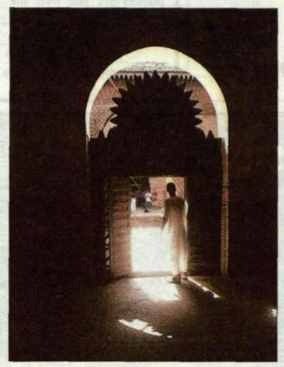


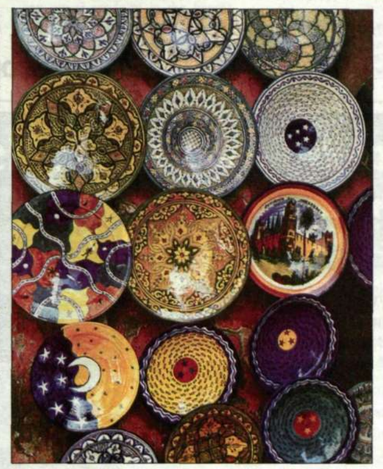
Project manager Mats Olsson and installers Steven Cozens and Darryl Queraat at one of the new sites outside Casablanca that will improve the capacity of the country's GSM network.

Photo: Nils Sundström

Mobile telephones have made Ericsson well known in Morocco.







Ceramics displayed at the Marrakech souk.

The Far West's middle class is going mobile

Along the winding alleys in the souk in Marrakech, traditional hand-knotted rugs, copper kettles, and spices are sold – as well as mobile telephones.

With a large expansion of the GSM network in Morocco, Ericsson is taking an important step forward in this expansive mobile telephone market. Ericsson is currently replacing competitor base stations in the industrial city of Casablanca.

Ericsson's sales of mobile telephone systems on the African continent are primarily in the larger markets, which include Egypt, Libya, Algeria and especially South Africa. But the GSM network expansion in Morocco is considered to be especially important since the country forms a beachhead between Europe and Africa.

"Considering its geographic position, it is of the greatest importance that Morocco remains economically and politically stable. The modernization and expansion of the telecom sector currently in progress is therefore an important step in the country's development," says Harald Oberbeck, manager of Ericsson's local company in Morocco.

The Kingdom of Morocco, also known as Maghreb el Aksa – the Far West, has 30 million inhabitants. A total of only six percent currently have fixed telephony.

Over the long term, this means enormous expansion potential, despite Morocco's substantial foreign debt, social differences and unemployment at around 20 percent. A growing middle class is a positive indicator and is the target group for the significant expansion now underway within the mobile telephone sector.

Harald Oberbeck

Mohammed Hmadou

The first GSM system order

Ericsson received its first GSM system order in Morocco this past spring.

The recently installed equipment, consisting of 147 radio base stations and two accompanying Base Station Controllers (BSC), marked a doubling of capacity for the state-run operator Itissalat Al-Maghrib.

"As of today, we have 100,000 subscribers to our GSM network. But with this expansion we are expecting to have 300,000 customers by the end of next year," says Mohammed Hmadou, infrastructure director at Itissalat Al-Maghrib. The telecom is planning to purchase an additional 600 radio base stations to expand its capacity to all of the larger cities and along the main highways in the country.

"At the same time, we are preparing for the impending deregulation and privatization of the telecom sector. We are entering a stimulating period, and we see Ericsson as an important partner in the development of both our fixed and mobile networks," says Mohammed Hmadou.

A second mobile telephone license is expected to be released in Morocco during the second quarter of 1999. International interest is greatest among the major consortiums, including France Telecom, Telefonica of Spain, TIM of Italy and Vodafone of the U.K. At the same time, portions of Itissalat Al-Maghrib will be privatized in the coming years.

A new office in Rabat

"This means that within five years there could be a million mobile telephone subscribers in Morocco. We are analyzing the market and working hard with the interested parties competing for the new license. Consequently, we will soon be opening a new office in Rabat," says Harald Oberbeck.

In addition to mobile telephony, significant expansions of the fixed telephony network in Morocco are also being planned.

"We are expecting a few difficult years, but I am convinced that we have a promising market here, in terms of modernization and expansion of existing networks as well as for products such as packet switching technology and IN services," says Harald Oberbeck.

"There are also other significant needs for new power equipment, MINI-LINKs, fiber-optic cables and access products to increase the band width on traditional copper lines," continues Oberbeck. "Recently, we received an order for 41,000 new AXE lines as well as for equipment modernization of another 200,000 lines. That will keep us busy for at least a year."

Harald Oberbeck, who has previously worked for Ericsson in both Australia and Brazil, confirms that the business climate in Morocco is unique. Moroccans are known as polite yet tough negotiators.

"As in many other places, the increased competition shows that it isn't just price and quality that land orders, but rather it is also a long-term commitment to the country. We need to think about how Ericsson can contribute to the economic development of the country, for example through collaboration with universities regarding telecom education. Foreign investment is essential to the further development of this telecom market," concludes Harald Oberbeck.

Nils Sundström
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FACTS ABOUT MOROCCO

Capital: Rabat, with approximately two million inhabitants. The country gained independence from France in 1956.

Head of State: King Hassan II.

Population: 30 million. The population has quadrupled since the 1940s.

Geography: Bounded by the Atlantic, the Mediterranean and the Sahara. In addition to desert, Morocco contains fertile plains and winter sports recreation areas in the Atlas mountains. Including the annexed Western Saharan territory, the country is about one and a half times the size of Sweden.

Languages: Moroccan, Berber and French.

Economy: The main sectors are phosphate mining, fisheries, tourism and agricultural products. A total of 1.8 million Moroccans live abroad, sending back significant sums of money to their native country.

GDP per capita: USD 1,250 (1998)

Telecom: There are approximately 1.8 million fixed telephone lines, representing a market of which Ericsson has about 20 percent. Fixed telephony competitors include Alcatel, Nortel and Siemens. On the mobile telephony side, Ericsson installed an NMT system in 1987 which has approximately 5,000 subscribers today. In 1992, a GSM network was started up and today has equipment from Siemens, Motorola, Nokia and Ericsson. Fifty percent of all the radio base stations were manufactured by Ericsson. As for mobile telephone sales, Ericsson officially has 20 percent via the two distributors, Moena and Performance, but in reality more than double that through additional sales.

Selling with action

An evil businessman tries to cut off power supplies to a major metropolitan area.

With the help of Ericsson's sophisticated mobile phones and terminals, the film's two heroes are able to log onto the businessman's computer network and save the city.

The thrilling tale of intrigue and mystery is the story line in a recent and widely acclaimed TV commercial now being used by Ericsson in China and Hong Kong.

Ericsson commissioned Andy Lau and Rosamund Kwan, two popular singers, to play the roles of hero and heroine in the action-packed commercial. Some scenes have a cast of more than 100 persons, including special effects experts from Hollywood. Andy Lau's popular music is an added attraction in the popular TV commercial.

China is Ericsson's largest single market. Projections show an increase of 13-14 million mobile phones per year over the next three years.

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Action is the theme of a new TV commercial by Ericsson in China and Hong Kong.

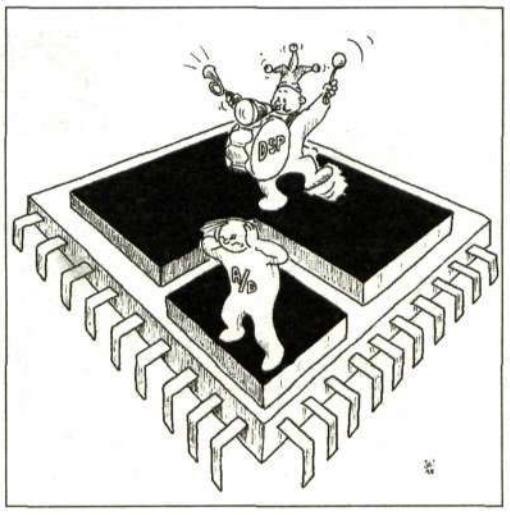
Bandit solves chip problem

An old research dream is about to come true. To place an entire system on a single silicon chip.

A three-year European program of research cooperation was started recently to solve problems caused by disturbances that arise when different components are packaged in the same capsule. Called the Bandit Project, the program is based on research cooperation between Ericsson, IMEC and the Catholic University of Leuven, in Belgium.

The problems are far from simple. Different components interfere with each other's operations, for example. The pulsed signals from the digital signal processor, created by turning the power on and off, can cause disturbances in analog sections of the components that receive incoming analog radio signals and convert them to digital signals.

The most serious disturbances are those which propagate in the actual substrate. Today's increasing use of high frequencies exacerbates the problem by disrupting more than just low frequencies. Another distinctive quality of the one-chip technology is that it leaves no margin for error. Everything must be done correctly from the start.



The research project will seek solutions to the very daunting challenge of integrating "everything" on a single chip. It will try to find new methods to eliminate transmission interference and disturbances between analog/digital converters and digital signal processors. Illustration: Jens Olow

"The project has several objectives," says Peter Olanders, manager of radio technology research at Ericsson Radio. "Project directors intend to study a concrete case. The researchers have selected products for the present WLAN wireless data network. They plan to pinpoint and analyze the disturbances that arise and try to develop methods that will reduce digital disturbances and the sensitivity of AD converters to transmission interference."

The ultimate objective of the project, however, is to develop generally applicable methods to integrate components in a single chip – a technical advance that would greatly benefit Ericsson.

The Bandit Project is one of several ongoing EU projects designed to establish a position of European leadership in Information Technology (IT).

"On the whole, Europe is probably the world leader today. It's essential that we maintain our lead in IT, from circuit boards to complete systems," Peter Olanders continues.

Ericsson will be represented by Svante Signell and Tony Fondén, who will work together on the Bandit Project. Ericsson's expertise will focus on systems know-how and verification, while IMEC will bring its special skills in Digital Multirate. The University of Leuven, in turn, offers competence focused on AD converters.

The starting shot has been fired for the European Bandit Project, which aims to fit an entire system on a single chip; Ericsson will be represented by Svante Signell and Tony Fondén. Photo: Kurt Johansson

"Although we may not develop any actual products in the Bandit Project, we shall certainly build chips that can be used in realistic tests and measurements of various transmission disturbances," Tony Fondén says. "We shall try to tackle relatively difficult problems and, for this reason, we have selected the preliminary standard for WLAN."

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Usability is a key factor

"If a user cannot use a product, the product is not functional. That's our motto."

Pär Carlshamre

The words were spoken by Pär Carlshamre, an expert in usability issues who recently joined Ericsson's Systems Engineering Lab in Mjärdevi, just outside Linköping in central Sweden.

Ericsson's lab in Mjärdevi concentrates on Usability Engineering, a concept focused on making products usable. The work at the lab is systematized in accordance with the Delta Method, an engineering approach commonly applied in modern technology.

Focus on customers

Usability is gaining greater importance as a key concept in parallel with Ericsson's increased focus on customers and speed. Its significance assumes even greater importance with the emergence of new customers/operators who lack any appreciable technological experience, but want products and systems that function.

Throughout the entire world of IT, more and more money is being invested today to guarantee usability and, in some companies, the concept has become a quality criterion for bonus payments.

"We know several Ericsson units are working with usability questions," Pär Carlshamre continues. "To get a better grip on where our skills and expertise are located within the company, and to strengthen our focus on the subject, we are arranging a special conference in Stockholm to be held December 2-4. We have also invited several independent researchers, including Janice Rohn of Sun Microsystems, a noted expert on man-machine interaction.

The Delta Method used in the Mjärdevi lab and elsewhere is a logical and efficient work method. It is based on three cornerstones: to determine who the product users will be; to establish the areas of application in which the product will be used; and to define which tasks the product should perform.

It is essential to keep these parameters in sharp focus throughout the entire project and, ideally, to review progress in relation to the cornerstone objectives. This applies from concept design, which deals mainly with how the system performs at a functional level, to prototype development and all subsequent phases of the project.

Ensuring improvement

Particular importance is also focused on specifications of usability levels to make sure the new concept is better than what it was designed to replace.

"We work quite often with paper prototypes. We sit down with the user and sketch product concepts on paper, rather than working on the screen," Pär Carlshamre explains. "The method is fast and we meet the user on common ground."

"Meeting and talking with people is a vital element in getting to know users and focusing on user aspects from the beginning of every new project rather than just guessing how users may behave."

Surveys have shown that more than 50 percent of all functionality is never used, simply because users don't know how to use it.

Successful products are often based on user input from the early stages of development.

Lars Cederquist

http://www.lmera.ericsson.se/~eradelta

Applications to conference:

http://www.lmera.ericsson.se/~eradelta/ecue

Japanese appreciate new tool

The latest and perhaps most successful project in the Usability Engineering lab in Mjärdevi was the recent development of a new PC-based support system for an operator in Japan. The system is used for B-number analyses, which investigate the cause of the problem when telephone numbers do not respond to calls.

Åsa Bäckström

"We had never worked with Japan in the past, so it was important to learn more about the Japanese culture," explains Åsa Bäckström, who worked on the project with Jörgen Gustafsson and Åsa Andersson.

They traveled to Japan to study first-hand exactly how operations are conducted, who actually works with the tool, and under what conditions. They found that the overwhelming majority of people working with problem analyses are very young and their work requires rapid response and processing times. The Japanese client also wanted the material presented in table format, but didn't want other functions.

"Based on user requirements, we developed a small, lightweight PC tool for portable computers and tested the concept with different operators in Japan. Their reactions were extremely positive. Two of the largest operators bought the tool before we had finished our preliminary study," concludes Åsa Bäckström.

Lars Cederquist

NOTEWORTHY

Robert Blomé of Ericsson in Kumla has been awarded SEK 685,000 for his improved pallet packaging proposal.

Award money to go towards wedding

➤ Robert Blomé, who works for Ericsson near Örebro, was recently awarded a check for SEK 685,000. The money was presented to Robert in recognition of his proposal of a new semi-pallet design concept for telephone packaging. His proposed semi-pallet design is now being used for packing telephones and accessory equipment. Robert's proposal has reduced the number of work stages and pallet space requirements, helping Ericsson cut costs for pallet materials.

His financial reward is the largest official award ever granted to a single employee of Ericsson Mobile Communications AB in Kumla.

"I'm going to use the money to pay off my loans, get married and have a great honeymoon," said a slightly overwhelmed "Robban" after accepting the check.

Maria Granath

Simulation proposal nets SEK 750,000

➤ Cornelius Rosu of Customer Services at Ericsson has been awarded SEK 750,000 for a proposal that outlines a new method and tool used to test various network scenarios. His model provides a solid base that enables operators to achieve optimal network utilization.

Ericsson is the only company on the market that offers this service to customers.

"I believe we are probably several years ahead of the competition. We are now also conducting tests to determine how the network can optimize itself in real-time with the support of artificial intelligence," says Cornelius Rosu.

Operators can save substantial amounts of money. For example, they can now conduct advance tests of the effects of large advertising campaigns and determine the capacity of their networks.

Cornelius Rosu has worked with advanced development projects since he joined Ericsson in 1971.

My Spangenberg

Ring melodies from Ace of Base

➤ On the Web site for Ericsson's mobile telephones, cooperation with the pop group Ace of Base will soon become reality (see last page for details). Plans include using the song "Travel to Romantis" to market a new function on the Web site. A so-called Internet piano will help users program their own mobile phone ring signals, including the new release from Ace of Base. Cooperation with the pop group will also be used for retail sales campaigns.

Ericsson helping to restore ancient monument in Turkey

The wall surrounding the ancient city of Halicarnassos in Turkey will be preserved for posterity. Ericsson and Turkcell, its largest customer in Turkey, have joined forces to sponsor the restoration of the old city wall, a project initiated a few weeks ago.

The picture above shows the remains of Myron Gate, a portal into the ancient Turkish city of Halicarnassos. Ericsson in Turkey and Turkcell, a major customer, are sponsoring the restoration of the old city wall.

"We are pleased to take part in such an important cultural undertaking," says Ersin Parmküser, president of Ericsson in Turkey. "Our sponsorship of this important program of cooperation with Turkcell will strengthen Ericsson's name."

Restoration of the old city wall was started in October during a special ceremony attended by Milsut Yilmaz, Prime Minister of Turkey, and several other dignitaries and officials, including Mehmet Emin Karamehmet and Cüneyt Türktan, Chairman and President, respectively, of Turkcell, and Ersin Parmküser.

The ancient city of Halicarnassos is now called Bodrum, one of Turkey's most popular tourist attractions. Situated near the Aegean Sea, the city attracts more than two million visitors annually.

A large part of ancient Halicarnassos was built around 370 BC, when King Mausolos commissioned the structure of a wall that stretched more than 7 km around the city's perimeter.

After his death, Artemis, the wife of King Mausolos, ordered the construction of a huge memorial – a mausoleum, which subsequently lent its name to a host of other sepulchral monuments. Before it was destroyed centuries ago, the great mausoleum was considered one of the Seven Wonders of the World.

Myron Gate, the city's western portal and starting point for the restoration project, is one the remaining vestiges from the Hellenic Age.

The project is being supported by several Turkish and foreign archeological museums. The entire restoration program is expected to be completed within four to five years. It will be well worth the wait to see the grandeur of centuries-past restored to its original splendor.

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From our mailbox

Here's a letter received from Rikkie Gajadhur in South Africa; an inspiring tale that we couldn't resist publishing

I recently had the opportunity of going ab-sailing down the 90-metre ledge of a small mountain. After nervously descending the first part of the ledge, my hand jerked upwards and my Ericsson GH388 (which was hooked inside my pocket) fell out onto another ledge below me and bounced down some 90 metres. By this time I could not see below and upon reaching the bottom, found my battery and phone nearby. My SIM card was lost. I put the battery back into the phone and was disappointed to find that the phone did not work. It had a huge gash next to the charging mechanism and on other parts of the casing. When I got home I tried my spare battery and another SIM card, and would you believe that besides its battered looks, the phone worked perfectly! I checked my original battery and found that the 2 pins had merely moved out of place, which I subsequently repaired myself with a quick adjustment.

Well done on a wonderful product!

Rikkie Gajadhur
Durban, South Africa

Cecilia Svanström, publisher of Ericsson Data's Web magazine, Weekly, accepted the 1998 Ericsson golden "E" award for internal communications excellence. The prize was awarded by Mats Rönne, head of corporate marketing communications, and Johan Ljungqvist, head of internal communications.

Awards for communications

➤ The golden "E" is an award for communications within Ericsson. Officially called the Ericsson Communications Excellence Award, this year's winners were honored at a ceremony held in Paris recently.

The award for internal communications was presented to Weekly, a Web magazine published by Ericsson Data.

Ericsson in Canada was awarded the prize for best external communications in recognition of the Canadian company's Support Link project. The project was a social awareness effort whereby Ericsson provided telephones to women exposed to various forms of abuse. It attracted widespread attention throughout all of Canada. One Black Coffee, a commercial produced by Ericsson in India, was awarded the prize for market communications. And the Bond campaign, which very few people missed, won the golden "E" for integrated communications.

http://weekly.edt.ericsson.se

http://www.lme.ericsson.se/lmedi/goldene/

It's our future.

Efficient project management and management of projects in a multi-project environment is the key to Ericsson's future. The names on these pages are just some of the people who have looked into that future with the help of Ericsson Project Management Institute (EPMI). So far, we have provided project-related training to some 17,000 Ericsson employees.

A

Christer Aasmäe	EHF/AY
Harald Aass	ETO/T/O
Andreas Aaw	KI/ECS
Reza Abbasi	KS/EIN/A
Ait-Kaci Ali	
Abderrahmane	LMCBO
Fouad Abiad	KI/ERA/AR
Hanne Abrahamsen	HI/ETO
Linda Abrahamsson	KI/ERA/LVN
Tore Abrahamsson	MÖ/EMW/FN
Udo Abt	EED
Stavros Adam	IXG
David Adamashvili	ECR/PO
Gerhard Adamle	SEA/ELAC
Malin Adolfsson	KA/EPK/NE
Per Adolfsson	KI/ERA/LG
Kaj Ahlberg	KI/ERA/LRB
Dieter Ahlers	EED/L/F
Björn Ahlgren	KI/ERA/LY
Åsa Ahlmén	SG/ERA/YF
Björn Ahlstedt	TO/EDT/B
Folke Ahlström	GÖ/EGS/B
Jonas Ahlström	VY/ERA/PV
Masoud Ahmadi	KI/ECS/TT
Seija-Liisa Ahonen	LMF/T/TM
Christer Ahrlind	NRJ/N/VN
Erik Ahrsjö	KI/ERA/F
Naveed Akbar	ECP
Måns Alander	VY/ERA/PV
Bushra Al-Bayati	ÄS/UAB/X
Haidi Albertsson	EED
Linda Albertsson	KA/EPK/DK
Malin Albertsson	KI/ECS/CI
Sylvia Aldenryd	ÄL/UAB/B
Spyros Alexiou	IXG/DO
Erik Algvere	KI/ERA/JT
Björn Allerbring	TO/EDT/B
Kristina Allgurén	LM/ERA/ZD
Roger Almstedt	MV/PRS/TP
Ib Alstrup	LMD/T/KM
Zoveb Altaf	TKU/R
Anna-Karin Alvén	ÄS/UAB/X
Bo Alvsäter	KI/RSA
Dionisiou Amalia	IXG/DE
Zine Amier	LMC/SS
Natasa Amin	ETK/P/B
Dariush Amini	LMC/MB
Dorota Anasiak	KI/ECS/TT
Peter Anastasiou	NY/ERA/PN
Mario Andelic	ETK/D/T
Lars Ander	KI/ERA/LY
Carsten B. Andersen	LMD/T/R
Alexander Andersson	KI/ECS
Anders Andersson	KA/EPK/DR
Bengt Andersson	KI/ERA/LRU
Bengt-Olof Andersson	MÖ/EMW/FN
Björn Andersson	VY/ERA/PV
Camilla Andersson	IK/ETX/ST
Carin Andersson	ERM
Curt Andersson	KH/ERA/PK
Erica Andersson	GÄ/ERA/PG
Göran Andersson	KA/EPK
Hans Andersson	MG/ETX/X
Ingmar Andersson	BS/EMW/SP
Jan Andersson	SEA/EBAL
Johan Andersson	LMF/T/SU
Karin Andersson	KI/ERM/FM
Kjell Andersson	KA/EPK/BK
Kristina Andersson	LU/EPL/R
Lars Andersson	KI/ECS/TT
Mats Andersson	KI/RSA/P
Per Andersson	LM/ESB/D
Per-Gunnar Andersson	KI/ERA/AR
Peter Andersson	KI/ERA/LVN
Rolf Andersson	GÖ/ETX/X
Stefan Andersson	KI/ESB
Sten Andersson	KS/EIN/N
Sven-Erik Andersson	HF/ETX/SA
Veronika Andersson	GÄ/ERA
Jens Andresen	EDD/R/DPC
Magnus Anehem	KI/ECS/TT
Per Anevik	KS/EIN/N
Efi Angelonidi	IXG/DC
Ira Antikainen	LMF/T/J
Gina Antonelli	LMC/F
Henrik Apelgren	KI/ERA/LRN
Callie Arai	ERJ/V/T
Andrew Archer	OML/SN/H
Robert Arcon	KK/EKA/K
Fredrik Armelo	SG/ERA/YO
Peter Arnby	KI/ERA/LK
Rainer Arndt	KI/ERA/LRD
Leif Arnerdal	KI/ERA/LRU
Tommy Arngren	LU/EPL/R
Peter Arnsten	NA/EBC/EN
Erik Arnström	TB/ETX/PN
Magnus Aronsson	ÖS/UAB/N
Jurgen Arts	DSN/M
Barbro Arvidsson	MÖ/EMWUA
Björn Arvidsson	ETC/RNA
Lars Arvidsson	GÄ/ERA/PG
Peter Asariew	KI/ERA/LY
Benedikt Aschermann	EED/N/BT
Ihsan Asinger	KI/ERA/AR
Hans Askenbäck	KI/ESB
Johan Asplund	ETL/NT/S
Mathias Asplund	KI/RSA/P
Per Assarsson	SBB/RGC
Dimitris Assimakis	IXG/DMG
Jean Audet	LMC/LE
Reinhard Augsburger	EED
Anna-Karin Averin	ÄL/UAB/K
Kenneth Axefors	GÖ/ETX/X
Björn Axelsson	KI/EPK/TE
Cecilia Axelsson	KL/ECS/CP
Göran Axelsson	UM/EPL
Jörgen Axelsson	KI/ERA/JM
Kristina Axelsson	KI/ERA/LRD
Lars-Gunnar Axelsson	ÄS/UAB/I
Ravi Ayyr	ÄS/UAB/B
Davoud Azimian	TN/ETX/XTBB

B

Petter Baardsen	HI/ETO/X
Magnus Back	HF/ETX/PN
Torbjörn Backman	TO/EDT/L
Ivica Badrov	ETK/D/S
Lothar Bahr	EED/X/STI
Michael M Bak	LMD/TRP
Johan Balk	KI/ERA/LRN
Edit Balogh	ETH/S/BB
Monika Bandurska	TN/ETX/XA
Morten Bangsgaard	HF/ETX/PN
Tuyen Banh	EUS
Denis Barabashov	ECR/MOP
Morana Barac	ETK/P/ED
Sergey Baranov	ECR/ED
Anastasia Baranova	ECR/I
John Barile	EUS
Karen E Barlaup	ETO/T/OQ
Cim Bartlett	ÄS/UAB/I/V
Marek Bartnik	VY/ERA/PV
Fredrik Bartsch	ÄS/UAB/R
Ümit Basoglu	ENK
Johan Basth	GÄ/ERA/PG
Max Bataille	EED/L/U
Mechelle Bate	ETL/RU/T
Vassilis Batsidis	TN/ETX/PN
Wolfgang Bauer	EMX/U/R
Andrew Beacon	ETL/NR/P
John Beaty	OML/INF
Toni Beck	KI/ERA/LRN
Visnja Bedenko-Fratric	ETK/P/PS
Arif Beg	LMD
Elisabeth Beijer	TN/ETX/XD
Ulf Beijner	SG/ERA/LZ
Anders Beillon	MÖ/EMW/SM
Magnus Beischer	MÖ/EMW/SM
Peter Belacevic	KH/ERA/PK
Zeljko Belancic	XHA/NXPR
Patrik Belina	ÄL/ETX/PN
Marija Beljo	ETK/SC/P
Alexandra Benamar	SG/ETX/PN
Synnöve Benari	ÄL/UAB/O
Hrvoje Bencic	ETK/P/M
Erik Benedic	ETM/LO
Per Bengtson	ÄL/UAB/B
Anders Bengtsson	MÖ/EMW/FY
Andreas Bengtsson	SG/ERA/YO
Bitten Bengtsson	NY/ETX/PN
Cecilia Bengtsson	KI/ERA/LRU
Kurt Bengtsson	KI/ECS/TT
Pernilla Bengtsson	TN/ETX/TN
Tomas Bengtsson	KI/EKA/NL
Pamela Benoit	EUS/RD/D
Martin Benthues	EED/N/N
Anders Berg	HF/ETX/BN
Gösta Berg	MÖ/EHS/LF
Jan Berg	HF/REM/F
Joakim Berg	KI/ERA/AR
Marita Berg	KI/ERA/AR
Roger Berg	SG/ERA/LZ
Stefan Berg	SL/EBC/PN
Sture Berg	LMC/NQ
Helene Bergander	MÖ/EHS/SE
Per Bergdahl	KI/ECS/TT
Ingrid Bergenholm-England	SG/ERA/LN
Eva Bergfeldt	KI/ERA/LRN
Katarina Bergfors	SG/ERA/LZ
Dan Berggren	VH/EDT/B
Johannes Berggren	TO/EDT/B
Lars Berggren	MÖ/EMW
Agneta Berghem	KI/ERA/LK
Anna Berglund	KI/ERA/LRU
Berndt Berglund	KI/ERA/LRN
Mats Berglund	UM/EPL/X
Per-Anders Berglund	KI/ECS
Anneli Bergman	LU/EPL/R
Lennart Bergman	SL/EBC/GI
Gunilla Bergqvist	KS/EIN/T/U
Gunnar Bergqvist	KI/ETX/PN
Svante Bergqvist	KI/ERA/AL
Magnus Bergsten	KI/ESB/D/M
Sissi Bergstrand	KI/ERA/LG
Hartmut Bergström	KI/ERA/AM
Monica Bergström	NY/ETX/XN
Ronny Bergström	SÅ/EPL/T
Ulrika Bergström	HF/REM/F
Anders Berling	KI/ERA/T
Monica Bertelsen	IK/ETX/ST
Mats Berthem	KK/EKA/K
Rico Bevilacqua	XHA/NXM4
Vladislav Bezurukov	ECR/MOP
Peter Bieker	EDD/K/OP
Maria Bigl	VH/EDT/I
Oleg Bikmoulline	ECR/ROP
Alvaro Bilbao	INE/P/OT
Li Bin	ENC
Zhang Bin	ETC/BMC/O
Aycag Birben	ENK/PM
Serdar Birlikci	ENK
Jörgen Björck	GÄ/ERA/PG
Patrik Björkander	SG/ERA/LZ
Christer Björklund	TO/EDT/R
Leif Björklund	KI/ECS/TT
Pierre Björklund	KI/ERA/LVN
Jeanette Björkman	KS/ETX/PN
Ola Björkman	TN/ETX/PN
Thomas Björkman	EUS
Per-Ola Björn	KI/ERA/AR
Amie Björne	KI/ERA/B
Bente Björngård-Gundersen	NE/ETO/T
Johann Blank	EED/N/N
Mikael Blazquez	GÄ/ERA/PG
Michelle Blazy	EMX/U/Z
Kerstin Blom	KI/ERA/LY
Joan Blom Andersen	KA/EPK/OR
Stellan Blomberg	HF/REM/N
Johnny Blomfeldt	GÄ/ERA/PGO
Malin Blomqvist	KI/ERA/AF
Maria Blomqvist	SL/EBC/GI
Marika Blomqvist	LMF/T/FP
Per Blomqvist	ÖS/UAB/I
Sergey Bobrov	ECR/ECR/ROP
Johan Boestad	NA/EBC
Johann Boettcher	EDD/K/NB
Gunnar Bohlin	KS/EIN/P
Annika Bohm	ÄS/UAB/R/T
Katarina Bohm	HF/ETX/X
Fotini Bokari	IXG/DG
Åsa Boklund	KI/ERA/LRG
Linda Bolme	ÄS/UAB/K
Sven Boman	SG/ERA/LZ
Sören Boman	KI/ERA/BR
Henrik Bonder	MÖ/EMW/SR
Chatchaval Boonplod	ECT
Kjell Borg	UM/EPL/X
Stefan Borg	SG/ERA/YA
Sture Borgenäs	KI/ECS
Carol Borgerink	EMN/T/DD
Joachim Borgh	ÄL/ETX/DN
Jan Borgman	TO/EDT/R
Mark Vinko Bosnjak	ETK/P/M
Anna Boström	KA/EPK/OT
Alain Boudreau	LMC/N/XA-C
Ola Bovallius	KI/ERA/LRN
Laurent Bovet	XHA/NXPT2
Roberta Boyle	LMC/JS
Malcolm Brader	SG/ERA/LZ
Clas Brameus	NA/EBC/EN
Rainer Brammen-Asdunk	EDD/B
Anders Brandt	HM/EPK/DS
Nadja Brandt	TN/ETX/PN
Adrian Brant	OML/CA/EML
Don Brassfield	ETL/NT/T
Danny Bravo	EUS
Magnus Bredberg	ÄL/EDT/N
Patrik Bredin	KI/ERA/LVN
Peter Bredin	KI/ERA/XB
Kristian Brehm-Andreassen	KI/ERA/AF
Susanne Bremer	NA/EBC
Robert Briggs	EPA/T/SM
David Bright	ENC
Gonzalo Brito	KI/ERA/LVN
Jean-Pierre Brochu	LMC
Anders Brodin	LMC/BE
Lennart Brodin	KS/ETX/PN
Svante Bromsjö	ÄS/UAB/K
Ingela Brovall	ÄL/EDT/N
Mike Brown	ETL
Stefan Bruhn	EED
André Brunner	XHA/NXPM2
Lars Bruno	KH/ERA/PK
Leif Brunström	KI/ECS
Åke Brynje	TN/ETX/XA
Jan Brännström	SG/ERA/LZ
Jon Brännström	EUS
Rayner Bröndrup	KI/ERA/AM
Helene Brötegård	KI/ERA/LK
Ulf Buckard	KI/ESB
Santoso Budiman	ERJ/V/NT
Henning Buhr	EED
Alex Burden	KI/ERA/JM
Ante Burilovic	ETK/D/S
Mikael Burman	SÅ/EPL/T
Katarina Burton	NA/ETX/DN
Marek P. Buznicki	LMD/T/PM
Bill Byard	EUS/XT/EP
Piers Byford	MÖ/EMW
Lars Bygdén	KI/ESB/D
Leif Bylund	SL/EBC/GI
Gunnel Byrenius	TN/ETX/PN
Nicklas Bystedt	SÅ/EPL/T
Hans Byström	KI/ERA/NY
Olle Bågling	TN/ETX/PN
Christer Bång	ÖS/UAB/I
Dan Bäckman	VY/ERA/PV
Jonas Bäckman	SG/ERA/LVR
Mårten Bäckman	KI/ERA/AP
Per-Magnus Bäckman	KI/ERA/AM
Petra Bäckman	KI/ERA/E
Elisabeth Bäckström	IK/ETX/ST
Mariko Bäckström	KI/EKA/N
Helena Börjesson	ÄS/UAB/K

C

Amparo Calderon	EME/MG
Ilhan Candemir	ENK
Silvana Canslai	SEA/EAPM
Nancy Cantin	LMC/BDT
Nika Caparin	ETK/D/T
Franco Capitina	LMC/GX
Jan Cardell	MÖ/EMW/FY
Patrick Carlén	KS/EIN/D
Niklas Carlheim-Müller	KI/ERA/JT
Anders Carlson	KI/ERA/LRU
Helena Carlson	KI/ERA/LV
Håkan Carlson	ÄL/UAB/B
Anette Carlsson	TN/ETX/PN
Elenor Carlsson	MÖ/EMW/SR
Göran Carlsson	ETL/XD/FL
Kajsa Carlsson	TB/ETX/FK
Lars Carlsson	MÖ/EMW/FY
Lennart Carlsson	KA/EPK/FE
Magnus Carlsson	MÖ/EMW/SP
Thomas Carlsson	IK/ETX/ST
Pär Carlzén	BS/EMW/SP
Kajsa Carton	ETL/XL/EEP
Chris Cartwright	EPA/O/T
Luiz Otavio Carvalhal	KA/EPK/MS
Sonia Carvalho	SEP/MT
Shahin Cassim	ESA
Alejandra Castillo	LMC/TR
Karen Caulk	EUS/XT/T
Silvana Caushi	SEA/EAPM
Igino Cazzola	KI/ECS/TT/TY
Urban Cederblad	VY/ERA/PV
Jonas Cederhage	GÄ/ERA/PGO
Jelka Cederqvist	KK/ETX/U
Johan Cerne	KI/ERA/LRU
Joanne Chamaillard	LMC/EI
Ekkarin Chanchitlekha	ECT
Sujata Chand	XHA/NEBSI
Deborah Chao	LMC/GR
Evridiki Charalampidi	IXG/DE
Jonas Charmi	ÖS/UAB/I
Stavros Chatzi-stefanidis	IXG/DE
Kim L Chau	EME/TD/P
Daryll Chee-Awai	LU/EPL/R
Maxim Chembura	ECR/ED
Leon Chen	ENC
Tony Chen	ENC/GUC
Chung-Man Cheng	LMC/ML
James Chiang	ERT/G/P
Charlie Chin	LMC/N/XA
Martin Chivers	OML/INF/MKTG
Rubina Choudhury	LMC
Jan Christensen	KI/ERA/LVN
Lars Erik Christensen	ETO/T/O
Peter Christensen	ETC/BMC/O
Philip Christopher	EUS
Dimitris Christopoulos	IXG/DG
Ove Claesson	MÖ/EMW/SM
Martin Clear	EEI
Wilhelm Cleff	EDD/K/NB
David Clegg	KI/ECS
Åsa Clifford	KI/ERA/AR
James Cline	ERJ/I/M
Glenn Coates	KI/ECS
Marie Coinchelin	LMC/ZO
Leif Coldenberg	KI/ECS/A
John Collins	XHA/NXPN4
Guido Commerscheidt	EED
Florence Contout	EME
Felix Contreras	REE/OSID
Ricardo Cordón	EME
Göran Coster	EUS/RD/L
Marc Cozijn	ESA/O/IP
Agneta Cramnert	LU/EPL/L
Caroline Crete	LMC/GH
Anneli Crona	LM/ERA/Z
Chris Crooker	EUS/RP/H
Ingeborg Cuppers	ETM/OPK
Guy Cyr	LMC

D

Ramon Daandel	EID/T/M
Gunilla Dahl	ÄL/UAB/B/U
Torbjörn Dahl	MÖ/EMW/SP
Åsa Dahl	LM/ERA/Z
Marie Dahlberg	UM/EPL/X
Dan Dahlgren	UM/EPL/X
Ingela Dahlin	ÄS/UAB/K
Mats Dahlin	KI/ERA/LVN
Johan Dahlström	ERM/FX/G
Sven Dahmberg	KI/ECS
Tony Dai	ETC/ETC/Y
Evangelia Dalakli	IXG/DC
Heine Dalsgaard	LMD/TN/P
Marcel Damen	DSN/M/X
David Danielsson	ÖS/UAB/N/XM
Henrik Danielsson	SÖ/EKA/K
Jeanette Danielsson	TN/ETX/PN
Mathias Danielsson	TB/ETX/PN
Åsa Danielsson	TN/ETX/PN
Richard Darden	EUS/RDQ
Wayne Davidson	EUS/R
Colin Davis	ETL/TC/B
Robin Day	ERJ/K/N
Lourdes Daza-Gillman	KI/ERA/LK
César Fernández de Larrea	INE/P/OT
Fred Dear	ETL
Christina Deborg	KA/EPK/OT
Markus Degerlund	LMF/T/LT
Vladimir Degtev	ECR/ROP
Attila Demeny	ETH/ROC
Mihran Demirian	KI/RSA/P
Olivier Démoulin	TO/EDT/I
Martha Dereskogh	TN/ETX/PN
Stefan Dersand	NY/ERA/PNQO
Constance Dery	LMC
Rajesh Desai	EUS/R
Stephane Desjardins	LMC/BP
Alexandre Devaud	XHA/NEBSI
Basil Dickason	ESA
Greg Dickason	ESA/ZA/O
Christopher Didi	LI/ERA/PL
Stefan Dillström	KI/ERA/LK
David Dinh	ETC/XA
Paul Dinnissen	EMN/B/DP
Henrik Djupsjöbacka	TN/ETX
Angelica Djurbring	HF/ETX/PN
Stefan Dobler	EED/N/RV
Laszlo Dobos	ETH/NP
Peter Domeij	KI/ERA/AR
Stefano Donati	ETO/T/O
Carol Dong Hong	ETC/SR/L
Rickard Donnerstål	GÄ/ERA/RT
Daniel Donohue	XHA/NXPD4
Mike Doub	EUS
Vassilis Douvikas	IXG/DG
Marijan Drcic	ETK/P/S
Robert Drexler	ETH/RMG
Paulo Duarte	SEP/MT
Nils Duberg	KI/ESB
Clare Dudley	EDL/GOO
Gorjan Dugonjic	ETK
Nathalie Duguay	LMC/BT
Joakim Dundeberg	SL/EBC/PN
Håkan Dyrefors	KI/ERM/FM
Ove Dysell	TB/ETX/SA

E

Les Eckersley	KI/ECS
Ping Edelsvärd	KI/ERA/JZ
Anders Edgren	KI/ECS
Erik Edgren	KI/ERA/LV
Kerstin Edholm	KI/ERA/AR
Per-Erik Edman	SL/ECA/N
Pär Edstedt	UM/EPL/X
Åsa Edström	KI/ERA/LV
Urban Edwardsson	GÄ/ERA/PG
Johann Egert	SEA/ESP
Dirk Eggeling	EED
Joerg Eibisch	EED
Lars-Åke Eimer	MÖ/EHS/LB
Britt Eisner	ETL/RU/TP
Anders Ejlertsson	KA/EPK/DT
Mats Ek	LU/EPL/L
Mattias Ek	SG/ERA/YB
Ola Ek	KI/ERA/AR
Anna Ekblom	KL/ECS/CIP
Lars-Åke Ekdahl	KA/EPK/TR
Magnus Ekelund	KI/ERA/AZ
Jörgen Ekengren	KI/ECS/CI
Thomas Ekengren	VY/ERA/PV
Magnus Ekhed	MÖ/EHS/SKE
Maria Ekhed	KA/EPK/MS
Mikael Ekholm	ETC/XA
Åsa Eklund	NA/EBC/EN
Kennet Ekman	SÅ/EPL/T
Gösta Eknor	KI/ERA/LVR
Hanna Ekstam	LM/ERA/ZD
Elsebeth Ekström	MA/ECS/S
Damon Eldsen	EUS/XT/DJC
Stefan Elf	SÅ/EPL/L
May-Lou Elgebrand	MÖ/EMW/SM
Annika Elgeryd	HF/ETX/EPA
Mikael Eliasson	ETC/YP/D
Anne-Christin Eliasson-Nyström	ÄS/UAB/K
Lotta Ellström	ÄS/UAB/K
Sverker Elmarsson	TO/EDT/B
Bassam El-Masri	EPA/R/O
Göran Elming	NA/EBC/EN
Mikael Elshult	HF/LME/DCA
Ruud Elsinghorst	EMN/B/A
Gert-Jan Elzinga	ETM
Mehrdad Emami	ETC/NP
Franck Emmerich	EED
Ron Emms	ETL/NT7P
Jan Enbom	GÄ/ERA/GD
Ana Gabriela Enciso	LMC

Niklas Eng	NY/ERA/PN
Roger Engblom	NY/ETX/PN
Andre Engbrocks	EED/X/S
Torbjörn Engesvik	TN/ETX/XA
Johanna Englund	NA/EBC/EN
Ulf Engman	SÖ/EKA/K/PLL
Claus Engström	KI/ECS/S/QC
Niclas Engström	NA/EBC/EN
Stefan Engström	LM/ERA/Z
Susanna Engström	KI/ERA/AM
Ulf Engström	KI/ESB
Helena Engvall	KI/ERA/LRN
Ulf Enhager	NA/ERA/JR
Thomas Enocsson	SG/ERA/LZ
Mislav Erceg	ETK/P/EI
Nevzat Ercelik	ENK
Annika Ericson	GÖ/ETX/X
Göran Ericsson	MÖ/EMW/FM
Ina Ericsson	KI/ERA/AR
Karin Ericsson	VH/ETX/FE
Lotta Ericsson	MÖ/EMW/FN
Malena Ericsson	KI/ECS/TT
Mattias Ericsson	ÄS/UAB/K
Anna Erikson	HF/REM/F
Billy Eriksson	UM/EPL/X
Elenor Eriksson	GÄ/ERA/PG
Gunnar Eriksson	KA/EPK/DF
Hans Eriksson	NA/EBC/EN
Ingvar Eriksson	KI/ERA/LRN
Jan-Olov Eriksson	UM/EPL/R
Jeanette Eriksson	KI/ERA/EK
Kenneth Eriksson	KH/ERA/PK
Lars-Åke Eriksson	SÅ/EPL/X
Leif Eriksson	KI/ERA/AM
Magnus Eriksson	KL/ECS/CP
Marcus Eriksson	NA/EBC/EN
Mikael Eriksson	HF/REM/S
Mikael Eriksson	GÄ/ERA/PG
Monica Eriksson	KI/ERA/LZ
Patrik Eriksson	KI/ESB
Rachel Eriksson	ETL/XL/FDDC
Stefan Eriksson	GÄ/ERA/PG
Ulf Eriksson	KS/EIN/R/D
Ulrika Eriksson	KA/EPK/DT
Åsa Eriksson	HF/LME/DU
Ulf Erlandsson	SG/ERA/LP
Lars Erling	VH/EDT/B
Jouko Eskelinen	LMF/S/P
Teijo Eteläinen	MÖ/EMW/FP
Robert Evers	EMN
Lena Ewert	MÖ/EMW/FY
Christian Ewertz	KI/ECS/TT

F

Branko Fabijanic	ETK/P/ED
Anders Fagerström	KA/EPK/OR
Johan Fagerström	LMF/T/LV
Rickard Fahlander	KI/ECS/TT
Oskar Fajerson	HA/ERM/FX
Katrin Falk	GÄ/ERA/PG
Mats Falk	MÖ/EMW/FN
Stephan Falk	KL/ERA/PM
Susanne Falk	NA/EBC
Niels Falkenberg	LMD/M/TP
Kristina Falkner	ÄS/ETX/XT
Gerhard Fally	SEA/EIA
Golara Faridian-Anagh	EDD/KNS
Rebeka Farmand	KI/EKA/K
James Fazey	ETL/N/I
Anatoly Fedorov	ECR
Björn Fehrlund	KI/ECS/TT
Joachim Feldhoff	TO/EDT/B
Bengt-Olle Fellert	MA/ECS/FM
Henry Feng	KI/ERA/LD
Patrik Ferlenius	KI/ERA/LJ
Alfredo Fernandez	INE/P/OT
Montserrat Fernandez	EME
Per Ferngren	SL/EBC/GI
Cecilia Fernholm	TN/ETX/SA
Fernando Ferreras	EME
Cecilia Filipsson	SG/ERA/LZ
Aline Filosa	EMX/U/PD
Ayse Findikli	KI/ECS/TT
Katharina Fineman	KI/EKA/NM
Peter Finne	MÖ/EMW/FY
Gary Fitzgerald	EUS
Shay Fitzpatrick	ETL/XD/FG
Charlotte Fjelkner	KI/ERA/JM
Björn Fjellborg	KI/ERA/LRU
Knut Fjellheim	HI/ETO
Holger Flacksmeier	EED/N/GT
Christof Fleischmann	EED/N/BG
Norbert Fleischmann	EED
Jonas Flodin	MÖ/EMW/UA
Norbert Floeren	EED/U/TDC
Belinda Flood	ETL/XL/EEP
Björn Floodh	LMD/T/B
Lennart Florell	KS/EIN/D/X
Jonas Fogde	TN/ETX/PN
Joao Fole	SEP/DB
Gerhard Folz	EED/N/BG
Joakim Forsberg	SÅ/EPL/L
Karin Forsberg	SG/ERA/YO
Kjell Forsberg	ÄL/UAB/B
Ove Forsberg	KI/EKA/NY
Mattias Forslund	GÄ/ERA/PG
Pär Forslund	KI/ESB/D
Greger Forsman	ERJ/I/R
Kristina Forsman	KI/ERA/BR
Anders Forssen	KI/ERA/X
Åsa Fosshaug	KI/EKA/NL
Stuart Foster	ETL/VU/TPC
John Fowler	ETL/N/I
Joseph J. Frangipane	EMX/A/C
Anders Fransson	LM/ERA/ZD
Jenny Fransson	KI/ERA/LJ
Josko Franulic	ETK/P/PM
Johan Franzén	KI/ERA/XB
Lars Franzén	LI/ECS/CM
Stellan Franzén	LI/ECS/CM
Per Fredander	EUS/TAC
Tomas Fredberg	ÄL/UAB/B
Frank Frederking	EDD/D/K
Agne Fredriksson	KI/ERA/RX
Karin Fredriksson	KI/EKA/P
Lars Fredriksson	KI/ERA/LZ
Mikael Fredriksson	KH/ERA/PK
Thomas Freund	SEA/ESP
Cecilia Friberg	KH/ERA/PK
Nicklas Friberg	KI/ESB/D
Mikael Frick	TO/EDT/B
Magnus Frid	VY/ERA
Anna Fridh	ÄS/UAB/K
Martin Fridh	KA/EPK
Oliver Friedrich	EED
Tomas Frohm	KS/EIN/N
Enneth Frohman	ETC/YP/A
Johan Fröjd	KI/RSA/P
Erik Fröström	NY/ERA/PN
Magnus Furstenborg	SÅ/EPL/T
Mårten Fäldner	KI/RSA/P
Thomas Fältmark	KI/ERA/LY

G

Andreas Gaarder	NE/ETO
Jeanette Gabbitas	ETL/XL/P
Albert Gabriele	EPA/F/TS
Maria Gagliano	LMC
John Gagnerud	SG/ERA/LP
Bertil Gahnström	VY/ERA/PV
Uwe Galepp	SL/ETX/PN
	OATK
Sandra Gallant	LMC/BD
Maria Galut	ERJ
Weldon Gammon	EUS
Kai Gamper	HF/ETX/R/G
G Ganesh	TKU/GSM/AXE
Marylin Ganstedt	LM/ERA/Z
Massimo Garaffa	ETL/L/LDL
Efraim Garcia	REE/RO
Pablo Garcia-Munoz Salvador	VK/EHS/X
Garcia-Rosado	INE/P/OT
Jacques Gaudy	MET/I/IN
Markus Gauffin	KK/ETX/U
Thomas Gauffin	GÄ/ERA/PG
John Geddis	KI/ERA/LRN
David Gentry	EUS/R
Tsoumbelis George	IXG/DE
Ola Georgsson	VY/ERA/PV
Frank Geraghty	ETL/XL/P
Andreas Gerle	EED/N/BT
Robert-Jan Gerrits	ETL/GU/JP
Mattias Gidlund	HF/ETX/PN
Peter Giesselink	EMN/A/DD
Lars Gillberg	HF/ETX/X
Soheir Girgis	TN/ETX/XA
Mikael Glans	HA/ERM/M
Annika Gleerup	MV/PRS/TQ
Daniel Glendor	SG/ERA/YA
Bruno Gobeil	LMC/SD
Kristina Gold	KI/ECS
David Goldman	EMX/C/P
Peter Gomez	KI/ERA/T
Constantino Gómez	EME/
Siamak Goodarzi	KI/RSA/N
Peter Goodings	KI/ECS
Pieter Goosen	ESA/R/X
Daniel Gormanns-Ebenthal	EED/U/TV
Dharmesh Goshalia	ESA/R/M
Jesper Goudoulakis	KA/EPK/DK
Thomas Graan	KK/EKA/K
Michael Grady	ERJ/D/ON
Birgitta Graetsch	KI/ERA/AR
Stefan Grahn	KI/EKA/K
Lena Granath	KI/EKA/N
Anders Granbom	IK/ETX/ST
Catarina Granell-Hagsten	KI/ERA/LRD
Gabriella Granfors	EED/U/OQ
Lars Grankvist	KI/ERA/LRN
Monica Granlund	SÖ/EKA/K
Petra Granlund	TN/ETX/PN
Katarina Granstedt	KI/ECS/M
Michael Granström	MÖ/EMW
John Grant	ETL/XD/BKC
Ingebjörg Gravlien	NE/ETO/O
Fredrik Greberg	ÄS/UAB/K
Kurt Grebner	KI/ERA/LF
Wiveca Green	MV/ETX/TK
Anita Greger-Stålbrink	VH/EDT/I
Sonia Gregoire	LMC/P
Bozidar Gregoric	ETK/D/B
Lee Griffin	EUS
Steve Griffiths	ETL/XD/DL
Randolf Grimsmo	KI/ECS
Ulf Gronert	KS/EIN/R/S
Kim Grossmann	LMD/TX/XM
Vazma Grskovic	ETK
Johan Grufman	ÄL/EDT/N
Norbert Grund	EDD/K/NF
Andreas Grundsell	KI/ERA/P
Janusz Grygierczyk	EPO/D
Staffan Grönberg	KI/ESB/D
Jennifer Gröndal-Andersson	NP/ENG/G
Mats Grönlund	HF/REM/B
Per-Eric Grönlund	GÄ/ERA/PG
Vasiliy Gudzenko	ECR/XO
Roland Guillou	LMF/L
Susse Guldager	LMD/O/KL
Jesper Gullberg	GÄ/ERA/PGX
Alfred Gunacker	SEA/ESP
Claes Gunnarson	SG/EBC
Mikael Gunnarson	MÖ/EHS/LG
Cenneth Gunnarsson	KI/ERA/J
Charlotte Gunnarsson	KA/EPK/MS
Magnus Gunnarsson	HF/ETX/PN
Sofia Gunnarsson	KI/ECS/TT
Conny Gunnth	NA/EBC/EN
Joanna Guo	ENC
Benny Gustafson	KI/RSA/P
Jerker Gustafsson	KI/ERA/P
Johanna Gustafsson	SG/ETX/PN
Mats Gustafsson	ERJ/F/IC
Mats Gustafsson	UM/EPL/X
Nils Gustafsson	SL/EBC/EN
Tomas Gustafsson	KI/ERA/AP
Ann Gustafsson Sjöö	KS/EIN/S
Mats Gustavson	NY/ERA/PN
Björn Gustavsson	KI/ECS/S
Eine Gustavsson	GÄ/ERA/PG
Johan Gustavsson	KL/ECS/CL
Jonas Gustavsson	NY/ETX/PN
Michael Guste	KI/RSA/P
Bernt Gustin	KI/ERA/LYQ
Birger Gustring	KI/ECS/TT
Ylva Gutke	NA/EBC/EN
Kerri Gwinn	EUS/C
Kenneth Gylling	NY/ERA/PN
Halit Günes	ENK/PC
Stefan Göstasson	TO/EDT/I
Martin Götze	TN/ETX/PN

H

Arnt Haaland	ETO/T/D/L
Karin-Anne Habberstad	MÖ/EHS/LF
Stefan Habegger	XHA/EAS/NOP
Dragica Habijan	KH/ERA/PK
Werner Hack	EED
Tore Haeg	KI/EIN/P
Maz Hafeez	OML/TERM/PRO
Petter Hagander	HF/LME/TK
Maria Hagdahl	ÄS/UAB/K
Fredrik Hagenblad	NA/EBC/SRM
John Hagerbonn	KI/ERA/AR
Claes Haglund	ERJ/EHK/XO
Mikael Haglund	ÄL/EDT/N/KF
Per Hagman	KI/ERA/AR
Peter Hagström	ERJ/I/R
Ulf Hagström	KI/ERA/LA
Farhad Hajiakbar	TKF
Patrik Hall	KA/EPK/FQX
Paul-Petri Hallanoro	LMF/T/SV
Fredrik Hallberg	MÖ/EMW/RT
Joakim Hallberg	KI/ERA/X
Knut Halldal	UM/EPL/X
Mats Hallefors	SÅ/EPL/T/TT
Helmut Haller	SG/REM/O
Rune Halvorsen	HI/ETO/X
Jonas Hamberg	KI/RSA/Y
Armin Hamidovic	ETK/D/N
Terry Hamilton	LMC/BD-S
Peter Hammarlund	ÄL/ETX/PN
Mats Hammarstam	LMC/NI
Ben Hammarsten	LM/ERA/Z
Urban Hammarström	NA/EBC/FSE
Michael Hamrén	KI/ERA/LA
Hans Hamrin	NA/EBC
Annie Han	ETC/M/U
Gönül Hancer	ENK
Chu Han-Chul	KI/ERA/LD
Evie Handrinou	ETG/P/P
Zaki Hanna	EPA/G/EIS
Clive Hannon	LMI/PU
Annika Hansen	KL/ECS/CIP
Erik Hansen	LMD/T/KI
Ingela Hansen	EAS/NOM
Marianne Hansen	KI/ERA/LG
Olof Hansen	SU/ERM/FR
Fredrik Hansén	HF/ETX/FBO
Benoit Hanssen	EMN/B/A
Anna Hansson	TO/EDT/B
Björn Hansson	VY/ERA/PV
Charlotta Hansson	EED
Håkan Hansson	KI/EKA/NM
Lars-G Hansson	KI/ERA/PK
Magdalena Hansson	LMC/UM
Martin Hansson	ÖS/UAB/N
Mickael Hansson	KI/ERA/AR
Mikael Hansson	HF/ETX/SA
Per Hansson	SG/ERA/LZ
Takashi Harada	ERJ/I/R
Anna-Lena Haraldsson	KI/ESB/D
Steve Hardaway	EUS/RD/B
Jonatan Harden	ETL/Z/PC
Petrus Hardianto	EMX/C/P
Tiffany Hardwick	ESA
John Hargrave	EPA/R/O
Willem Jan Hart	ETM
Johan Hartman	KI/ERA/LV
Yvonne Hartman	KS/ETX/X
Roger Hartonen	HI/ETO/O
Maria Hasselrot	VH/ETX/L
Britta Hassler	HF/ETX/R
Martin Hassler	KI/EKA/NY
Babak Hatamian	KI/ECS/TT
Pekka Hautala	KI/ECS/TT
Zdenek Havelka	ETK/D/C
Anna Hawkins	EUS
Richard He	ETC/ETC/S
Helmut Hechler	EED/N/BG
Cay Hedberg	TO/EDT/B
Stefan Hedberg	KI/ERA/LRN
Patrik Hedengren	TB/ETX/PN
Urban Hedeås	KS/EIN/I
Heléne Hedin	ÄS/UAB/K
Anders Hedlund	SÅ/EPL/T
Jan Hedlund	HF/REM/
Kjell E. Hedlund	NY/ETX/N
Mats Hedlund	KS/EIN/Q
Jan-Olof Hedman	NY/ERA/PNO
Ulrika Hedman	ÄS/UAB/R
Magnus Hedner	EUS
Anette Hedström	GÄ/ERA/PG
Conny Heed	GÄ/ERA/RP
Kees Heessels	ETM
Michael Hegg	KI/ERA/NB
Roger Hegg	KI/ERA/AR
Schahla Heidari	KI/ECS/TT
Annika Heidemann	LMD/T/P
Reijo Heikkilä	MÖ/EMW/SM
Robert Heimdahl	GÄ/ERA/PG
Peter Heindl	SEA/TGD
Jakob Heinemann	LM/ESB/D
Jan Heinonen	LMF/T/XVP
Klas Helgesson	ÄS/UAB/K
Nell Hellberg	KI/ERA/AR
Jonas Helledaij	VY/ERA/PV
Anne Hellevik	TN/ETX/PN
Joakim Hellgren	HF/ETX/PN
Jonas Hellgren	GÄ/ERA/PG
Göran Hellman	KI/ERA/LN
Lasse Hellman	SL/EBC/ZT
Tina Hellman	LMF/T/LP
Åsa Hellman	KI/ERA/LY/E
Cecilia Hellstadius	KI/ERA/AM
Juha Hellsten	LMF/T/Z
Maria Hellsten	EUS/R
Thomas Hellstern	EDD/K/NB
Per Helmersson	KI/ERA/LRN
Åke Helsén	ÄS/UAB/K
Stig Hemström	KI/ERA/LJ
Thomas Henke	EED/E/XP
Kristoffer Henningsson	NA/EBC/EN
Emil Henriksson	SL/EBC/GI
Jeanette Henriksson	TN/ETX/XA
Frank Henschke	KI/ERA/LI
Torsten Henschke	EED/X/T
Albert Henzen	ERH/N/TA
Christian Herbertsson	KL/ECS/CP
Anders Hermanson	KI/ETX/PN
Anna Hermansson	KS/ETX
Micael Hermansson	MÖ/EMW/FN
Peter Herngren	TN/ETX/XA
Jean-Francois Heroux	TN/ETX/PN
Per-Olof Hertegren	KI/ERA/LRD
Joachim Hesse	EED/N/N/BG
Johannes Heussen	EDD/R/ODC
Klas-Urban Hilberth	SL/EBC/PN
Patrick Hillberg	GÄ/ERA/PG
André Hilmer	HF/ETX/FBK
Per Hilmo	KK/ETX/B
Salvador Hinarejos	EME
Daren Hinchliffe	ERJ/H/O
Claes Hindemith	KL/ECS/CIP
Mike Hindmarsh	ETL/XL/ED
Robin Hinkle	EUS/D
Toshi Hirabayashi	ERJ/V/T
Annikki Hirn	SL/ECA/N
Henrik Hjort	KI/ERA/LVR
Jerry Ho	EMX/KL
Andrew Hoare	OML/INF/ENG
Michael Hockauf	LMD/T/P
Karl-Georg Hocks	EDD/K/G
Janet Hodges	EUS
Simon Hodgoon	ETL/D/P
Gerd Hoenemann	ETC
Christiaan Hol	ETM/LSS
Zsuzsanna Hollosy	ETH/NP
Charlotta Holm	VR/EBC/RY
Carl-Johan Holmberg	ÄS/UAB/R
Gregor Holmberg	KI/ECS
Jan Holmberg	KI/RSA/P
Mårten Holmberg	KA/EPK/NE
Peter Holmertz	ETC/YP
Tony Holmgren	KI/RSA/P
Lars Holmquist	SU/ERM/FR
Jonas Holmqvist	KI/ERA/LG
Anders Holmring	KI/ERA/LVN
Bo Holmström	KI/ERA/LRN
Gerard Hoogendijk	EMN/B/D
Stjepan Horvatic	ETK/P/P
Anne-Lee Horwitz	SG/ERA/LZ
Airlie Houldsworth	ETL/XD/BP
Jan Hovare	KI/ERA/AR
Jon Howden	ETL/GU/TPC
Gavin Howell	ESA
Anna Hrdlicka	ÄS/UAB/K
Li Huacheng	ETC/BMC/O
Vivian Huang	ETC/ETC/S
Mike Hughes	NA/EBC
Jouko Huhtala	LMF/T/LG
Gong Hui	ETC/XN
Wang Hui	ENC
Kerstin Huldén	KI/ERA/AF
Darko Huljenic	ETK/D/T
Stefan Hult	LD/ECS/TB
Jonas Hultberg	TN/ETX/PN
Bengt-Olof Hultman	TN/ETX/PN
Mats Hultman	SG/ERA/LO
Hans Hultqvist	VH/EDT/BE
Jari Hussi	LMF/T/K
Öyvind Huus	KI/ERA/AM
Thi Kim Chi Huynh	LMC/EI
Halina Hylander-Tureniec	ÄS/UAB/K
Pär Hylback	ÖS/UAB/I
Annica Hyyrynen	KI/ERA/LRO
Anders Håkans	KI/ECS/TT
Johan Håkansson	KI/RSA/P
Sofia Håkansson	KI/ERA/LY
Sven Hålling	KI/ERA/LF
Martin Hägerdal	KI/ERA/JR
Johan Hägg	KA/EPK/DR
Lennart Hägglund	KI/ECS/TT
Mikael Hällström	MG/ETX/PN
Magnus Händel	ENG
Valto Hänninen	LMF/T/TM
Kerstin Häägg	KI/ECS/TTS
Jonas Högberg	ERJ
Mattias Högdahl	UM/EPL/R
Greger Höglund	LM/ERA/ZD
Patrik Höglund	KI/ECS/TT
Clas Högvall	UM/EPL/X
Mats Höjbrandt	KI/ERA/AR
Erica Höjer	KI/ERA/AP
Claes-Göran Hörnqvist	KI/ECS/TT

I

Giuseppe Ieva	TEI/CM
Göran Ihrefjord	KI/ERA/JT
Laila Ihrefjord	KI/ERA/AR
Anders Ingels	KI/ERA/JT
Iréne Ingvarsson	KL/ECS/CL
Anders Innala	LU/EPL/R
Dinas Ioannis	IXG/DE
Göran Isacsson	MÖ/EMW/FQC
Michael Isberg	KI/ECS/TT
Mohammad-Ali Islamian	KI/EKA/K
Jonas Isoalho	KL/ECS/CL
Alexander Ivakhov	ECR/I
Goran Ivancic	ETK/P/B
Tomislav Ivankovic	ETK/D/C
Tommy Ivarsson	MÖ/EMW/SM
Lovorka Ivce	ETK/P/PT
Sathish Iyengar	EPA/O/BE

J

Eva Jacobson	KI/ECS/TT
Adam Jacobsson	KI/EKA/NR
Eva Jacobsson	KA/EPK/DF
Rolf Jacobsson	MG/ETX/X
Frank Jacono	EMX/C/X
Sascha Jaeger	EED
Saeid Jafari	ÄS/UAB/K
Gerd Jahns	EDD/K/NP
Nina Jaki	ÄS/UAB/P
Kenneth Jakobsson	VY/ERA/PV
Renier Jamieson	ESA/O/IP
Goranka Jankovic-Ramljak	ETK/P/PM
Thawat Janpatanasit	ECT
Bart Jansen	ETM
Bernt Jansson	KI/ERA/LU
Catrin Jansson	GÄ/ERA/PGQA
Monica Jansson	ÄV/ETX/DN
Carina Jareblom	ÄL/ETX/PN
Susanne Jarl	KI/ERA/LY
Aho Jarmo	LMF/C/STK
Josef Jaroudi	KI/EKA/K
Christina Jarreby-Andersson	MÖ/ETX/A
Karsten Jaschultowski	EDD/FZ/T
Srikanth Jayaraman	EUS/RD/VP
Anna Jensen	KS/ETX/PN
Peter Jentsch	EED/N/BT
Tina Jeppesen	TN/ETX/PN
Anna Jernryd	GÖ/EGS/T
Ling Jiang	ETC/Y
Kristina Jidne	KI/ERA/LRN
Thomas Jilek	SEA/ESS
Guo Jing	ENC/S/L
Zhang Jingyu	ENC
Frank Jira	EED
Lennart Johannesson	KS/EIN/D
Magnus Johannesson	KI/RSA/P
Niclas Johannesson	VR/EBC/RY
Anders Johansson	IK/ETX/ST
Anders Johansson	KI/EKA/NY
Annika Johansson	KI/ECS/
Anthony Johansson	KA/EPK/OT
Björn Johansson	ETC/YP/A
Bo Johansson	KI/ESB
Christina Johansson	KI/ERA/LRN
Henrik Johansson	KI/EKA/NR
Jan-Ove Johansson	ENC/O/P
Jörgen Johansson	ÄL/EDT/L
Kennet Johansson	ÖS/UAB/I
Kjell Johansson	ÄL/ETX/PN
Kristina Johansson	LM/ERA/ZD
Lars-Gunnar Johansson	MÖ/EMW/SP
Lennart Johansson	KI/ECS/TT
Maria Johansson	MÖ/EMW/SM
Mats Johansson	TO/EDT/B
Nils-Erik Johansson	SG/ERA/LP
Olof Johansson	BS/EMW/SP
Ove Johansson	KA/EPK/DK
Peter Johansson	KA/EPK/DT
Stefan Johansson	KI/ECS
Susanne Johansson	ÄS/UAB/X/H
Sven-Erik Johansson	TN/ETX/XA/KA
Sören Johansson	MV/ETX/PN
Torbjörn Johansson	MÖ/EHS/AI
Tove Johansson	TO/EDT/B
Ulf Johansson	MÖ/EHS/SKN
Urban Johansson-Hagström	HF/REM/B
Mike Johnson	OML/ENG
Trevor Johnson	ETL/XD/FL
Chris Johnston	ETL/RNR
Annik Joly	LMC/N/XA
Tarek Jomaa	EML/DT/S
Kjell Jonasson	LM/ESB/D
Lars Jonasson	KI/ECS/TT
Stefan Jonasson	KH/ERA/PK
Anders Jonsson	MÖ/EMW/KI
Britt-Marie Jonsson	GÄ/ERA/PG
Jonas Jonsson	TB/ETX/PN
Patrik Jonsson	UM/EPL/X
Per-Ivar Jonsson	MÖ/EMW/FN
Stefan Jonsson	KI/EKA/N
Stefan Jonsson	SÖ/EKA/K
Charlotte Josefsson	KA/EPK/DT
Reine Josefsson	KI/RSA/N
David Jost	SG/ERA/LP
Einar Jung	KI/ERA/XB
Ingvar Jungenäs	KI/ECS/TT
Harald Junker	REE/RO/P
Ante Juretic	ETK/D/D
Raimo Jylhä	KI/ERA/LRN
Ann-Christin Jäderholm	KI/ERA/JJ
Stefan Jäggi	XHA/EAS/NOP
Nicklas Järelöw	KA/EPK/OR
Anders Järnbo	KA/EPK/OI
Mikael Jönsson	HF/TSS
Henning Jörgensen	LI/ECS/CM
Jesper Jörgensen	LMD/O/ZF

K

Annelie Kaarlenkaski	NY/ERA/PN
Wu Kaidong	ENC
Tom Kajander	LMF/T/LP
Tea Kajba	ETK/P/ED
Marija Kalacic	ETK/P/P
Björn Kalderén	KI/ECS/B
Theo Kallimanis	IXG/DO
Kirsti Kallio	LMF/T/TM
Stanislav Kalman	ETK/P/D
Anne Kalmer	EED/N/N
Karin Kalmerström	KI/ERA/AM
Annica Kandelin	KI/ERA/X
Mikael Kaneteg	ETC/BMC/PSC
Päivi Kangas	LMF/T/MT
Martin Kanka	NA/EBC/EN
Dionysis Kantas	IXG/DG
Kati Kanya	ETH/S/O
George Kapetanakis	ETG/O/TC
Per Kapfält	TN/ETX/PN
Maria Karandina	ECR/T
Dimitris Karaoulanis	ETG/P
Carsten Karas-Jensen	LMD/TX/PP
Bosse Karboub	ERJ
Anders Kardborn	MÖ/EHS/S
Nader Kardouni	KI/ERA/LRO
Ann-Marie Karjala	LMF/T/LP
Ingrid Karlmar	KI/ECS/TT
Rune Karlsen	ETO/T/D
Anders Karlsson	GÖ/ETX/A
Ann-Christine Karlsson	KI/ERA/LG
Britt-Inger Karlsson	KL/ECS/CP
Ebbe Karlsson	KA/EPK/NE
Fredrik Karlsson	HF/ETX/PN
Ingemar Karlsson	KI/EKA/NY
Jörgen Karlsson	VY/ERA/PV
Kjell-Ingvar Karlsson	KI/ERA/LU
Magnus Karlsson	VY/ERA/PV
Martin Karlsson	KI/RSA/P
Mikael Karlsson	KI/ERA/LZ
Per Karlsson	ENG/M
Peter Karlsson	LI/ECS/CM
Pierre Karlsson	KH/ERA/PK
Tomas Karlsson	ÄS/UAB/K
Ulrika Karlsson	LI/ECS/CM
Åke Karlsson	NY/ERA/PN
Hanna Karlström	LM/ERA/Z
Lars Karlström	KI/ERA/XB
Mikael Karlström	TB/ETX/PN
Peter Karlström	KL/ECS/CIP
Vitaly Karmanov	ECR/MX
Peter Karnatz	GÄ/ERA/PG
Yuko Karube	ERJ
Nantana Kasornsuwan	ECT/RM
Ann-Marie Kassmo	KI/ERA/LG
Risto Kastarinen	KI/ERA/LRU
Sari Kastinen	LMF/T/K
Kent Kastman	SG/ERA/LP
Yianis Katsenos	IXG/DG
Akira Kawada	ERJ/O
Patrick Keating	LMC
Åsa Kellberg	KI/ERA/AR
Jouni Kemppainen	LMF/T/FF
Jeff Kendrick	EUS/C
Linda Kene	KI/ERA/XB
Juerge Kern	EED/N/BG
Mikael Kesti	KI/ERA/LA
Behjat Khalifeh	SG/ERA/LP
Nasrin Khani	EMX/V/P
Tuan Khieu	LMC/SM/T
Mansour Khorram-nezhad	KI/ECS/TT
Leena Kianen	LMF/T/SR
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Ulrika Kihlberg	LM/ERA/ZD
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Britt-Marie Pettersson KI/ERM/FM
Elisabeth Pettersson NA/EBC
Jan-Erik Pettersson GÄ/ERA/PN
Kjell Pettersson KI/ERA/AM
Kristine Pettersson SL/EBC/ZD
Lena Pettersson KI/EKA/N
Mats Pettersson KI/ERA/JT
Ola Pettersson KI/ERA/JT
Sven Pettersson KI/ECS/TT
Åsa Pettersson KL/ERA/PM
Mats Pettersson Elffors SU/ERM/FR
Vladimir Pevek ETK/P/PM
Siamak Peykarimah LMD/T/KB
Marlies Pfister XHA/NXDI5
Michael Philipp EED/N/BG
Pagorn Phimolsri ECT
Christophe Pialot KI/ERA/AX
Hans Piet ESA
Mattias Pihlström ENG/B
Jarkko Piirto LMF/T/MP
Ted Pimbblet KI/ECS
Robert Pinard LMC
Robert Pinojtic ETK/D/N
Chaiyot Piriyakulkit ECT
Steve Pitts EPA/TU/MEL
Elisabet Plate HF/ETX/P
Lena Plogby KI/ECS/TT
Supatthra Pluemyart ECT
Attila Pocsai ETH/ROG
Robert Pollak SEA/EPVP
Chucheep Pongkungsananan ECT
Jan Pontéus KI/ECS/TT
Joyce Pope LMC/MV
Zeljko Popovic ETK/P/D
Michael Porsbo LMD
Emanuela Possanzini TEI/XC
Birgit Postol ÄL/UAB/X
Stephen Powell EEI/RA
Marina Prager ETK/D/T
Magnus Prebert KI/ERA/AR
Stefan Preiss EED/N/N
Kye Prigg ERJ/V/T
Karl Pristovnik SEA/TB/ME
Ivan Prokofiev ECR/P/OP
Francois Prud'Homme LMC/MV-C
Somboon Prukpri-padung ECT
Antti Pudas LMF/T/XG
Thomas Pütz EDD/K/NP

Q

Richard Qi Jian ETC/NP
James Qian Jian ETC/RL
Jiang Qiang ENC
Liu Quan ENC
Eduardo Quezada KI/EKA/LJ
Emilio Quiroga EME/MG
Anneli Qvarfordt TN/ETX/PN
Ann Qvigstad KH/ERA/PK
Camilla Qvist LI/ECS/CM

R

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Fredrik Radencrantz ENO/R
Monther Radwan EUS/HFID
Georg Raeder ETO/T/O/A
Anna Ragnarsson KL/ECS/CIP
Johan Ragnarsson ÄS/ETX/PN
Mats Ragnarsson MÖ/EMW/FN
Magnus Ragneberg SÅ/EPL/L
Fredrik Rahme KI/ERA/AR
Kenneth Rains KI/ERA/LK
Jan Rajwer KI/ERA/AL
Martin Ramqvist KI/EKA/NY
Krister Ranlind TO/EDT/L
Ikka Ranta GÄ/ERA/PG
Johanna Ranta LMF/T/L
Lone Rasmussen LMD/T/KB
Mike Ratcliffe EID/X/F
Annalena Ravelid KA/EPK/NS
Daniel Rawlingson ETL
Elizabeth Rawlinson KI/ERA/AF
Jacques Raynauld LMC
Oleg Redkin *ECR*
Robert Regnier LMC/EID
Ronnie Rehn NY/ERA/PN
Johan Reis MÖ/EMW/UA
Barbara Reisner EED/X/P
Leif Relbe MÖ/EMW/FY
Antoon Reniers ETM/OB
Annica Renqvist HF/TSS
Bo Repfennig HF/ETX/R
Rasool Reyahi KI/ERA/LRN
Azim Rezaei KI/ECS/TT
Larry Richards ERJ/D/SC
Sally Richards ETL
Anders Rickard KI/RSA/P
Maria Rickardsson KI/ERA/JT
Sven Riddarström SG/REM/O
Erik Ridderby KA/EPK/MS
Sven Riis-Klausen LMD/O/L
Jim Rimby LM/ERA/Z
Anders Rinaldo KA/EPK/DZ
Anders Ringquist LM/ERA/Z
Helena Ringström GÄ/ERA/PG
Jeb Riordan EID/F/PC
Jose Rios TIM/YM
Peter Ritzen ETM
Marie-Helen Robert LMC
Marcia Robertson ETL/XL/EEP
Erik Robsarve VY/ERA/PV
Matthias Rodermann EDD/R/OX
Jose Rodríguez *EUS/R*
Elsy Rodríguez KI/ERA/AM
Bianca Roeleveld REE/RB
Sven Rogdahl ÄS/UAB/K
Nives Rogulja ETK/P/EI
Karin Roijer TO/EDT/R
Kimberley Rokas LMC/T
Ana Roldan EME
Peter Roman KK/EKA/K
Julian Romero EME
Marcos H. Romero EUS/XT/DP
Esbjörn Roos ÄL/UAB/X
Ulf Rosberg KI/ERA/JR
Bertil Rosenqvist MG/ETX/X
Anders Rosqvist HF/REM/B
Karl-Erik Rosvall KI/ERA/AR
Ali Rouhani KI/ECS
Suzanne Routhier LMC/TD
Barbara Roy LMC/J
Sylvie Roy LMC/SM
Harald Rudell SG/ERA/LP
Bo Rudemalm KI/ERA/LJ
Christine Rudolph EDD/R/TI
Lars-Gunnar Rughaven BS/EMW/SP
Weng Rui ENC/S/TE
Jos Ruiters SG/ERA/YF
Andreas Russ SEA/K
Mikael Russberg KI/RSA/P

Danny Russell	EUS/R
Franco Russo	LMC
Olof Ruthström	TO/EDT/R
Björn Rydell	MG/ETX/PN
Christina Ryman	KI/ERA/LG
Mikael Ryrberg	KI/ERA/LVN
John Ryves	OML/INF/MAN
Lena Råberger	KI/ERA/AX
Dan Rådström	VY/ERA/PV
Jens Rögen	XHA/NXPB3
Anders Rönnbäck	LU/EPL/R
Barbro Rönnfors	TO/EDT/B
Elisabet Rönngren	KI/ERA/RX
Anna Rönning	KL/ERA/PM

S

Anders Saadio	SÅ/EPL/X
Raimo Saarinen	KI/ERA/LRD
Zdenko Sabo	ETK/P/EI
Christina Sagersten	GÄ/ERA/PG
Maria Sahlberg	KA/EPK/NS
Margo Sahlén	TN/ETX/XA
Anna Sahlin	KI/ERA/JT
Braulio Salinas	KI/ERA/LJ
Pierre Salomon	KA/EPK/MS
Bahram Samadani	ÄL/UAB/B
Juhani Sammalisto	GÄ/ERA/PG
Bill Samrai	LMC
Krister Samuelson	KI/ERA/LV
Angelica Samuelsson	ECR
Magnus Samuelsson	KA/EPK/MP
Monika Samuelsson	KI/ERA/AM
Sandro Samuelsson	ÄS/UAB/K
Claes-Göran Sandberg	KI/ERA/NZ
Elisabeth Sandberg	KI/ERA/JM
Ewa Sandberg	SG/ERA/LZ
Magnus Sandberg	GÄ/ERA/PG
Tony Sandberg	KI/ERA/JM
Jörgen Sandegård	KA/EPK/NE
Peder Sandelin	KI/ERA/LRN
Lars Sandelius	TB/ETX/SA
Robert Sandgren	KI/ERA/JT
Kia Sandqvist	KI/ERA/LG
Björn Sandström	KI/ERA/LK
Bo Sandström	TO/EDT/B
Jean Santirosi	LMC/NS
Jani Sarajärvi	KH/ERA/PK
Ioannis Sarantopoulos	IXG/DO
Jahanzeb Sarfraz	ECP/T/TC
Dinko Saric	ETK/D/C
Barbro Sartz	KL/ECS/CP
Suwat Satthaporn	ECT
Stefan Sattler	EED/N/BG
Duncan Savage	EPA/G/MEL
Richard Savage	TN/ETX/PN
Shalini Savander	ÖS/UAB/N
Ekaterina Savina	ECR/LP
René Saxell	LMF/S/P
Bernd Schaller	EED
Christer Schavon	GÄ/ERA/PG
Leif-M.Schellhorn	ETO/X/P
Thomas Schlegel	EDD/KN/P
Armin Schlereth	EED/N/N
Benjamin Schlup	XHA/NXPS2
Henrik Schmidt	EID/O/F
Jonas Schmidt	SG/ERA/LZ
Lennart Schmidt	NA/EBC
Mikaela Schmidt	TO/EDT/B
Andreas Schmitt	EED
Erwin Schomburg	EDD/N/N
Vinzenz Schreiner	EDD/L/KF
Pieter Jan Schrieken	EMN/B/P
Christine Schröder	KA/EPK/NF
Jos Schulte	EMN/A/DD
Klaus Schulz	EDD/K/B
Jonas Schulze	ENG/M
Claes Schumann	KI/ECS/TT
Patrick Schweitzer	ETO/T/O
Helena Schytt	KI/ERA/X
Anette Schött	KI/ERA/LRU
Martin Segerfeldt	KI/RSA/P
Rickard Segerstedt	SÅ/EPL/X
Helena Sehlstedt	KI/EKA/NL
Junji Sekine	ERJ/V/NR
Yasemin Selim	ENK/RS/O
Michael Selin	KI/ERA/LN
Norbert Sené	ETL/NR/P
Boris Sepec	ETK/P/PM
Jarmo Seppä	NY/ERA/PN
Ove Setterlund	TO/EDT/R
Carina Seven	MÖ/EMW/SR
Rune Sevik	HI/ETO/X
Alexander Seyf	HF/ETX/PN
Andrey Shadrov	ECR/ROP
Phil Shanley	KI/ECS
Hu Shanmu	ETC/XT
Chris Sharp	ETL/XD/PD
Julia Sheslavskya	ECR/ROP
Yukari Shibuya	ERJ
Mohammed Shrouf	SG/ERA/LP
Olga Shscherbakova	ECR/ROP
Zhi Shuhua	ENC
Yuji Shuto	ERJ/T/J
Björn Sidén	KI/RSA/P
Susanne Sigfridsson	NA/EBC/EN
Stefan Sigvald	ÄS/UAB/K
Evert Silder	GÄ/ERA/TPN
Mikael Silver	GÄ/ERA/PG
Dusko Simac	ETK/D/S
Silvana Simic	ETK/P/B
Tarja Sinervo	VH/ETX/FE
Martin Sines	TB/ETX/X
Mohan Singh	ETL/NT/DSC
Igor Sinovcic	ETK/D/S
Astrid Sjöberg	KI/ERA/AR
Christer Sjöberg	EUS
Jonas Sjöberg	SG/ERA/LZ
Martin Sjöberg	ETC
Mikael Sjöberg	MÖ/EMW/UR
Naoko Sjöberg	NRJ/N/P
Ulf Sjöberg	KI/ERA/NT
Johan Sjöblom	LMF
Anna Sjöcrona	MÖ/EMW/RT
Gösta Sjödin	ÖS/UAB/N
Mats Sjögren	KI/ECS/TT
Ingemar Sjöholm	MÖ/EHS/SKN
Christian Sjöqvist	TN/ETX
Filippa Sjöstrand	KI/RSA/P
Per Sjöstrand	ERJ/I/M
Hans Sjöström	SL/EBC/EN
Thomas Skaarup	LMD/T/PP
Didrik Skantze	HF/ETX/R
Gani Skepi	KI/ERA/LVN
Ivica Skiljo	ETK/D/S
Henrik Skoglund	SÖ/EKA/K
Lennart Skoglund	KI/ECS/TT
Olle Skoog	KI/ESB
Johan Sköld	KI/ERA/LK
Erika Sladius	KI/ECS/S
Elena Sloutski	KI/ERA/AM
Karin Smedmark	KI/ERA/LY
Robert Smietana	EED
Piet Smits	ETM/OPK
Tom Snyder	EUS
Göran Snygg	MÖ/EMW/UA
Giovanni Sois	KK/ETX/B
Mark Solari	LMC/OSP
Erika Soleimani	EED/X/PD
Dag Solhaug	KS/EIN/N
Marie Sollén	LM/ERA/ZD
Klaus Sollner	EED/N/XY
Janos Solymos	ETH/S/O
Torbjörn Sonning	UM/EPL/X
Olof Sootalu	KA/EPK/NK
Lennart Spangenberg	SG/ERA/YB
Ivica Spanic	ETK/P/D
Thomas Sparrmo	NA/EBC/EN
Jonathan D. Spellman	EPA/G/MEL
Charlotte Sperling	KS/ETX/PN
Gordana Spoljar	ETK/D/N
Erik Sprängare	ECR
Agis Spyropoulus	IXG/DE
Joakim Staberg	KS/ETX/X
Michael Stadig	BS/EMW/SP
Fred Stainkrycer	MET/R/I/P
Tomas Stanek	MÖ/EMW/FN
Antonis Stavroulakis	IXG/DG
Eduard Stefanic	ETK/D/N
Gro Steffensen	KI/RSA/P
David Stegmann	EAS
Jonas Steinhauf	ÄS/UAB/B
Maria Stenborg	GÄ/ERA/TPN
Tommy Stendahl	KA/EPK/DZ
Mikael Stenelund	TN/ETX/PN
Susanne Stenman	SG/REM/O
Johan Stenmark	HF/REM/N
Joakim Stenqvist	KA/EPK/NE
Paul Stephansson	KI/EKA/ND
Inga Sternak-Popocovski	ETK/D/D
Eric Sterner	EED/E/DP
Gert Stillborn	ETC/NP/C
Lena Stjärnkvist	SG/ERA/LZ
Göran Strandberg	KS/EIN/N
Henrik Strandberg	LM/ESB/D
Kim Strandberg	VY/ERA/PV
Mats Strandhagen	MÖ/EMW/FN
Janis Straume	ÄL/EDT/B
Klaus Strauss	EED
Nigel Straw	EML/NPI
Anke Strick	EDD
Johan Strid	KA/EPK/TF
Rune Stroemmen	ETO/T/D
Torkel Strähle	SG/ERA/LP
Hans Ström	KA/EPK/DF
Magnus Ström	MÖ/EMW/FN
Mikael Ström	TN/ETX/XA
Kristina Ström Mobrin	SG/REM/O
Anna Strömberg	KI/ERA/LK
Laila Strömberg	KS/EIN/N
Markus Studer	XHA/NXPN4
Pernilla Sturve	NA/EBC/EN
Lars Stål	TB/ETX/X
Tommy Sun	ZE/ETC/SM
Johan Sundberg	VY/ERA/PV
Jonas Sundborg	KI/ERA/UX
Benny Sundgren	SL/EBC/Z
Ulf Sundgren	SÖ/EKA/K
Ulrika Sundholm	KS/ETX/PN
Lars-Gunnar Sundin	MÖ/EMW/SM
Hans Sundling	GÄ/ERA/PG
Mårten Sundling	ÄL/UAB/B
Mats Sundlo	LI/ECS/CM
Leif Sundman	GÄ/ERA/PG
Anders Sundqvist	KI/RSA/P
Bengt Sundqvist	MÖ/EMW/FN
Göran Sundqvist	TB/ETX/SA
Mattias Sundstedt	GÄ/ERA/PGQ
Thord Sundstrand	VY/ERA/PV
Eva Sundström	GÄ/ERA/PG
Fredrik Sundström	KI/ERA/LVR
Jan Sundström	SG/ERA/YG
Marianne Sundström	TO/EDT/B
Elif Suner	ENK/RS/HR
Milinko Susic	ETK/P/PS
Prawut Sutarasuwan	ECT
Fredrik Svahn	NA/EBC/EN
Nicklas Svahn	MÖ/EMW/FY
Kajsa Svanberg	KI/ERA/AP
Anna-Karin Svensson	KI/ERA/AR
Dan-Magnus Svensson	KA/EPK/MP
Diana Svensson	VR/EBC/EN
Erik Svensson	TN/ETX/XA
Johnny Svensson	KI/ECS/TT
Peter Svensson	KI/RSA/P
Zeljka Svensson	NA/EBC/EN
Karin Svingby	KI/ERA/AP
Rizwan Syed	KI/ERA/AM
Gustaf Sylvin	MV/ETX/PN
Arpad Szakacs	ETH/S/BAC
Hans Sågström	GÄ/ERA/LD
Håkan Söderberg	TB/ETX/SA
Ulf Söderberg	KS/EIN/P
Bo Söderqvist	MÖ/EHS/TA
Anna Söderström	KI/ERA/LY
Jakob Söderström	KI/EKA/NY
Lars Söderström	LMF/T/T
Carl Södrén	KI/ERA/LK
Fredrik Sölving	KI/ERA/AR
Nuran Sönmez	ENK
Christer Sönnerfors	KH/ERA/PK
Finn Sörensen	KI/ERA/NR

T

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Patrick Tabourin	LMC/SM
Kenichi Takeuchi	ERJ/T/J
Sandor Tamaska	ETH/S/TB
Seved Tammergård	VY/ERA/PV
Jesper Tammilehto	VY/ERA/PV
Sergey Tarumov	ECR/ROE
Harald Taugs	EDD/R/TI
Mike Teague	ETL/XL/EEP
Johan Tedenvall	KA/EPK/DS
Lennart Tegström	KI/ESB/T
Olof Tenghoff	ÄV/ETX/DN
Marijan Tenodi	ETK/D/T
Patrick Testa	EPA/G/MEL
Anna Tester	ETL/XL/EEP
Somsak Thakolchaisri	ECT/T/TR
Sofia Thalén	KI/ERA/X
Alex Thiery	VY/ERA/PV
Mark Thomas	ZE/ETC
Penny Thomas	EUS/C
Bonnie Thompson	EUS/XT/T
Byron Thompson	EUS/R
Erik Thorén	KI/ERA/LK
Joakim Thorén	NY/ERA/PNQ
Margareta Thorén	KI/ERA/AM
Helena Thorgren	GÄ/ERA/PG
Ulrika Thorildsson	SG/ERA/LZ
Magnus Thorstenson	KI/ERA/LV
Anne Thrane	HI/ETO
Per Thunberg	KI/ECS/TT
Eva-Carin Thureson	KI/ERA/LP
Olle Thyrestam	GÄ/ERA/PG
Susanne Tideman	KI/ERA/LRO
Jonas Tilly	KI/ERA/AR
Alan Timbrell	ETL/GU/B
Anette Tirfing	KI/ERA/LRN
Margot Tischbierek	ÄS/UAB/R
Andreas Tjernberg	TB/ETX/X
Ulrika Tjernlund	KI/ERA/AM
Björn Tobiasson	MÖ/EMW/RT
John Tobin	EMX/C/P
Patricia Tobin-Ley	LMC
Thomas Toifl	SEA
Maria Tokareva	ECR/X
Mija Tolusic	ETK/P/PM
Tony Ton	KI/ERA/LRU
Yu Tong	ETC/NP/A
Hilda Toomasian	KI/ERA/LRU
Carina Torén	LM/ERA/Z
Lage Torgilsson	TB/ETX/SA
Alexey Toropygin	ECR/ROE
Miguel Torres	XHA/NXL4
Carl-Johan Torstenson	KI/ESB
Ann-Charlotte Torstensson	LM/ERA/
Ulrika Torstensson	MÖ/EMW/FY
Per Tranaeus	TO/EDT/I
Yoryos Trapalis	IXG/DO
Björn Trollsås	KI/ERA/LVN
Jon Tronde	KI/EKA/K
David Trosclair	EUS/XT/T
Malin Trossing	KI/ESB/D
Magnus Tränkner	KI/ERA/LRN
Demetra Tsolka	IXG/DO
Motoyoshi Tsuzaki	ERJ
Todd Tucker	EUS
Catrin Tufvesson	KI/ECS
Pär Tunäng	KI/ERA/LU
Tuija Tuomainen	LMF/T/KP
Francois Turgeon	LMC
Lee Turner	ETL/NR/P
Helena Tuvendal	KH/ERA/PK
Cumhur Türkmen	ENK
Ola Tystedt	KI/EKA/NR
Erik Tärnvik	UM/EPL/X
Marie Törnkvist	KL/ECS/CIP
Annika Törnqvist	TN/ETX/PN
Per Törnqvist	KS/EIN/I

U

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Jonas Uddman	KI/ERA/LRD
Shinobu Ueda	ERJ
Ralph Uhlin	TO/EDT/B
Ulrika Uhlman	KI/ERA/LRD
Åke Ullbrand	SL/EBC/ZT
Mikael Ulmestrand	MÖ/EMW/FN
Eduard Ulrich	SEA
Erhan Ulukutlu	ENK/RS/ON
Thomas Unshelm	EED/N/BT
Sreewan Utakrist	ECT

V

Torbjörn Vaaje	HI/ETO/TX
Richard Wadfeldt	KI/ERA/AM
Renate Waerner	KI/EKA/NM
Mike Wagner	EUS
Lena Wahlberg	KI/EKA/NY
Arvid Wahlgren	SG/ERA/LP
Kjell Wahlgren	KI/ERA/XB
Roine Wahlin	KI/ERA/LV
Clemens Waldau	ETL/GV/M
Marie-Louise Waldenström	MÖ/EMW/SM
Bent Vale	HI/ETO/O
Manuel Vallejo	ECE/TL/P
Birgitta Walley	KI/ERA/LP
Ulf Wallgren	TN/ETX/
Anders Wallin	KS/ETX/PN
Gert Wallin	UM/EPL/X
Hans Wallin	KI/ERA/LRN
Johnny Wallin	ÖS/UAB/N
Lars Wallin	KI/ECS/TT
Leif Wallin	GÄ/ERA/PG
Maria Wallin	KI/ERA/LVN
Peter Wallin	UM/EPL/X
Catarina Wallmon	ÄS/UAB/O
Rebecca Vallo	EUS/DR
Lung Wan	ETL/XL/EDT
Tore Wandel	KI/ERA
Allen Wang	ENC
Anna Wang	ETC/M/V
Thanasit Wansom	ECT
Marian Vaquero	ECE/TD/P
Helene Varenius	KI/ERA/LY
Mats Warne	KI/ECS/TT
Jake Warren	ETL/XL/EEP
Dave Warwick	OML/INF/D
Ann Waser	NY/ETX/PN
Jelena Vasilj-Humic	ETK/D/D
Eirini Vassalou	IXG/DC
Anders Wassén	KK/ETX/B
Astrid Wastegård	SG/ERA/YB
Kymm Watson	EUS/CB/BT
Alfredo Vazquez	EME/TM/P
Astrid Vedder	ETM/LSB
Katrin Wedekind	EED/N/BT
Auke Veenema	ETM/O
Jörn Wegener	KI/EPK/TE
Wang Weiguo	ENC
Martin Weimarck	VK/EHS/X
Matthias Wellmark	MÖ/EMW/RT
Karl-Heinz Welter	EED/U/T
Zhang Wen	ENC
Håkan Wendler	ERJ/I/M
Ernest Wendling	ETK/D/B
Jiang Wenkai	ETC/NP
Tao Wenliang	ENC
Urban Wennerberg	ENG/B
Catharina Wennerström	NA/EBC/DN
Fernando Vera	EUS/XT/DP
Lars Werin	GÖ/ETX/X
Thomas Vest	LMD/TX/PO
Cecilia Westbladh	KA/EPK/OT
Svein Roger Westengen	ETO/TT/P/L
Rolf Westerberg	ÄS/UAB/K
Tom Westeren	LMF/I/T
Michael Westergaard	LMD/O/P
Carina Westergren	VY/ERA/PV
Kent Westerlund	VY/ERA/PV
Monica Westerlund	KI/ERA/LRU
Niklas Westerlund	KI/ERA/AM
Andreas Westh	SG/ERA/LZ
Anders Westlinder	SÅ/EPL/X
Anders Westling	TO/EDT/B
Monia Westlund	KA/EPK/NM
Anders Westman	SG/REM/O
Tobias Westman	SG/ERA/YA
Johan Wetterhorn	TO/EDT/B
William Whiting	EUS/C
Colin Whittaker	ERJ
Michael Wichmann	LMD
Antun Vidak	EED
Åsa Widebäck	SL/EBC/ZT
Johnny Widén	MÖ/EMW/SR
Richard Widén	KI/ERA/JM
Anders Widlund	SG/ETX/PN
Sara Widman	NA/EBC/EN
Linda Widmark	GÄ/ERA/PG
Jolanta Wielburski	ÄS/UAB/R
Jonas Wigander	KI/ERA/LRN
Pavlos Vihos	IXG/DC
Inger Vik Drivenes	ETO/T
Lotta Wiklund	KI/ERA/AR
Carl-Magnus Wikman	KI/ECS/
Roger Vikström	HF/ETX/PN
Gerhard Wildt	EED/N/XY
Pernilla Wilén	IN/ETX/SA
Ronny Viljanen	LMF/T/FU
Michael Willershausen	KI/ERA/JY
Anders Wilson	BS/EMW/SP
Per Winqvist	HM/EPK/DS
Bertil Winzenburg	SG/ERA/LP
Helmut Wirdl	KI/EKA/K
Tanja Viskic-Huljenic	ETK/D/N
Håkan Wissö	MÖ/EMW/SM
Piotr Wlasienko	EPO/D
Norbert Vohn	EED/X/P
Eileen Woliner	HF/ETX/PN
James Wolner	KI/EKA/NM
Viktoria Wolpher	SG/ERA/LP
George Volteras	IXG/DE
Helen Wong	LMC/SM/T
Winit Wongtangton	ECT
Carlo Vonk	EMN/T/DB
Pam Wood	OML/TERM/PRO
Tina Voosemaa	KI/ERA/I
Håkan Wrangberg	ESA
Ingemar Wrangel	KI/ERA/J
Gaynor M. Wright	ETL/T
Mark Wright	EUS
Dragan Vucenovic	ETK/D/N
Nada Vukovic-Bombek	ETK/P/PM
Maja Vukusic-Vasiljevski	ETK/D/N
Marcus Wunderlich	SG/ERA/YM
Vaibhav Vyac	ÄS/UAB/K
Joakim Wänfelt	HF/ETX/P
Antero Vänskä	LMF/C/RP
Fredrik Wästlund	ÄL/UAB/B
Kai-Uwe Völkening	EED/N/BG

X

Tan Xiangyang	ETC/BMC/O
Na Xin	ENC
Liu Xiyang	ETC/NP
Lan Xuebing	ETC/BMC/O
Guo Xun	ENC/S/TE

Y

Ninos Yakoub	ÄS/UAB/R
Junyi Yang	KI/ERA/LD
Yi Yang	ENC
Chen Yanqing	ENC
David Yao	ETC/YZJ
Ding Yao	ENC
Marlene Yared	KI/ERA/AR
Hiroshi Yasumori	ERJ/J
Malek Yayo	ÄS/UAB/I
Sotiris Yiasoumi	EML
Semiha Yilmaz	KI/ERA/AR
Chang Yinglai	ZE/ETC/SE
Christian Yng	EPO/EPO/PM
Torbjörn Yngwe	KI/ERA
Björn Yngvesson	MG/ETX/X
Keizo Yokoh	ERJ
Mari Yonezawa	ERJ/C
Teng Yongjin	ENC
Motoki Yoshida	ERJ/I/D
Mikael Ytterström	GÄ/ERA/PG
Mina Yu	HF/ETX/PN
David Yuan	ETC/YP/A
Stanley Yuan	ERT/GQ
Wang Yuyi	ETC/DEC/O
Marro Yvan	XHA/NEBSI

Z

Mari Zachrisson	HF/ETX/BN
Sattar Zad	KA/EPK
Anna Zagradkin	KH/ERA/PK
Hugo Zahno	XHA/EAS/NOP
Qu Zaigang	ETC/DEC/O
Rabab Zariffa	LMC/EQ
Valery Zasedatel	ECR/EN/O
Leszek Zdybek	SG/ERA/YO
Mladen Zelic	ETK/D/S
Jürgen Zenk	EED/E/XP
Björn Zetterström	EDD/N/N
Staffan Zetterström	KI/ERA/LRD
Janet Zhan	ETC/ETC/Y
Michael Zhang	ETC/YSD
Sophie Zhang	ETC/YP/L
Willy Zhang	ETC/YZJ
Hong Zhao	KI/ERA/LY
Tatyana Zhdanova	ECR/LP
Simon Zheng	ETC/YZJ
Shirley Zhong	ETC/ETC/S
Henry Zhou	ETC/M/V
Jacky Zhou	ETC/ETC/Y
Jason Zhou Jian	ETC/NP
Julie Zhu Lei	ETC/NP
Morteza Ziaei	KI/ERA/AR
Sandra Zivkovic	ETK/P/PM
Boris Zupanic	ETK/P/M

Å

Lars Åberg	MÖ/EHS/BB
Margareta Ådegren	LM/ERA/Z
Ann Ågren	SL/ECA/N
Magnus Åhlander	KL/ECS/CP
Matts Åhlin	MV/ETX/PN
Trygve Åhlstad	HF/REM/N
Urban Åkerblad	LI/ECS/CM
Åke Åkerfeldt	KI/ECS/TT
Anders Åkesson	KI/ERA/LRU
Patrik Ångman	SG/ERA/YA

Ä

Helena Ädel	SG/ERA/STM

Ö

Magnus Öberg	GÄ/ERA/PG
Anna-Carin Ögren	NY/ETX/PN
Barbro Ögren	TO/EDT/B
Urban Ögren	KI/ERA/LRD
Ulf Öhlander	KI/EKA/NY
Hans Öhlin	KI/ERA/LRU
Thomas Öhman	VY/ERA/PU
Jonas Öhrn	ÄS/UAB/I
Ingela Öhrner	KI/ERA/P
Per Öjelid	GÖ/EGS/M
Peter Öjeman	SG/ERA/LZ
Björn Öman	KI/ECS/TT
Staffan Örnbratt	ETO
Linda Östberg	GÄ/ERA/PG
Per Östberg	KI/ERA/LRN
Anna Östblom	GÄ/ERA/PG
Mikael Österberg	SG/ERA/LZ
Emil Österlin	KI/ESB
Eva Österlind	KI/ERA/LES
Bengt Öström	SL/EBC/ZTK
Isil Öztürk	ENK/RS/OE

vacancies AT ERICSSON

This is a selection of vacancies within the Ericsson corporation. They are published in the electronic News system, which is being updated once a week.

For further information about advertising here, send a memo to LME.LMEJOB.

Contact No. 17 1998 **Updated November 9**

in sweden

Ericsson Radio Systems AB, Kista

RESPONSIBLE FOR RMOA HUMAN RESOURCES AND OPERATIONAL DEVELOPMENT

Business Unit Cellular Systems - American Standards (RMOA) develop and market complete wireless communication solutions based on the D-AMPS/AMPS standard. Presently, nearly 50% of the world's wireless subscribers are connected to D-AMPS/AMPS systems.

● You will on business unit level be heading our Human Resources and Operational Development unit, and be a member of RMOA management team.

The success of RMOA depends critically on achieving and maintaining high levels of competence for the organization as a whole, and for the individuals working within it. Developing and co-ordinating processes globally that achieve this will be your main responsibility.

Operational Development is responsible for developing, implementing and measuring the effectiveness of policies, and the best methods/tools to achieve shortened lead-time, improvement in productivity and quick adaptation to changing markets and customer needs.

Human Resources ensure that we achieve our objective to employ the best people and be the best employer.

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Ericsson Radio Systems AB, Kista

MANAGER

We are at the Wideband Radio Networks (PU - WRN) Kista, Stockholm, SWEDEN, developing a system based on WCDMA radio technology and ATM transmission. At present, we are working on the first system that will be supplied to one of the world's largest telecommunications companies, NTT DoCoMo in Japan. This year, completely new base stations, exchanges, operations support systems and transmission solutions will be functioning in pilot networks for the third generation of mobile telephony at the facilities of several customers in Japan and Europe.

● We are now starting to develop commercial products and we need a manager for ASIC and FPGA design. You will manage a group of highly motivated people. The challenge is the products and the time to market.

We co-operate with a number of design centres, which creates great opportunities for international contacts. You need to have documented experience of leadership. It is also good if you have experience from ASIC design, FPGA design, signal processing, project managing and commercial products. You have good communication skills and you like teamwork. Your strengths include flexibility and creativity. Drive, enthusiasm, and determination also belong to your personal traits.

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Ericsson Radio Access AB, Kista

CUSTOMER SUPPORT MANAGER

Cellular Transmission System (CTS) is a business segment within Ericsson Radio Access AB. We offer complete transmission solutions for all mobile applications. The systems increase the utilisation of infrastructure and offers additional network control, flexibility and reliability. To be able to meet the rapid growth and the customers demands on fast solutions we need independent and experienced staffmembers. We are currently 80 people working at CTS and we now need additional staff.

● As manager for our Customer Support, you are responsible for a group of 10-12 technical specialists who keep our networks running and up-to-date and - of course - our customers satisfied. Customer Support serves today more than 40 networks in more than 30 countries.

You do not need to know all technical details, but you should have a broad telecom background, which lets you understand our customers needs and ideas. You are a good coach for your team and can stimulate and guide its members in their responsibility. You are open and service minded and you can understand and deal with all different foreign cultures.

You have to supervise planning and scheduling of activities and you will face situations which require immediate and competent attention to customers which operate live networks with 100 thousands of subscribers. Keeping well track of our installed networks and activities, as well as responding promptly and professional to our customers requests and complaints is customer support's responsibility.

Continuous education for you and your team is essential in an era of fast evolving systems.

Your background is mainly experience as a team leader and experience from service to customers.

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Ericsson Radio Systems AB, Kista

MANAGER, BUSINESS DEVELOPMENT & MARKETING

Customer Services´ mission is to ensure customer satisfaction and better profitability for Customer Services products. We therefore develop, market, sell and supply services within Ericssons´seven common Service Solution Areas.

● We are now looking for a Manager to lead the unit Business Development & Marketing. Your task will be to join, coach and inspire the team. The unit will support Customer Services with marketing communication, service business development and business analyses.

We want you to be result oriented with social flexibility and sensibility to customers and employees. You should have experience from the service area and worked as a manager before.

If you find this interesting and believe that you have the qualifications, please do not hesitate to contact us for more information.

Contact: Bert Nordberg, General Manager Customer Services phone + 46 8 585 325 25 or Lena Axhamre Hellberg, Human resources, phone + 46 8 404 54 21. Application: Ericsson Radio Systems AB KI/ERA/LY/HS Viveka Viklund, 164 80 STOCKHOLM. viveka.viklund@era.ericsson.se

Ericsson Hewlett-Packard Telecommunications

BUSINESS MANAGER

● We need more people to our department for Technology Partering. The unit is responsible for managing business relations with external suppliers, evaluating external companies and technology/products, establish partnerships and follow industry trends. An important part is business negotiation and contract development. The work is done in co-operation with product managers and leading suppliers in the IT and telecom industries.

You should hold a M.Sc or equivalent education, and have several years of experience. You also have experience in business negotiation and marketing. Experience of business law is an advantage. Very good knowledge of English and international experience are required. Good person-to-person communication skill is a must.

Contact: Sven-Göran Elveborg, tel + 46 8 685 2148, e-mail: sven- göran.elveborg@ehpt.com or Inger Agdahl, Human Resources, tel + 46 8 685 2661, e-mail: inger.agdahl@ehpt.com. Application marked VK/64 981116: November 1998 to: Ericsson Hewlett-Packard Telecommunications AB Helena Ryderberg, VK/EHS/FP 126 25 STOCKHOLM or by email: helena.ryderberg@ehpt.com

Ericsson Radio Systems AB, Kista

MANAGER ADVERTISING AND SALES PROMOTION

GSM is the leading digital mobile system worldwide, with more than 100 million users worldwide, increasing with 5 million every month. Ericsson is the clear global leader for GSM systems, with a market share of well over 40%. With its strong entrepreneurial spirit, the business unit for Mobile Systems GSM, NMT and TACS (RMOG) has established itself as a leader within the Ericsson group to meet the challenges of today and tomorrow in this exciting and rapidly changing market.

● Our manager for Advertising and Sales Promotion is moving on to an international contract assignment, and we are now searching for an experienced and dynamic successor. You will be part of the department for Marketing Communications in Kista, and be manager of a team of six highly skilled marketing communications specialists. You will be responsible for the business unit's international media and SP budget.

Your responsibility will include: Media, including advertising, advertisement features, press releases, press seminars and editorial coverage in trade and business press, internet and other suitable media including Ericsson customer magazines. Sales promotion materials and activities such as brochures, data-sheets, posters, audio-visuals plus product launch and SP-campaign project management. Ideally you have education and experience from several of these areas and from 'business-to-business' marketing in telecommunications. Professional fluency in English is essential.

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Ericsson Radio Systems AB, Kista

MANAGER, ADVERTISING AND SALES PROMOTION

The wireless communications field is one of the most dynamic and expansive industries of this century. Today, Ericsson's D-AMPS/AMPS products and services support 50% of the world´s wireless subscribers. New and dynamic applications such as PCS,Wireless Office, Fixed Wireless, and Wireless IP (via CDPD) are forging new frontiers within the D-AMPS/AMPS wireless world.

With its strong entrepreneurial spirit, the Cellular Systems - American Standards (RMOA) business unit has established itself as a leader within the Ericsson group to meet the challenges of today and tomorrow in this dynamic wireless communications market.

● Will you develop the strategic advertising and sales promotion efforts and campaigns for Cellular Systems & American Standards (RMOA).

As manager of a team of three communications specialists you will provide support and leadership to a graphics co-ordinator, web content editor and project manager.

We are part of a dynamic department in an exciting business unit and an explosive industry and as such have a high profile role in a fast moving and creative environment. As manager of Advertising and Sales Promotion you will manage the project flow, execution, development, and budgeting of RMOA's advertising and sales promotion and support activities world-wide. You must be able to work effectively in a cross cultural environment as co-operation and collaboration with diverse local companies is an important aspect of the position.

Ideally you have experience within Ericsson and an MIM/MBA or equivalent. Knowledge of D-AMPS products/services and customers and/or the wireless industry is a plus. You are energetic and willing to take the initiative to further the positioning of D-AMPS both on the global market and internally. In addition to being a team player, you must be able to work independently, you are detail-oriented and have some experience with advertising/sales promotion and possess a creative "eye". Willingness and ability to travel is important. Professional fluency in business English is essential. Fluency in Spanish or Portuguese is a plus.

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Ericsson Radio Systems AB, Kista

BUSINESS CONTROLLER EUROPE-AFRICA

ERA/LG is the Business Management unit responsible for supporting RMOG (Mobile GSM infrastructure) business in Europe and Africa. Some of Ericsson's largest and most successful GSM customers operate in this region and recent analysis of the market shows continued high subscriber growth well into the next millennium.

● As a result of internal promotion and expansion, we now are looking for an experienced Business Controller to join the team, based in Kista. The main responsibility of the Business Controller is to drive the achievement of financial targets for a group of customer accounts. This will be achieved by working closely with Business managers, key account managers and KAM Controllers.

To succeed in this position, You will need to have a solid background in controlling, good knowledge of GSM products and markets and be able to initiate rapid corrective action whenever necessary. Very good influencing skills are essential.

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Ericsson Radio Systems AB. Kista

PRODUCT PROFITABILITY CONTROLLER

Services Solutions are an expanding business area within RMOA. Due to this expansion we need to strengthen our product controlling capabilities.

● We are looking for someone to work alongside our (M)LC's in ensuring that the information regarding the service revenues and costs are reported timely and accurately, and to prepare and present the financial results both internally, within RMOA, and within Ericsson to our most important partners. The person chosen must have very good analytical and social skills and be prepared to travel world-wide to the RMOA markets, influencing and ensuring the highest quality reporting when it comes to the financial figures.

A B.Sc. with a major in business administration (or equivalent) and at least three years within Ericsson with experience from related areas is required.

Fluency in English is required and Spanish is a plus.

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Ericsson Radio Systems AB, Sundbyberg

BUSINESS MANAGER – INDIA AND BANGLADESH

Business Management Middle East and Asia-Pacific (ERA/LO) is responsible for business operations for products based on GSM, NMT and TACS standards.

● We are now looking for a Business Manager responsible for India and Bangladesh.

As a Business Manager your main responsibilities will be to: Establish business strategies and market plans together with the local companies.

Support the customer account units in the local companies in marketing and sales activities. Promote RMOG's applications, services and products. Build relations with the customers.

We are looking for a market and commercially oriented person with a good product knowledge. You should also be flexible, result oriented and have strong drive. You will have to be able to travel regularly to the region.

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Ericsson Radio Access AB, Kista

MARKETING COMMUNICATIONS PROJECT MANAGER

Cellular Transmission System (CTS) is a business segment within Ericsson Radio Access AB. We offer complete transmission solutions for all mobile applications. The systems increases the utilisation of infrastructure and offers additional network control, flexibility and reliability. To be able to meet the rapid growth and the customers demands on fast solutions we need independent and experienced staffmembers. We are currently 80 people working at CTS and we now need additional staff.

● The primary objective for this new Project Manager is to continuously support the Market Communications team in various project areas.

This includes for example: production of sales material. administration of seminars and exhibitions. production of Internet information. keeping contact with our sales force. be in contact with external suppliers. information of on-going activities to our internal customers.

This position demands: about 3 years of relevant working experience. a result oriented personality with a positive solutions oriented attitude. good presentation skills as well as social skills. skills with PowerPoint, Word, Excel and other PC-tools. fluency in English.

This position involves close co-operation with our marketing, sales and product management colleagues.

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Ericsson Radio Systems AB, Kista

BUSINESS INTELLIGENCE

Marketing of Packet Switching System is a unit within the Product Unit Packet Switching System. We are responsible for the marketing of data communication products for GSM. We are also developing product information and sales material.

● We are now looking for a Business Intelligence Analyst who will take on the responsibility for this new function within our department. As a BI analyst you will follow the market and our comptetitive environment. You will be responsible for providing the relevant information to our global sales force as well as our product management. The position will be a part of the Ericsson Business Intelligence Network (EBIN).

The tasks require both commercial and technical competence. As a person you shall be analytical, self motivated, outgoing and independent with strong social and communication skills, both oral and written. You have a university degree in engineering or economics and a minimum of two years experience in the telecom industry.

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Ericsson Radio Systems AB, Kista

SOLUTION MANAGERS

We are a unit within Ericsson Radio Systems responsible for the marketing and technical support of our complete Wireless Data product and service portfolio. Co- operating with other instances, we handle GSM standard solutions such as High Speed Data and General Packet Radio Services (GPRS) as well as other solutions such the WISE? (Wireless Internet Solutions) program. GSM Data is creating totally new business opportunities for the mobile operators. This rapidly expanding area is motivating us to strengthen our market efforts within our department.

● We need to expand with two Solution Managers in order to support our local companies around the world sell our existing and new products. Are you ready to tackle the challenge of building up strategies, producing market messages and supporting our international local companies in selling advanced data and value- added services?

As a Wireless Data Solution Manager you will be assigned the responsibility to co- operate with our local companies in order to design, offer, and sell a solution based on Ericsson and partner products and services, addressing a market opportunity or need for our customers.

You will establish a professional sales process for our GSM Data products. You will be involved in our tendering / offering activities and pro-actively sell our data solutions towards our local companies and customers. Further, you would work with sales packaging such as producing Marketing Guides, Pricing Strategies, communication material, etc.

You will be dedicated to activities that span over the following: Analysing customer need/market opportunity. Design solution for customers based on Ericsson and partner products. Assist local companies in the sales process of the solution. Assist in the establishment of customer projects.

You are an achiever with an entrepreneurial spirit, and possess an excellent sense for business and marketing. You have the drive, creativity, and perseverance necessary in order to convey to our customers the great potential that our products represent!

We expect that you have an engineering college degree, preferably complemented with Business or Economics studies. You should have a broad IT/Datacom experience and/or competence. A very good knowledge of written and spoken English is expected and further language skills are advantageous. The nature of these positions entails many customer meetings and thus, certain availability for shorter travel periods abroad.

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Ericsson Radio Systems AB, Kista

SUPPLY PLANNING AND PROCESS DEVELOPMENT. SUPPLY PLANNING

Supply Planning is a function within Supply Management. We are now looking for someone, who is interested in Supply Chain Management and would like to join a team of 10 people who have got the challenging task of developing and implementing RMOA's new Global Supply Chain Concept.

● As a Planner within the Supply Planning team, you will have the following responsibilities: Monthly collection, consolidation and evaluation of forecasts from our customers. Rework forecasts from the market input and take necessary actions. Set up targets and measure/evaluate their performance, together with the suppliers. Implement and continue to develop RMOA's Global Supply Chain Concept, together with the suppliers. Focus on supplier's planning function in different kinds of projects.

Skills: Open and positive personality with a genuine interest to work with people as well as in teams. Interested in working with analysing and developing received figures. Be able to question figures and take necessary actions. Make presentations and be a strong and active representative from supply planning in different kind of projects. Be able to manage several activities simultaneously. Creative, self going and be interested to learn and develop our supply chain concept.

Within Supply Management, we can promise you an interesting and challenging future.

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Ericsson Radio Systems AB, Kista

OPERATIONAL DEVELOPMENT

Process Management - Time To Market flow

Continuous improvement is the key-word in our active and wide ranging Operational Development activities.

● You will work with the improvements of the TTM flow in Kista and support Ericsson companies in other countries.

You will also work with measurements, IS/IT and competence questions within the TTM flow.

You should have experience from modern quality work, project management, process management and improvement work. Experience from the different functional areas with the TTM Flow would be highly advantageous.

You should also have an analytic and creative mind and also a customer oriented way of thinking. You should have a university degree, preferably a technical degree. Fluency in English is required. Ericsson experience is appreciated.

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Ericsson Radio Systems AB, Kista

Would you like to have a challenging role in our Global Pricing? Ericsson Radio Systems AB in Kista (Stockholm) is looking for

PRICING SPECIALISTS

The wireless communications field is one of the most dynamic and expansive industries of this century. Today, Ericsson's D-AMPS/AMPS products and services support 50% of the world´s wireless subscribers. New and dynamic applications such as PCS, Wireless Office, Fixed Wireless, and Wireless IP (via CDPD) are forging new frontiers within the D-AMPS/AMPS wireless world. With its strong entrepreneurial spirit, the Cellular Systems - American Standards (RMOA) business unit has established itself as a leader within the Ericsson group to meet the challenges of today and tomorrow in this dynamic wireless communications market.

The Pricing Group is responsible for RMOA's global pricing strategy and price management. The group is involved in defining pricing strategies, pricing of new products, deployment of pricing strategies and supporting the sales organization with pricing argumentation, price comparisons and advice. We now need to strengthen our resources and are therefore looking for a pricing managers:

PRICING MANAGER

● In this position you will analyze Ericsson's world-wide pricing structures and price levels. You will build up an in-depth knowledge about different markets, trends, underlying business, and technological differences in mobile networks. Your knowledge will be used to support management, the sales organization, and the pricing group with pricing information and analyses. Finding information, analyzing, and initiate the appropriate actions are key words for your daily work. You will work intensely with computer based models to create price and other comparison models and you will work in close cooperation with sales representatives and the rest of the pricing group.

We are looking for a person with excellent analytical skills, a good business sense and an affinity with high tech products and services. A university degree, fluency in English and a service minded attitude are required.

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Ericsson Radio Systems AB, Kista

Need a challenge? Join the future!

The Product Unit Packet Switching Systems is a part of Ericsson Radio Systems AB in Kista. We develop and market packet data solutions for GSM and the next generation mobile telephony system UMTS.

An "Innovation Cell" has very recently been created within the product unit Packet Switching Systems. The clear objective for this new innovation cell is to develop and market "Realtime Routers for Wireless Systems" for all wireless (mobile) product lines within the Ericsson group. The products shall fulfill very stiff requirements, for example to handle Voice Over IP in mobile networks.

The customer segment is today mainly internal customers, but a clear understanding of end customer's requirements is a necessity and therefore end customer relations shall be established.

We work together with an Ericsson unit in Gothenburg which has the responsibility of system and system design.

As a new department we need to expand. We can offer the right person for the positions below a very challenging work and working environment, both locally and internationally. Team and entrepreneurial spirits togheter with initiatives will be essential parts for success. We are now eager to employ candidates for the following positions with the corresponding experience:

PRODUCT MANAGER

● The following responsibilities apply for the product manager who will be a part of a product management team:

- Define the overall strategic product roadmap.
- Define product development based on customer's requirements, standard and edge functionality and performance.
- Define strategic standardisation items. Secure patents.
- Define platform concepts and real time operating systems.
- Be responsible for the technical interface to customers and to system responsible.
- Initiate studies.
- Make product presentations internally and externally.
- Work with partners.
- Be responsible for a product realease/increament step of product.

Skills and experiences: Broad knowledge of router functionality, technology and architecture. Broad experience of data networks and telecom networks architectures. Experience and knowledge of market and product situation today and trends. Knowledge of development environments, real-time systems, HW and SW technologies. Experience of O&M systems datacom and telecom networks and equipment. Managerial experience. Languages: English is essential. Team worker and take responsibility.

TECHNICAL AND BUSINESS INTELLIGENCE MANAGER

● Responsibilities: Assemble and analyse major market actors products, trends, capabilities etc. Analyse in detail competitors products architecture. Participate in defining strategies and products. Communicate internally, both to managers and to developers about findings and strategic issues.

Skills and experiences: Knowledge of datacom and telecom industries. Knowledge of HW and SW architectures and components. Knowledge of IP technologies. Independent. Networking and mingling skills. Excellent in writing and speaking English.

BUSINESS STANDARDISATION MANAGER

● Responsibilities: Develop strategic standardisation proposals with focus on business importance. Participate in high level standardisation meetings, mainly IETF. Co-ordinate standardisation participation and issues. Analyse competitors standardisation activities from a business perspective.

Skills and experiences: Familiar with standardisation organisations and work procedures. Knowledge of data and telecom industries. Analytic and strategic competence. Good at influencing people.

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Ericsson Radio Systems AB, Kista

DESIGN OWNER – THIRD PARTY PRODUCTS (3PP)

Cellular Systems - American Standards is one of the fastest growing business units within Ericsson Radio Systems. We are the market leaders for cellular telephone systems and services based on D-AMPS/AMPS.

The Product Unit Wireless Network has Product Management responsibility for Data and Solutions. Today some of those applications, such as Pre-Paid , Over-the-Air-Teleservices, Voice Activated Services, and D-AMPS-Pro, include external products. An organization for the Design Ownership of those products is being built up. Within that Design Ownership section we are now looking for several persons who are willing to take on new challenges.

● As a Design Owner you will have responsibility to ensure the products are developed, or acquired, and maintained according to the requirements on functionality, characteristics and standards during it's whole life cycle. You will mainly interface with product managers, project managers, logistics people and the external supplier. In other word, you will work both internally and externally to Ericsson. Internally to support in the industrialization of the products. The products should be orderable and deliverable according to the requirements we have for Time-To-Customer. Definition and communication of what is required from a support and maintenance point of view will also be required. New requirements on functionality and trouble reports coming in should be handled, and discussed together with the product manager for each product.

Externally you will define and secure that required industrialization information is available for Ericsson, the product meets requirements, have been tested, and that the installation and customer documentation meets what is required in each case. Follow up of troubles in the field, and planning of new releases from the external supplier may also be required.

The job involves some traveling, mainly within North America, but could also be required in South America, Asia, Pacific, and Eastern Europe.

The ideal candidate should have a M.Sc. or B.Sc. in CS or EE and experience within telecom,

and datacom, especially in the field of cellular communication. He or she should preferable be familiar with different hardware platforms. Knowledge of the External Technology Provisioning (ETP) process, Product Handling, Configuration Management, Software License handling is a plus. Fluency in English is required. The person we are looking for is self-motivated, ambitious, out-going and mature.

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International

Ericsson S.A, Spain

SENIOR SUPPORT ENGINEER

● The FSC for the AIRTEL customer in Spain, established in 1996, has a vacancy for a SS Senior Support engineer.

Main responsibilities: Trouble-shooting activities on/off sites. HW/SW upgrades such as APZ upgrades/AS-changes/AC-A's/EC-A's. Participate in the on-call schedule to handle emergency situations. Test/demo/implementation of new features and services. Trouble Report handling. Transfer of knowledge to local staff

Competence requirements: CME20 experience with a minimum of two years working on the SS subsystem preferably in Customer Support but applicants with testing/verification experience will also be considered. Strong knowledge of test system, ability to trouble shoot s/w problems. Experience of APZ stoppage handling. Familiarity with MHS

You need to be flexible and able to work under pressure applied by a very demanding customer. Travel at short notice is an integral part of the job.

Good knowledge of spoken and written English is essential and any fluency in Spanish is a plus but not essential.

The contract duration is of 2 years.

BSS SENIOR SUPPORT ENGINEER

● The FSC for the AIRTEL customer in Spain, established in 1996, has a vacancy for a BSS Senior Support engineer.

Main responsibilities: Trouble-shooting activities on/off sites. HW/SW upgrades such as APZ upgrades/AS-changes/AC-A's/EC-A's. Participate in the on-call schedule to handle emergency situations. Test/demo/implementation of new features and services. Trouble Report handling. Transfer of knowledge to local staff

Competence requirements: CME20 experience with a minimum of two years working on the BSS subsystem preferably in Customer Support but applicants with testing/verification experience will also be considered. Strong knowledge of test system, ability to trouble shoot s/w problems. Familiarity with RBS 200/2000 handling Experience of APZ stoppage handling. Familiarity with MHS

You need to be flexible and able to work under pressure applied by a very demanding customer. Travel at short notice is an integral part of the job.

Good knowledge of spoken and written English is essential and any fluency in Spanish is a plus but not essential.

The contract duration is of 2 years.

OSS SUPPORT EXPERT

● We are looking for an "OSS System Expert" to work with OSS implementation and maintenance support.

To qualify, you must have worked with installation/support of OSS systems for at least 3 years and have a broad knowledge of Unix HW & SW, Sybase Administration, X.25, TCP/IP, TMOS platform and CME20 OSS Applications, System Administration and troubleshooting.

You will be part of the OSS support team in our FSC, having as main responsabilities to participate in the on-call schedule to handle Emergency Situations, Implementation of new releases and corrections, and Troble Report Handling.

You should be self-motivated and work easily on your own and within a team to achieve goals and customer requirements.

Good knowledge of English is a must, Spanish knowledge will be appreciated.

The contract duration is of 2 years.

Application: Diego Garrido, FSC Manager,REE.REEDGS

Ericsson Belgium

FIELD SUPPORT CENTER SUPERVISOR

Field Support Centre is responsible for support of mobile and fixed networks in Belgium and Luxembourg. The position will be placed in Brussels.

● The FSC Supervisor should have the following profile: Broad technical experience, minimum 5 years. Field support experience. A solid AXE/Unix knowledge and experience with a minimum of three years of working with Customer Support. Knowledge of APZ/IOG. Ability to handle urgent SW problems (trouble shooting). Familiarity with MHS. Customer and process oriented/structured. Good communication skills in English.

You need to be flexible and able to work under pressure applied by very demanding customers. Travelling is a part of the job. You are customer and team oriented with proven capabilities to transfer knowledge to local staff.

Duration of the assignment is at least 12 months. Please apply with your CV summarising your background and experience.

TRANSMISSION SUPPORT ENGINEER

● Ericsson Belgium in Brussels has a vacancy for a Transmission Support Engineer.

Main responsabilities : Trouble-shooting activities on/off site regarding Minilinks, Netman, DXX, DXX NMS. HW/SW upgrades. Participate in the on-call 24 hours schedule to handle emergency situations. Test/Demo/Implementation of new features and services. Trouble report handling. Transfer of knowledge to local staff. Other tasks connected to support and supply.

Competence requirements : A solid transmission knowledge and experience, preferably in Customer Support but applicants with implementation experience will also be considered. Ability to handle urgent problems (trouble shooting). Familiarity with MHS.

You need to be flexible and able to work under pressure applied by very demanding customers. Travelling is a part of the job. You are customer and team oriented with proven capabilities to transfer knowledge to local staff.

Good knowledge of spoken and written English is essential.

The contract duration is 1-2 years.

SWITCHING SUPPORT ENGINEER

● The FSC for fixed and mobile customers in Belgium has a vacancy for an AXE Support Engineer.

Main responsibilities: Trouble-shooting activity on/off site. HW/SW upgrades. Participate in the on-call 24 hours schedule to handle emergency situations. Test/Demo/Implementation of new features and services. Trouble reports handling. Transfer of knowledge to local staff. Other tasks connected to support and supply.

Competence requirements: A solid AXE/Unix knowledge and experience with a minimum of three years of working, preferably in Customer Support but applicants with testing/verification experience will also be considered. Knowledge of APZ/IOG Ability to handle urgent SW problems (trouble shooting). Familiarity with MHS. Customer and process oriented/structured. Good communication skills in English.

Knowledge and experience of IN is an advantage.

You need to be flexible and able to work under pressure applied by very demanding customers. Travelling is a part of the job. You are customer and team oriented with proven capabilities to transfer knowledge to local staff.

Good knowledge of spoken and written English is essential.

The contract duration is 1-2 years.

Application: Gilbert Huysentruyt, Memoid EBRGIH Ericsson SA/NV Raketstraat 40 B-1130 Brussels Belgium

Ericsson Communications Canada, Mississauga, Ontario, Customer Service Organization

OSS TECHNICAL ASSISTANT SPECIALIST

● Job Requirement: University degree in engineering, engineering technology or science or equivalent work experience. Exposure to Unix and peripheral products. Several years related experience in telecommunications. Working knowledge and understanding of cellular systems. Two years experience with Ericsson or equivalent cellular experience. Trained in CMS 40 or CME 20 OSS operations and maintenance. Basic ISO training on 9002 standard. Excellent communication skills both written and oral. These skills can be acquired through a combination of specialized training and/or on the job experience

Job Description: Providing technical sales support and application testing as part of the Application Support function. Responsible for developing personal and group objectives. Communicating with customers on an ongoing basis. Preparing the procedures and verification of functionality of functions/corrections regardless of complexity, preparing quarterly or monthly plans, audits and verifying data. Assisting customers and field personnel in technical and operative questions. Assisting in emergency situations to resolve equipment and/or procedure errors. Plans, controls and directs CN-A, AC-A, EC-A, SC-A or MR implementation

Contact: Human Resources Ericsson Communications Canada 5255 Satellite Drive Mississauga, Ontario Canada L4W 5E3 Fax (905) 629-6701

Ericsson Inc. USA

SYSTEM TEST ENGINEERS

Your main authorities and tasks are to perform System Integration Test of Transgate products.This includes acivities like Load test, Stability test, Robustness test and Accuracy test. Main areas are today IN, TSS and ISDN for the US market,tomorrow Voice over ATM.

As a suitable candidate you have good knowledge of Transgate systems, you are flexible, show initiative and have good communication & cooperation skills. The ability to work under pressure is also an important personal quality. Furthermore, fluency in written and spoken English is required. Experiences from System Verification/Test should be 6 years or more.

Contact: Chuck Sturgeon EUS.EUSSTUN 0091-9725837642 or Lars Hogfeldt EUS.EUSLHT 0091-9725837465.

Ericsson Australia Pty. Ltd.

LONG TERM CONTRACTOR OPERATIONS & MAINTENANCE

Bangladesh has commenced a 67k Public Network turn key project. As a part of the contract it is essential that we provide 12 months Operations and Maintenance support towards Bangladesh Telecommunications and Telegraphic Board.

● In this role you will be responsible for Operations and Maintenance of the switch. To successfully perform in this role you will need the following skills/experience; Minimum 5 years field support experience/AXE O&M experience. Ability to methodically solve problems and implement solutions. Familiar with Ericsson Troubleshooting procedures. Good Ericsson Network. Good communication skills. Intercultural awareness.

The contract will commence January 1999 and conclude January 2000.

Contact: Hue Ly (61 9301 4420). Application latest 981116: EPA.EPACLJ, Caroline Nadj

Ericsson Radio S.A., Spain

BGW SENIOR SUPPORT ENGINEER

● We are looking for a Billing Gateway Support Engineer with a minimum of 3 years in related field and with a good understanding of Ericsson GSM System for a short-long term contract in the FSC. Our unit is responsible for the support and supply activities to our customer, the new DCS1800 Spanish cellular operator.

The objective is to provide technical support to our customer and to be responsible for the efficient running of the BGW system. This includes advanced trouble-shooting in BGW applications.

To qualify you must have worked with installation/support/test of BGW systems for at least 3 years and have a broad knowledge of Unix HW & SW, Sybase, X.25, trouble shooting, trouble report handling, and gook knowledge of GSM.

You should be self-motivated and work easily on your own and within a team to achieve goals and customer requirements. Good knowledge of English is a must, Spanish knowledge would be appreciate.

Contact: Jose M. Callejo, phone +34 91 339 3110, memoid REE.REEJMCG, reejmcg@niepce.ericsson.se Application: Jose M. Callejo, memoid REE.REEJMCG, reejmcg@niepce.ericsson.se, Fax. +34 91 3391733

LM Ericsson Israel Ltd (EOI)

has signed a contract for the supply of a complete GSM network in Israel. The project office is based outside Tel Aviv, and the first phase of the implementation process has already been completed. We are now entering the second and third phase of this rapidly expanding project, and are urgently looking for the following positions to be filled:

SWITCH PROJECT MANAGER

● We are looking for a senior Project Manager with at least 10 years of experience of handling large projects within the Switching area.Your primary tasks will include being the main customer interface, plan the implementation of all the nodes. Making time plans, follow up deliveries, making sure that all engineering dimensions etc is according to the project specifications. Secure installation and commissioning of the peripheral nodes. You will report directly to the Operations Manager

SYSTEM SPECIALIST CME 20 SS

● We are looking for a senior SS System Engineer with at least 5-10 years of experience of trouble-shooting in CME 20. Primary tasks are to lead and conduct in network investigations and resolving complex problem in the network. Provide technical advice and train support engineers and customer. You will report to the FSC Manager

SENIOR SUPPORT ENGINEER SS/BSS

● We are looking for Senior Support Engineers with a minimum of 3 years of experience from customer support, for the Field Support Centre. Your main responsibilities will be implementation of new releases, Help desk, TR analysis, first line emergency support and trouble shooting (SW/HW). You will report to the FSC Manager.

DATA TRANSCRIPT ENGINEER

● We are looking for a senior DT Engineer with at least 5 years of experience, preferably with knowledge from BYB 501. Your main tasks will include producing a final I-module for all the existing nodes in the network, do DT for all feature expansions. Work with the customer in planning and introducing changes to the B-no, IMSI-analysis, charging, SAE, routing, International Roaming etc. both for the MSC and the BSC. Teach and train local employees. You will report to the Switch Project Manager.

ERIPAX (ROUTER) ENGINEER

● We are looking for someone with good knowledge of routers especially ERIPAX and X.25/LAN (TSP/IP) networks and experience in the setup of X.25 ports in the IOG etc. We require at least 2 years of experience in this area. Your main tasks will include responsibility of all new connections to the PFA units and installation of new PFA units in the network. Do configuration and fault handling of the units. Help the customer in planning their X.25 and LAN network to match the Ericsson recommendations. Teach and train the FSC, Customer and the local employees. You will report to the Switch Implementation Manager.

LEAD TESTER

● We are looking for someone with at least 5 years of experience and good system knowledge of all nodes within a GSM network, MSC, BSC, IN, ERIPAX, SMS, VMS, X.25, Integration and Acceptance. Knowledge of the BYB 501 is preferable. Your main tasks will be to lead and coordinate testing, integration, and acceptance for all existing and future nodes in the network. Ability to trace and correct faults. Teach and train local employees. You will report directly to the Switch Implementation Manager.

IN SPECIALIST / SUPPORT ENGINEER FOR IN (MOBILE IN SERVICES)

● We are looking for someone with at least 3-5 years of experience and good knowledge of the AXE and IN service test experience from either fixed or Mobile IN. Your major responsibilities will be to do test analysis and test planning, and prepare test specifications and test instructions. Conducting testing of IN service and leading the test teams. You will report directly to the FSC Manager.

All vacancies require long experience of AXE and GSM environment, international experience, and good communication and team skills.

Contact: Per Assarsson, Act. Operations Manager, memoid EOI.EOIPASS Phone: +972 8 918 32 00 or Elisabeth Ramel, HR Manager, memoid: EOI.EOIELRA Phone: +972 3 688 50 05 Application: LM Ericsson Israel Ltd ATT: Irene Snir 48 Derech Petach Tikva, 11th floor Tel Aviv 66 184 fax: +972 3 688 66 44 memo: EOI.EOIISNI

Ericsson Telecommunicatie, Netherlands-Rijen

ACCOUNT/PRODUCTSUPPORT MANAGER ENTERPRISE NETWORKS

● You are the interface between the European Hardware Service centre and the local companies in the region Europe-Africa-Middle East. Supporting the Service-organizations from local companies in reaching their objectives. Strive for continously improvement of the performance from Hardware Services. Developing and introducing -together with the Support-group- new hardware services concepts and ideas. Giving presentations for local companies, distributors and End Users. Reporting to the businessmanager EN.

Job Requiremants: Bachelor or University degree. Excellent communication skills, fluently englisch, knowledge from Hardware-services escp. SWAP en Repair-routines and Spare parts management, service-minded, no problems with frekwently travelling around, sensitive for intercultural differences in doiing business.

Contact: Michel Verheggen mobile +31 6 51 618065 memo-id ETM.ETMMICV. Application:o Rob Haest/HR etm.etmroha.

Guangdong Ericsson Telecommunication Engineering Co.Ltd., China - GUC

TAKE THE CHALLENGES IN CHINA

Latest news: China becomes Ericsson's largest market in the world!

Guangdong Ericsson Telecom Engineering Co. Ltd (GUC) is a joint venture company based in Guangzhou and offers its professional service to Region South, the most dynamic part of our business in China. Why not take the challenge to grow with us? Now at GUC we have the following openings for you:

SENIOR SUPPORT ENGINEER

● customer support in the South China Region within GSM minimum of 5 years relevant experience, with at least 3 years in Ericsson support organisation high-level competence in trouble-shooting, general trouble report handling experience in maintenance (AS-, CAN-, ACA- and ECA-handling) and customer training fluent English and good interpersonal skills

SENIOR BSC/BTS ENGINEER

● BSS support and Supply Center in China Southern region minimum 5 years experience with Ericsson and 3 years with supply process knowledge in CN-A, AC-A, system upgrade packages assemble, verification and FOA BSS experience is a MUST fluent English and good interpersonal skills

SENIOR BSC/BTS SUPPORT ENGINEER

● customer support in China Southern region within BSC/BTS area minimum 5 years experience with Ericsson AXE and 3 years with BSC/BTS support able to handle CSR/TR handling and on emergency call fluent English and good interpersonal skills

Application: GUC/H Sharon Yuan (Memoid: ETC.GUCSHYU) Tel: +86 20 85538868 ext. 20848 Or GUC/H Tracy Gu (Memoid: ETC.GUCTRGU) Tel: +86 20 85538868 ext. 20685 Fax: +86 20 8553 6193 or 85536191

SENIOR PSTN ENGINEER

● Provide AXE 10 system expertise to the customer. act as primary knowledge source in technical questions and transfer of knowledge within the division. minimum of 5 years relevant experience, with at least 3 years in Ericsson support organisation. high-level trouble shooting competence. good knowledge of switching, traffic concepts, telecom. network, interexchange signalling and product functional descends. must be familiar with Transgate-3 and local-6.

SENIOR SUPPORT ENGINEER

● Customer support in the South China Region within GSM. minimum of 5 years relevant experience, with at least 3 years in Ericsson support organisation. high-level competence in trouble-shooting, general trouble report handling. experience in maintenance (AS-, CAN-, ACA- and ECA-handling) and customer training. fluent English and good interpersonal skills.

SENIOR BSC/BTS ENGINEER

● BSS support and Supply Center in China Southern region. minimum 5 years experience with Ericsson and 3 years with supply process. knowledge in CN-A, AC-A, system upgrade packages assemble, verification and FOA. BSS experience is a MUST. fluent English and good interpersonal skills.

SENIOR BSC/BTS SUPPORT ENGINEER

● Customer support in China Southern region within BSC/BTS area. minimum 5 years experience with Ericsson AXE and 3 years with BSC/BTS support. able to handle CSR/TR handling and on emergency call. fluent English and good interpersonal skills.

O & M ENGINEER

● Supervise and take care of daily helpdesk issues. at least 3-5 years AXE-10 experience in O&M area of GSM network. experience from work with both MSC and BSC is required. have knowledge of Ericsson information system MSS and MHS. fluent English and good interpersonal skills.

Application: GUC/H Sharon Yuan (Memoid: ETC.GUCSHYU) Tel: +86 20 85538868 ext. 20848 Or GUC/H Tracy Gu (Memoid: ETC.GUCTRGU) Tel: +86 20 85538868 ext. 20685 Fax: +86 20 8553 6193 or 85536191

Nippon Ericsson K.K. - Japan

ITAC MANAGER

● We now have a vacant position for an experienced ITAC Manager at our office in Shin-Yokohama.

We expect you to have: A Bachelor degree in Engineering or Computer Science or the equivalent. 5 years relevant job experience. Supervisory experience in technical group (more than 5 persons). Good knowledge of Ericsson processes and procedures, in particular solid, documented, experience from Customer Support and HW Implementation. A good network within Ericsson

You should be analytic, creative, flexible, a good listener and prepared to implement a quality system within the ITAC organization at NRJ.

We also see that you have previous experience in the field of quality assurance or similar work.

You have to be fluent in spoken as well as in written English.

We presume that you are open-minded, outgoing and that you can easily adapt to a culturally diverse working environment.

We are ready to offer a 1-year contract to the right person and starting date is negotiable.

Contact: Per Jansson, +81 45 475 0084. Application: Thomas Åhberg NRJ/HP Office + 81 45 475 0400 Fax + 81 45 475 6231 Memoid: NRJ.NRJTHOM E-mail: thomas.ahberg@ericsson.co.jp

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Ericsson Eurolab Deutschland GmbH, our R&D centre in Herzogenrath-Aachen offers the following challenging position:

The AXE Mobile Network department, within our AMC System House, will reinforce our Test unit for the AXE Mobile Core (AMC). The AMC consists of the core subsystems that are common to the mobile applications CME20, CMS30, CMS40 and CMS88.

The Test unit will have as main responsibilities to perform verification of the AMC product components and have an active role in AMC customer support activities. The unit will furthermore also be responsible for verification project both on main (AMC) as well as sub-project level. These projects perform in an international and intra-culture environment and is covering a vast range of development areas at the leading edge of technology, such as ISDN, IN and Internet accesses. To strengthen our activities w e are looking for

SYSTEM TEST LEADER

● Your main authorities and tasks are to plan, coordinate and follow-up of System Integration test activities in the Overall AMC projects. Furthermore you will also be the interface towards associated verification projects in project related matters and of course you will coach the team.

As a suitable candidate you have good knowledge of mobile telephone systems, you are flexible, show initiative and have good communication & cooperation skills. The ability to work under pressure is also an important personal quality. Furthermore, fluency in written and spoken English is required. You should be familiar with System Verification/Test and/or Customer Support. Previous managerial experience, e.g. as Project leader/Testleader is a clear advantage.

Contact: EED/H/R Simon Seebass Memo-Id:EED.EEDSIMS Dial: +49 2407 575 163 or EED/U/TVC Mats Erlandsson Memo-Id.:EED.EEDMERL Dial: +49 2407 575 635 For more information see: http://www.eed.ericsson.se/international/amc

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Ericsson GmbH, Düsseldorf, Germany

The buzz statement on the market is -Telecom-Datacom Convergence". The current telecom operators search for more business in the IP/datacom field and the ISP/datacom operators are searching for more business in the telecom field. Our key account "o.tel.o" has one open position for a

CUSTOMER SOLUTION MANAGER IP/DATACOM

● The team handling the o-tel-o account consists of Account Managers, Customer Solution Managers and Contract Managers.

The tasks of the Customer Solution Manager within the designated solution area are: To detect (technical, commercial, operational) customer need for new solutions. To develop a solution concept adressing the need and present it to the customer. To market the identified solution concept with an overall business focus. To work as a credible counterpart and, ideally, consultant to the customer. Generally support the sales process (marketing, influencing, bidding, negotiating)

The internet business is booming and the team needs reinforcement of a person who has: A general knowledge of IP/Datacom and associated technologies for user authentication, accounting and CoS support. Good general knowledge of IP application areas, especially LAN, WAN, internet, intranet, extranet (public intranet). Good general knowledge of related and new technologies like ATM, MPLS, VoIP, H.323, internet E-Commerce. An understanding of how the customers make business in the telecommunication field

You should have a background from either product management, account management, marketing or business management. You have an extrovert personality and love speed and quick results. You are a team player who makes things happen and preferably has experience in customer dialogue.

Within our Customer Unit "Other Licensed Operators" the account o.tel.o is looking for

CONTRACT MANAGER

● The team handling the o-tel-o account consists of Account Managers, Customer Solution Managers and Contract Managers.

The tasks of the Contract Manager are: Co-ordinate internal EDD contract process. Customer interface for current contracts. Report and follow up on contract profitability and on customer satisfaction. Act on additional sales opportunities.

The business is booming and the team needs reinforcement of a person who has: A good knowledge of MS-Office and SAP. Technical or commercial education. 2 - 4 years experience from system projects or business. experience from the telecommunication area. capacity to focus and set priorities. good German and English knowledge. open-minded, relation builder and team oriented.

You should have a marketing, business or telecom engineer degree and basic knowledge of the other field. You have an selfsufficient personality and love speed and quick results. You are able to work in a small team with a flat hierarchy.

Contact/Application: Gerd Nienaber, tel.: 49/211/534-4700, memo: edd.eddgn Hans-Jürgen Vratz, tel.: 49/211/534-1441, memo: edd.eddhjv Ericsson GmbH Personalabteilung Fritz-Vomfelde-Straße 26 40547 Düsseldorf, GERMANY

LM Ericsson Limited Dublin

SYSTEM DESIGNERS

● Want to work with Multimedia over Internet Protocol? Our designers work with all the biggest technologies - <?tw=95%OOAD, JAVA, UNIX, NT, C++ - developing<?tw the business communications systems of tomorrow. As part of a young enthusiastic group of people, there will be plenty of hard work coupled with plenty of opportunities. These include the chance to work abroad, technical and management training, with many different areas and disciplines to work in. For ambitious, talented individuals, working in Software Design at Ericsson allows your career to grow in tandem with the new technology you will be helping to create. Ref: 2580

NETWORK MANAGEMENT SYSTEMS ENGINEERS

● This is predominantly a systems role, where you will be responsible for the realisation and deployment of Telecommunications Operation Support Systems and IT solutions through integration of third party hardware and software systems. We are seeking candidates across all levels of experience, with excellent analytical skills. You will be working with systems and solutions mainly based on UNIX and Microsoft platforms, incorporating RDBMS and Client/Server applications across TCP/IP WANs. The need to analyse the infrastructure of a system and determine the optimum way to approach problems and develop solutions requires someone with the ability to work very much on their own initiative.

The successful candidate will possess a degree or diploma in Electronic/Telecommunications Engineering or Computer Applications/Science. Experience with compiled languages (C programming, UNIX network programming), interpreted languages (SH, TCL, PERL), system/database administration (SUN or HP UNIX, SYBASE or ORACLE), network administration (LAN/WAN, TCP/IP, X25), data communication commissioning and troubleshooting are desirable. Ref: 2581

SOFTWARE ENGINEERS

● With the exciting transformation of telecommunications happening due to the convergence of media, applications and technologies, this is an ideal time to become part of this ever-expanding market. We are now seeking Software Engineers to work with some of our most important customers, involving the verification, customisation and support of public network telecommunication systems in Europe and the Middle East.

The successful candidates will have experience in software debugging/troubleshooting of Ericsson proprietary software, familiarity with C++ and/or UNIX and the ability to develop pro- active, empathetic relationships with our customers and their needs. This is a fastmoving, exhilarating career with plenty of opportunities for international travel, servicing our multinational customer base. It requires people with confidence and dynamism, who will relish the challenges which the rapidly growing future of telecommunications brings. Ref: 2582

PRODUCT MANAGERS

● Working as part of a multi-disciplinary team you will identify new opportunities for Ericsson's customers in the increasingly dynamic telecommunications marketplace. You will have an in depth knowledge and understanding in at least one of the key technology areas in existing and next generation communication systems including GSM core, Intelligent Networks, Data Communications, Internet - Voice Over IP, E Commerce, Transmission, Access Solutions, Network Management and Operations Support Systems.

Responsibilities will include the evolution of existing networks and services to take advantage of emerging technologies and business opportunities. Working with the global Ericsson product management team you will ensure local operator requirements are captured for inclusion in future product releases. Close co-operation with the Business Units will be required providing them with the necessary technical expertise in the preparation of tender responses and pre- sales activities. These positions offer a stimulating environment for individuals with a flair for creativity and innovation in realising the path to next generation networks and convergence between fixed, mobile and data communications. Ref: 2583

USER INFORMATION DESIGNERS

● We are seeking experienced professionals to work with our switch and IP based telecommunication applications. You will be working with a team of service designers, systems engineers and marketing support. Your main tasks will be to provide information design, with a focus on user and system administrator's guides, on-line help and software usability aspects of our products.

There will also be opportunities to work with multimedia and the web. You should possess excellent writing skills and have the ability to write technical information orientated to the user's needs. Previous experience of publishing tools, particularly Framemaker and Word is necessary. An engineering, computing or telecommunications qualification is preferred and candidates may be required to supply samples of their work. Ref: 2584

PROJECT PLANNERS

● The ideal candidates will have experience in project planning or production planning in the telecommunications industry in the areas of production, cost control and project organisation. We are seeking ambitious, dynamic individuals with the ability to develop into Project Managers.

You should possess the ability to track project budgets, plan and schedule project resources and be prepared to act on the Project Manager's behalf. Ideally you should have an Industrial Engineering or equivalent qualification. Ref: 2585

PROJECT MANAGERS

● Working with a dynamic group of fellow Project Managers, your responsibilities will include management of telecommunications projects from initiation to satisfactory conclusion in terms of delivery precision, quality, costs and customer satisfaction. You will require drive, ambition and be goal-orientated to consistently meet the aggressive targets you are set. Candidates will possess a relevant degree or will have relevant technical and business expertise in the field. Ref: 2586

Application with ref.nr included: Margaret Gaffney, Employee Relations Manager, LM Ericsson Ltd, Beech Hill, Clonskeagh, Dublin 4, Ireland. Tel: +353 1 2072112. E-mail: lmimgy@eei.ericsson.se

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Ericsson Radio Systems AB, Sundbyberg

OPERATIONS DIRECTOR – MOROCCO

Imagine places like Casablanca, Marrakesh, Tanger and Fes. Imagine a landscape that goes from desert to high mountains to sunny beaches. Imagine a friendly people, ancient culture, perfect climate and superb food.

● Imagine running a project from the start-up phase to completion, imagine turn-key responsibility. Imagine building-up a totally new organisation for a new customer. Imagine being part of the marketing team prior to the project.

Imagine a small local company, lots of hard work, success. Imagine yourself in the position of the Operations director of all this.

We Imagine that you have a lot of drive and determination, that you have a humble attitude to local habits and that you will be good official representative of our company.

We also imagine that you have a university degree in engineering or science and several years of experience in implementation of cellular systems and management experience as Operations Manager inside Ericsson. Good skills in french is required.

So stop imagining and give us a call!

Contact: Patrick Boyeaux, Ericsson Maroc SARL, +212 7776906, mobile +212 1300027 Ulf Borison, phone +46 8 757 15 80, memoid: ERAC.ERAUBOR Anita Malmström Wallner, Human Resources, phone +46 8 404 24 29 Application: Ericsson Radio Systems AB LP/HA Siw-Britt Johansson, 164 80 Stockholm siw-britt.johansson@era.ericsson.se

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Ericsson Sørlandet Norge

Mobile Data communication is one of the central areas of business in Ericsson AS in Norway. The X/M department works within product development in the digital Mobile Systems (GSM, D-AMPS) and we are a part of an international Ericsson product development organization (AMC).

In addition to product development we are involved in technical market support activities concerning the new products and technologies.

The area of Mobile Data communication is a high potential market and we see big challenges both now and in the future. To meet the coming challenges we need more excellent people that want to work with state of the art products, technology and methodology. Special focus is migration to UMTS and IP solutions. We have open position as

QUALITY CO-ORDINATOR

● Quality Co-ordination is a prioritized activity within the organization to secure sufficient quality in our products to our customers. As Project Quality Co-ordinator (PQC) or Organizational Quality Co-ordinator (OQC) you will have a key role in the project management team or in the line management team with well-defined responsibility and authority.

Please mark your application with X/M-Quality

Contact: Bjørn Tellefsen, Tlf +47 370 51456, etobjkt@eto.ericsson.se

We also need competence in the area of

TECHNICAL MARKET SUPPORT, MOBILE DATA COMMUNICATION

● Applicants must have good technical background preferable from Mobile Systems and/or Data communication work. These positions involve directly contact with Ericsson Product Management and Ericsson customers

Please mark your application with X/M-MARKET

Contact: Bjørn Tellefsen, Tlf +47 370 51456, etobjkt@eto.ericsson.se

We also need more resources and competence in the area of

SOFTWARE DEVELOPMENT

● Knowledge and/or interests in the following areas: TCP/IP, Internet, web server, C7C++, CORBA, JAVA. Data communication, UNIX, networks, Mobile Systems.

Real time programming. SDL/UML, Methodology work. Configuration management.

Please mark your application with X/M-SW.

Contact: Solfrid Fløystad, Tlf +47 370 51729, etosf@eto.ericsson.se or Kari Kårstad, Tlf +47 370 51422, etokark@eto.ericsson.se

X/M is located in the Grimstad/Arendal area of Norway and we have young and stimulating working environment and international contacts.

Application: personalavdelingen Ericsson Sørlandet Norge

Nippon Ericsson K.K, Japan - NRJ

Ericsson in Japan is establishing development of Intelligent Network (IN) services for the PDC system on the Japanese market. We are looking for highly qualified engineers with an interest to quickly transfer their knowledge to the local staff. We offer short- or long term contracts as

SERVICE ADMINISTRATION AND MANAGEMENT (SAM) DESIGNER

● The job covers requirement and implementation analysis, implementation and test of the Graphical User Interface (GUI) for IN services.

The Graphical User Interface (GUI) is built using Power builder and Sybase, the Ericsson SMABase platform and Object Oriented design. The design environment is Windows NT/Windows 95 client-server and all documentation is written in Framemaker.

3-5 years experience of GUI design and 1-2 years of experience with the tools are required.

SERVICE APPLICATION (SAT) TESTER

● The job covers test analysis, test specification and execution of Service Application (SAT) test of the IN functions for both Service Functionality (SF) and Service Management (SAM) parts.

The testing is executed in a PDC test network with AXE, SMAS/Unix and Windows NT/Windows 95.

3-5 years experience of SAT test in AXE/SMAS test network and some experience with test of Windows based applications is required.

The location for all assignments is the newly established Ericsson R&D Centre at Yokosuka Research Park (YRP) south of Tokyo.

Contact: Torbjörn Boltshauser, +81-468-47 5227 memo: nrj.nrjtors email:nrj.nrjtors@mesmtpse.ericsson.se Application: Att: NRJ/RDC Torbjörn Boltshauser Nippon Ericsson KK Ichibankan 5F, YRP Center 3-4 Hikarion-oka, Yokosuka Kanagawa 239-0847, Japan

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LM Ericsson Ltd, Dublin

TOTAL PROJECT MANAGER

● Vacancies exist in the newly created Product Line Entity (PLE) for Total Project managers. The Product Line Entity has responsibility for all consolidated business activities with respect to the Business Services product portfolio of both GPL-NI and the VAS unit of RMOG. The Business Services product portfolio is initially comprised of the Information & Business (I&B), Virtual Private Network (VPN), to-day available for both fixed and cellular operators.

As a Total Project manager you will manage and co-ordinate the total project with various organisations which have the sub-project responsibility for functional activities such as design, supply, training & marketing of Business Services. These organisations are located in Holland, Sweden and Ireland.

For this job you must have an academic qualification in an Engineering related subject in addition to project management experiences from development, verification and/or industrialisation projects.

You should be open minded, result/goal oriented and have the ability to organise and manage a multicultural software development project.6

Contact: Margaret Gaffney Tel: +353 1 2072112 . E-mail: lmimgy@eei.ericsson.se Application latest 981127: Margaret Gaffney, Employee Relations Manager, LM Ericsson Ltd., Beech Hill, Clonskeagh, Dublin 4.

Ericsson Communications Pvt. Ltd., India

SS CME 20 SYSTEM SUPPORT EXPERT

The main responsibilities for this position will be to manage, co-ordinate and participate in network investigations and problems at highest technical level and to customers expectations. Provide technical competence for resolving complex problems in network. Provide technical advice and assistance to support engineers and Managers. Transfer trouble shooting skills and competence to system support staff. Also participate in emergency services.

The competence requirement are : Minimum of 5-8 years working experience on AXE 10 Digital Switching application Systems, of which at least 3-4 years experience should be on GSM CME20 Systems in Verification and/or Support environment. Experience on IN is desirable.

Candidates with excellent trouble shooting skills and experience on other application systems/product line can be considered for this position.

Candidates should also have good English Communication skills.

Qualification : Degree in Computer Science or Electronics or Telecom Engg.

The initial contract will be for one year.

Contact: ECI/HC Girish Johar, Phone + 91 11 6180808 E-mail : eci.ecihrc.mesmptse.ericsson.se Application: Ericsson Communications Pvt. Ltd., The Great Eastern Plaza, 2-A, Bhikaji Cama Place, New Delhi - 110 066, India

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Ericsson Australia Melbourne, Australia

INTELLIGENT NETWORK SERVICES TEST LEADER

● This is a great opportunity to join a dynamic new business area that is enjoying rapid new growth.

ASAC (Advanced Services Application Centre) is a fast growing area within Ericsson Australia, working in the development of Network Intelligence and IT based services and applications. Principal customers are BN's Network Intelligence product area, RMOG, the Asia-pacific region and the local EPA customer divisions. ASAC is an ideal area for staff skilled in telecommunications to start moving into Information Technologies while still making use of telecom's principles and skills. ASAC is located in Melbourne Australia. It currently has 55 staff with in excess of 80 expected during 1999.

Due to this growth, we are seeking applications from staff with excellent test leader skills to become a member of the ASAC team. You should have several years experience in the IN service test area and be able to do both test planning, and test leading for design projects

Your major responsibilities would be : Test Analysis. Test planning. Preparation of test specification and test instructions. Leading test teams. Mentoring. Conducting testing of IN services.

Prerequisites: Good AXE test experience. Good IN service testing experience. Good testing knowledge of SCP, SSP, INAP, CS1. GSM testing and IT testing experience is also a great plus. Good Test Leader experience. Good fault finding abilities. Good general Telecommunication knowledge. Unix experience. Good communication and team skills. Dynamic and result driven.

Don't miss out on this great opportunity to join a new dynamic business area that is growing very fast, and is at the cutting edge of technology.

Contact: Maria Elmgren, EPA.EPAMIE, epamie@epa.ericsson.se, phone +61 3 9301 4601. Application latest 981202: Leonie Cordell , EPA.EPALEC,epalec@epa.ericsson.se, Ericsson Australia Pty Ltd, P O Box 41, Broadmeadows, VIC 3047, Australia.

Ericsson Eurolab Deutschland GmbH, our young research & development centre in Herzogenrath-Aachen offers the following vacancy:

The AXE Mobile Network department, within our AMC System House, will reinforce our Test unit for the AXE Mobile Core (AMC). The AMC consists of the core subsystems that are common to the mobile applications CME20, CMS30, CMS40 and CMS88.

The Test unit will have as main responsibilities to perform verification of the AMC product components and have an active role in AMC customer support activities. The unit will furthermore also be responsible for verification project both on main (AMC) as well as sub-project level. These projects perform in an international and intra-culture environment and is covering a vast range of development areas at the leading edge of technology, such as ISDN, IN and Internet accesses. To strengthen our activities we are looking for

SYSTEM TEST ENGINEERS

● Your main authorities and tasks are to perform System Integration Test of AMC products. This includes acivities like Load test, Stability test, Robustness test and Accuracy test. Main areas are today IN, Datacom and ISDN. You will work with the definition and execution of SIT aswell as trouble shooting on the faults found.

As a suitable candidate you have good knowledge of mobile telephone systems, you are flexible, show initiative and have good communication & cooperation skills. The ability to work under pressure is also an important personal quality. Furthermore, fluency in written and spoken English is required. Experiences from System Verification/Test are a clear advantage.

Contact: EED/H/R, Simon Seebass, Memo-Id:EED.EED-SIMS,Dial: +49 2407 575 163 or EED/U/TVC Mats Erlandsson, Memo-Id.:EED.EEDMERL, Dial: +49 2407 575 635 For more information see: http://www.eed.ericsson.se/international/amc.

Ericsson Eurolab

AXE Mobile Core (AMC)

The AXE Mobile Core (AMC) System House at location Herzogenrath/Aachen is responsible for development of core products used commonly by all Ericsson digital mobile systems i. e. CME20 (GSM), CMS30 (PDC), CMS40 (PCS) and CMS88 (D-AMPS). Our AMC System House at EED consists of the AMC operations and the design & test department.

The AMC operations department is overall responsible for all activities from requirement management to integration test at our 15+ design centers working for AMC.

We are organized into product-, systems-, project-, quality- & methods-management. We also have an AMC lab group responsible for pre-development and prototyping.

The AMC design & test department (former TCS) is responsible for development within product area traffic control and overall for function and system integration test activities within AMC.

Process Engineer

Project-No. 14/198

The main responsibilities are the improvement of work processes within the AMC organization and monitoring the usage of the AXE 108 methods in projects. The position is located at Ericsson Eurolab Deutschland GmbH, Herzogenrath, and reports to EED/U/OQC.

The main tasks include:
- Coordination of process management (PM) activities
- Project management of PM projects
- Maintenance and improvements of design processes
- Establishment, maintenance and improvements of operational processes
- Being the driving force for process management

As a suitable candidate, you should be familiar with the Ericsson-way-of-working and the existing processes in your current work area. Knowledge of different methodologies used in software engineering is a definite plus. You should have a very good knowledge in how to establish, maintain and improve processes.

Working as a moderator and consultant a structured way of thinking, excellent communication and cooperation skills, perseverance and the ability to be the driving force for PM are important personal qualities.

Overall you should see this job as a challenge in improving our existing way of working. Participation in international AMC meetings is also part of the job. Fluency in written and spoken English is a must.

Please contact:

Human Resources	Manager Methods & Quality AMC
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AMC 7 Technical Coordinator

Proj.-No.: 15/398

One of the responsibilities of the Systems Group is the technical coordination on AMC main level.

The AMC Technical Coordinator coordinates technical issues involving several subprojects, the related mobile applications projects and associated projects within the CME20, CMS30, CMS40 and CMS88 systems. The AMC main Technical Coordinator also supports the subproject Technical Coordinators.
To strengthen our capabilities on technical coordination, we are looking for an experienced system designer with more than 3 years of Ericsson experience in AXE10 design. You will most probably share the working tasks with another Technical Coordinator.

We are particularly interested in someone who can provide competence in ONE OR MORE of the following areas: AM System Development, Signalling, Data Communication, ATM, O&M, Resource Modules, IN Development, Business Communication Fixed Access, UMTS, Hardware Modernization. Furthermore, good communication skills and organisational talent is requested. Due to the type of work performed, some travelling may be necessary.

Please contact:

Human Resources	EED/U/ORC
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The AXE Mobile Network department, within our AMC System House, will reinforce our Test unit for the AXE Mobile Core (AMC).

The main responsibilities of the test unit are to perform verification of the AMC product components and have an active role in AMC customer support activities. The unit will, furthermore, also be responsible for verification projects both on main (AMC) as well as subproject level. These projects perform in an international and intracultural environment and cover a vast range of development areas at the leading edge of technology, such as ISDN, IN and Internet accesses.

To strengthen our activities we are looking for

SYSTEM TEST LEADER

Proj.-No.: 33/398

Your main authorities and tasks are to plan, coordinate and follow-up of System Integration test activities in the overall AMC projects. Furthermore, you will also be the interface towards associated verification projects in project related matters and of course you will coach the team.

As a suitable candidate you have good knowledge of mobile telephone systems, you are flexible, initiative and have good communication & cooperation skills. The ability to work under pressure is also an important personal quality.

Furthermore, fluency in written and spoken English is required. You should be familiar with System Verification/Test and/or Customer Support. Previous managerial experience, e.g. as Project leader/Test leader is a clear advantage.

Please contact:

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AXE10 DATACOM ENGINEERS

Proj.-No.: 16/398

The border between telecommunication and datacommunication is becoming more and more diffuse. AMC needs to strengthen the competence in the datacom area focusing especially on mobile interworking and TCP/IP. We need a person to represent AMC on the system level and to contribute to the evolution of datacom within AXE10.

Your responsibilities will be to perform datacom system studies, investigations and to develop datacom strategies. Some of the results could then be objects for prototyping in a lab environment. You will cooperate with colleagues within the Mobile Applications, PN and UAB.

We are looking for a system or software engineer with at least 4 years of Ericsson experience, preferably TCP/IP and/or mobile Datacom experience.

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AXE10 SYSTEM DESIGNERS

Proj.-No.: 21/398

AMC System activities are steadily growing, mainly due to fixed mobile convergence. To meet this challenge we need to expand.

We are participating in early project phases and are performing pre- and feasibility studies. We are also evaluating new technologies and perform tasks which require high competence and professionalism. To strengthen our capabilities for this type of system work, we are looking for an experienced system designer with more than 3 years of Ericsson experience in AXE10 design.

We are particularly interested in candidates who can provide significant competence in one or more of the following areas: AM System development, Signalling, Data Communication, O&M, Resource Module Platform, Hardware Modernization, PDC system, D-AMPS system. Due to the type of work performed, some travelling may be necessary.

Please contact:

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Strategic Product Manager

Proj.-No.: 13/398

The Strategic Product Manager will be responsible for the content and the timing of one AMC release. This includes:
- start-up of the negotiations with all involved product and project managers
- define and order the project package from the AMC project office and steady follow-up

Supported by your colleagues, you continuously balance the needs of the different mobile systems during a project's life cycle, the long-term system strategies and the possibilities of the AMC project to deliver.

You document the agreed parts of the project package in core requirement specifications and change requests. You control these parts by participating in the projects change control board and steering group. By approving the statement of compliance you verify that the ordered contents have been delivered by the project.

As a suitable candidate you should have a technical background with at least 3 years of job experience, preferably in systems design and/or project management. Experience from any of the technical areas above mentioned is a merit.

In this demanding and challenging position you should take initiative, have good communication and cooperation skills and be able to work under pressure.

Both local and expat contracts will be offered.

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Circuit Switching Systems (CSS)

Our CSS System House at location Herzogenrath/Aachen is part of the huge GSM family and involved in nearly all activities from requirement definition to customer supply and support around the Circuit Switching System (CSS) of AXE/CME20:

- **Systems Design and Operational Product Management (EED/X/D)**
- **CSS/GSM Project Office (EED/X/R)**
- **Software Design for MSS and MMS (EED/X/P)**
- **INDUStrialization, Test Configuration Management, Product Line Maintenance (EED/X/S)**
- **World Class Provisioning of GSM products (EED/X/T)**
- **Software Supply and Support (EED/X/Y)**

Function Test Coordinator

Proj.-No.: 34/398

The EED/X/P department is responsible for 1/APT products, the design of the Mobile Switching Subsystem (MSS) within the Circuit Switching System (CSS) System House as well as Function Test and Maintenance for the designed products in MSS.

For the next project R8.0 our project team is looking for a function test analyzer (TG1 to TG2)/ function test coordinator (TG2 to MS8).

Your main tasks as Function Test Analyzer are to analyze the function test impacts of the new functionality, defining a test strategy, preparing the Master Test Plan, preparing the AD-plan and following it up throughout the project and to closely work together with the project manager and the STE coordinator.

Later on as a Function Test Coordinator your main tasks are to coordinate all test related issues, beeing the TCM contact person, coordinating test plant set-up and to closely work together also with the Overall Function Test Leader.

You should have at least 3 years experience in testing in simulated environment and target system testing. You should have a good understanding how a design or test project is run, be very good in communication and be the driving force in a project team.

Please contact:

Human Resources	EED/X/P	EED/X/P
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System Engineering and Product Management

Migrating from GSM to the Future

Proj.-No. 07/398

We are working in the area of GSM 900,1800 and 1900 systems. We are looking for people who like to design the evolution of our GSM markets to the next generation of networks in a responsible position.

We are the right place for business-oriented system engineers who like to work for UMTS, Internet networks, GSM systems and mobile data. You directly control the next version of Ericsson's products in the mobile world market. You are responsible for European standardization (ETSI) and you join also sales teams in Europe and middle East to boost Ericsson's market success.

Suitable candidates are familiar with system engineering of 3-5 years of AXE. Being a technical coordinator, project leader, doing marketing descriptions, giving customer presentations and doing technology evolution in the forefront of telecommunication development should give you the fun professional life has to offer.

You should enjoy to work on an entrepreneurial basis and have the ability to set the right priorities within an everchanging environment.

Business trips to European standardization gremia, Stockholm as well as to customer sites will enrich your day to day life.

Please contact:

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Andreas Thuelig, +49 2407 575 246, eedant@eed.ericsson.se;
Simon Sebass, Human Resources, +49 2407 575 163, eedsims@eed.ericsson.se.

The CSS/GSM project office at EED in Herzogenrath is responsible for all GSM Circuit Switching System projects from TG0 up to GA. We have the responsibility for overall CSS/GSM resource management, CSS/GSM Project roadmap establishment and co-ordination of all MSC/VLR development operations based at EED, EUS, ERA, LMF and IXG.

Total Project Manager for CSS/GSM R9

Proj. No.: 52/98

GSM/CSS R9 will be Ericsson's GSM delivery for the year 2001, containing development for the traditional GSM customers, satellite operators, GSM-Railway and most likely first parts of the 3rd generation system UMTS.

As TPM R9 you will be responsible for the GSM switching system development project from pre-study until general availability. This covers the relevant node-level projects (e.g. MCS/VLR, GDB, SOG/BGW) as well as ordering responsibility from our associated projects from e.g. AMC and UAB. The project will conclude at GA after INDUS and FOA activities on our various markets.

The project volume is expected to be in the magnitude of ca. 600 - 800 kmh, excluding associated projects.

Project Manager R9 MSC/VLR

Proj. No.: 54/98

You will be responsible for the MSC/VLR project from TG1 (feasibility study) up to MS 10 (system release). The MSC/VLR project will be the biggest node level project belonging to CSS/GSM R9.

The project volume is expected to be in the magnitude of ca. 200 - 300 kmh (excluding associated projects).

Technical Consultant

Proj.-No.: 19/398

As a technical Consultant you will provide expertise for all technical issues within the project office, which are not (yet) covered in one of the design projects.

You will be involved in a broad field of activities, as e.g. Rapid Product Changes (RPCs), act as our technical interface to SPM, co-ordinate with other product areas and associated projects.
World Class Provisioning activities and perform various investigations as needed by the project office management are also part of the job.

This covers all areas belonging to CSS as well as co-ordination towards associated organisations like PSS, VAS, BSS, UAB, AMC etc.

You can find more information about the structure of the department, the projects and the international organisation on:

http://www.eed.ericsson.se/proj/css

Please contact:

Human Resources	EED/X/RTC	EED/X/RC
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Ericsson Eurolab's „Product Line Configuration Management Section (EED/X/SO)" has the central Test Configuration Management (TCM) responsibility for CSS and AMC development projects from TG1 to GA or CME20 SS releases, and support for design maintenance and PLM activities after GA. We are now looking for candidates to fill the position of:

Group Manager STE Support Group

Proj.-No.: 26/398

The Simulated Test Environment (STE) support group provides STE coordination and test support with emphasis on STE to CSS and AMC function test projects and design maintenance activities. The group's tasks are primarily technical coordination, testing support and methods and tools strategies.

Your key responsibilities will be to plan and coordinate the activities of the group, ensuring tool vendors meet our requirements, support is provided for all applications and project phases and follow-up of all tasks and commitments.
You have AXE design and/or testing experience, a good understanding of STE tools and methods and strong skills in organizing, planning, coordination and communication.

Please contact:

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STE Test Engineer

Project-No: 9/298

The position is located in the CME 20 SS STE Support Group under TCM. The group is responsible for supporting STE activities within CSS and AMC in the area of function test, design maintenance and longer term Methods & Tools issues affecting testing. This central STE support group will not only support EED but also other LDC's that perform CME20 SS related test and maintenance activities.

As a suitable candidate, you have experience in AXE function testing or design maintenance. Experience with MGTS PASM, TSS 2000, TTCN and C coding is of added value. You also have to be service-minded and prepared to quickly take new assignments. In this position you will have the opportunity to travel, perform new tools evaluations, come up with new testing strategies and increase your network throughout Ericsson.

Please contact:

Human Resources	EED/X/SOZC
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The system group within X/P CSS design department has the product responsibility for the mobile application 1/APT 210 25 and the subsystem MSS within the CME20 / CME40 switching system. We also run the product committees for these products, PC-1/ATP and MSS, and perform system studies. For further support of our system group we are looking for a

System Designer

Project No. 32/398

As a System Designer your main tasks include:
- Participation in prestudy, feasibility and quick studies
- PRIM & CNI handling
- Writing of technical reports

As a suitable candidate you are an Ericsson employee with at least of experience in the area of switching systems. Ideally, you should be familar with 1/APT mobile applications. Good knowledge of mobile telephony systems and in Data communications is a clear advantage.
Being initiative, self-driven and showing good analytic abilities as well as good communication and cooperation skills are important personal qualities. In addition you should be able to cope with a high work pressure.

If you enjoy demanding work and can respond well to significant challenges and responsibilities, why not become a member of our team? We have the responsibility for the software development for the mobile switching system within the GSM-standard. We are looking for

Software Design Engineers

Project No.: 31/398

We are working with the GSM-system in the area of the MSS, dealing with the design, development and test of telecom software or design complete telecom systems. Programming experience e.g. (C++, C), background in telecommunications preferably with a working knowledge of structural design methods is required for this prosition. Relevant Ericsson experience is a plus.

If you are interested in joining a young and international team and you have good communication as well as good interpersonal skills please send us your resumee via mail or memo to:

Human Resources	Systems Group	
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EED.EEDSIMS	EED.EEDGINA	EED.EEDDHE

IN Specialist GLOBAL Support for the No.1 AXE application

Project -No 17/398

The Product Line Maintenance section takes central responsibility for the worldwide CME20 Switching System. It is considered as the primary competence centre for CME20 SS.
We have accepted the responsibility to verify IN solutions in a CME20 SS environment, providing high quality loadfiles to our customers.

Your experience in
- testing and/or development of the AXE IN platform (ideally for Mobile) (SDP, Service Scripts, SMAS)
- development and implementation of IN scripts
- sharing your knowledge with team members

will make you the central technical person in our IN team.

Join us, develop your skills and secure your future with the CME20 Switching System Product Line Maintenance team. Opportunities for travel, networking, personal and technical development are outstanding. Watch yourself make a global impact with your efforts.

Please contact:

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Experienced Troubleshooters GLOBAL Support for the No.1 AXE application

Project No 39/98

The Product Line Maintenance section takes central responsibility for the worldwide CME20 Switching System. It is considered as the primary competence centre for CME20 SS.

Our strong resources reflect our responsibility for troubleshooting and testing on system level. Your contribution to the Help Desk team is:
- Excellent testing and trouble shooting experience in Mobile AXE switching systems and their latest developments
- Commitment to provide solutions to our customers
- Team spirit

Join us, develop your skills and secure your future with the CME20 Switching System Product Line Maintenance team. Opportunities for travel, networking, personal and technical development are outstanding. Watch yourself make a global impact with your efforts.

Please contact:

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General Packet Radio Services (GPRS)

The System House GPRS (General Packet Radio Services) at location Herzogenrath/Aachen is responsible for the development, verification, support and supply of products in the field of GPRS.
GPRS is aiming for the combination of data communication and mobility. GPRS is currently standardized as an extension of GSM.
The department EED/D is responsible for the development and maintenance of the GPRS core systems OMS and PXM and for the GPRS applications VLR, SMS and PTM.

The unit Product & Operations (/D/P) just recently got the assignment to build up the Central Configuration Management (CCM) for Ericsson's GPRS products.

Senior System Designer GPRS

Proj.-No. 69/98

We are looking for Senior System Designers who will enable us to enhance and extend our current GPRS Phase 2/UMTS standardization activities and system design of the GPRS Support Nodes (SGSN and GGSN). This task comprises:
- support for Ericsson's ETSI delegates within the Ericsson-wide standardization projects and active participation in ETSI as an Ericsson representative
- analysis of ETSI change requests
- support and influence of the design project with respect to the latest developments in ETSI
- support of internal customers and local product management
- investigation of the current development in IETF in order to actively influence the development in UMTS at an early stage

As a senior system designer you need a proven, solid background in the technical principles of GSM. Of special importance for this position is a good understanding of the GSM circuit switched data services and preferably also Direct Access and GPRS.

Experience with typical datacom protocols such as IP, TCP/UDP, HTTP, PPP, DHCP, RADIUS, RSVP, etc. would be beneficial.

Since this task requires extensive contacts to Ericsson internal personnel and to external customers and competitors, you need very good communication and negotiation skills as well as a good command of the English language. An already well established personal Ericsson network will support you to fulfil this challenging task.

Please contact:

Human Resources	EED/D/PC
Simon Seebass	Stefan Eissing
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For further support of our design teams we are looking for two

GPRS Senior Software Designers

Proj.-No.: 30/398

The main tasks for the position are: either design of the GPRS bearer service (SMS, VLR, class A/B mobile support) or O&M product development (OMS,PXM). The job is performed in teams with a large degree of responsibility and authority, comprising all parts of the product life cycle from early requirement analysis up to maintenance after GA. There will be a close cooperation with the I&V subproject at EED. Thus, we have the opportunity to see our products being integrated and verified in the real GSM datacom network.

As the GPRS organization is still rather young, there is the freedom to be pioneer for processes, system architecture, usage of programming languages and platforms. On the other hand, we have well defined projects and clear delivery deadlines for our assignments.

For the GPRS bearer service, the languages ERLANG, C and JAVA are used. O&M applies C++, JAVA, ERLANG and the CORBA architecture.

We are looking for persons with proven experience in the technical domain and a strong team orientation. A solid SW engineering background is a requirement. Either local or expat contracts can be offered for these positions.

Please contact:

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Location Nürnberg

Ericsson Eurolab Nürnberg is responsible for Product Development for Mobile Phones, Radio Base Stations, Transcoders and for the Research Mobile Communications.

Due to the split of our Base Station Design Department W-CDMA Radio Design is seeking a

Group Manager Wide Band Radio Design

Proj.-No.: 53/998

Due to the split of the Base Station Design department, a separate group for W-CDMA Radio Design will be formed. The unit's task will be design of RF parts of the BTS. The work will be performed in close cooperation with other design centers within PU-WRN.

As a group manager you will be responsible for your staff as well as for the tasks performed in your group.

As a suitable candidate you have earlier experience from RF design, you have a strong interest in people as well as knowledge of general telecommunication. You are an Ericsson employee with good cooperation and communication skills, you take initiative and have a good self motivation.

Please contact:

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Department Manager, John Victorin
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Ericsson Eurolab Deutschland GmbH is a young Research & Development center located in the middle of Europe. More than 1000 employees from about 30 different nations are working in 3 locations in Germany. Due to a continuous growth we have a number of new positions for experienced engineers.

www.eed.ericsson.se

Location Herzogenrath/Aachen

Location Hildesheim

Location Nürnberg

ERICSSON

No. 17
November 19
1998

contact

Ericsson, HF/LME/I,
Room 811023,
S-126 25 Stockholm

In a new music video by Ace of Base, Ericsson's GH 768 mobile phone plays a starring role and saves the day.

MTV, the TV music channel, has been showing a very popular video of the latest hit single by Ace of Base for the past several weeks.

Ericsson's smallest mobile phone has a starring role in the video, and the company has now initiated a program of marketing cooperation in various Internet activities.

Ace of Base

flying high with Ericsson's 768

Ace of Base, with Ulf Ekberg and siblings Jonas, Malin and Jenny Berggren, broke through internationally in the early 1990s. "Happy Nation," released in 1993, still holds the all-time record for debut albums, with 21 million copies sold around the world.

Since then, Ace of Base has recorded one smash hit after another, culminating in June 1998 with the release of their latest album, "Flowers". A music video that accompanies "Travel to Romantis," the hit single from their "Flowers" album, is the most widely telecast video on MTV today.

Starring in new music video

In the video, with obvious references to the movie "Top Gun," a yellow Ericsson GH 768 mobile phone plays a starring role. The hero, a Swedish fighter pilot played by Ulf Ekberg, uses the telephone to call the woman of his dreams, a flight instructor played by Jenny Berggren.

The Internet and IT are important elements in all work conducted by Ace of Base. Ulf Ekberg and Jonas Berggren send draft copies of lyrics for new songs to each other, as well as drum and synthesizer beats, from their homes in Marbella, Spain and Gothenburg, Sweden, respectively.

Rapid feedback over the Net

"Electronic communications have become a basic prerequisite in our work. Today's communication services are especially important in providing close contacts with the market. We study the merits of new songs over the Net, chat with our fans and receive rapid feedback on our work."

Ulf Ekberg believes a growing percentage of music sales will be booked via the Internet.

He projects higher sales through mail-order companies, but also sees the potential for other opportunities and sales outlets.

Fans will do their own albums

"In the future, fans will probably not have to buy an entire album. Instead, they will be able to download the songs they want via the Internet, store them on their hard-drive and record their own album collections. One problem I foresee might arise with certain songs that are not immediate, songs you have to listen to more than once. They probably won't have a chance on the new market. There are obvious inherent risks in the speed of Internet music."

Niclas Henningsson

http://www.aceofbase.net

http://www.aceofbase.com

UPCOMING

Tuesday, Nov. 23: Corporate executive team meets to follow up on the progress of the new organization.

Tuesday, Nov. 23: Launch of Ericsson's enterprise solutions in New York.

Tuesday, Nov. 24–Friday, Nov. 27: Sircom International Mobile Telecom Exhibition in Paris.

Tuesday, Dec. 1–Friday, Dec. 4: Expo Comm Andino '98 in Bogota, Colombia.

Wednesday, Dec. 2–Saturday, Dec. 5: Unicomm Brazil.

UPDATES

The Latin America market area will establish its corporate office in Miami, Florida. The office will open during the first quarter of 1999.

On **November 9**, some 1,700 of Ericsson's Swedish managers gathered in the Stockholm Globe Arena for a briefing on the new Ericsson.

The management team for the Europe, Africa and Middle East market area has been announced. Members are listed on the Corporate News Web page at:

http://inside.ericsson.se.

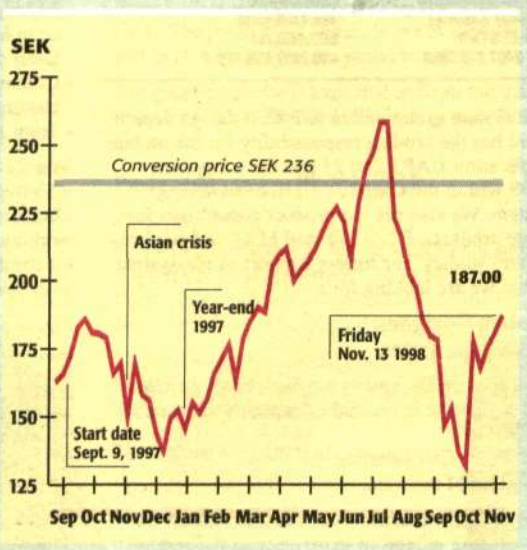
The management team will begin working in Stockholm and will relocate to London in mid-1999.

NEW ASSIGNMENTS

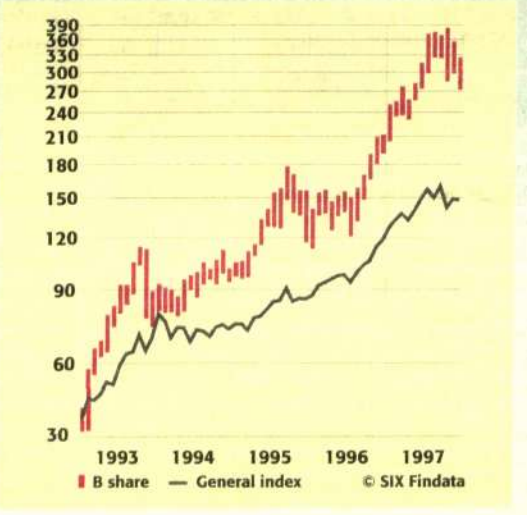
Roger Hellqvist has been appointed president of Ericsson in Bosnia-Herzegovina. He is currently responsible for marketing and sales of fixed and wireless access products at Ericsson in Russia.

Bo Carlgren will serve as acting general manager for the Professional Services business unit within the Network Operators business segment. He will report directly to **Mats Dahlin**.

THE ERICSSON B SHARE



An Extraordinary General Meeting of shareholders on September 9, 1997, approved a proposed convertible debenture program. The conversion period extends through June 30, 2003. For additional information, access the web site: http://inside.ericsson.se/converti.htm

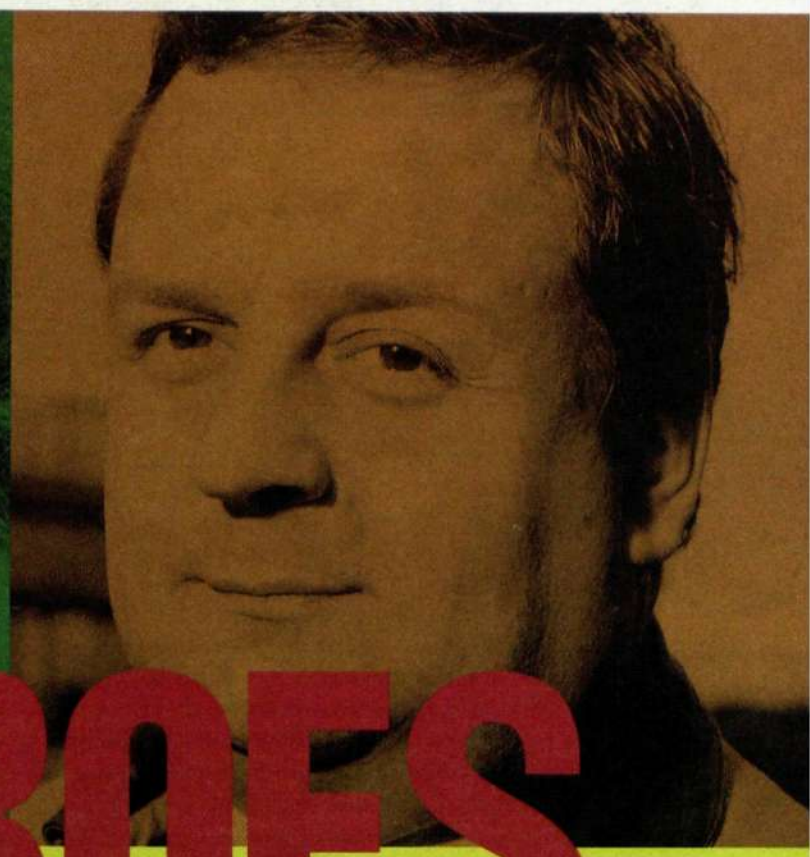


MALAYSIA – A HUB IN THE NEW TELECOM WORLD PAGES 12–16

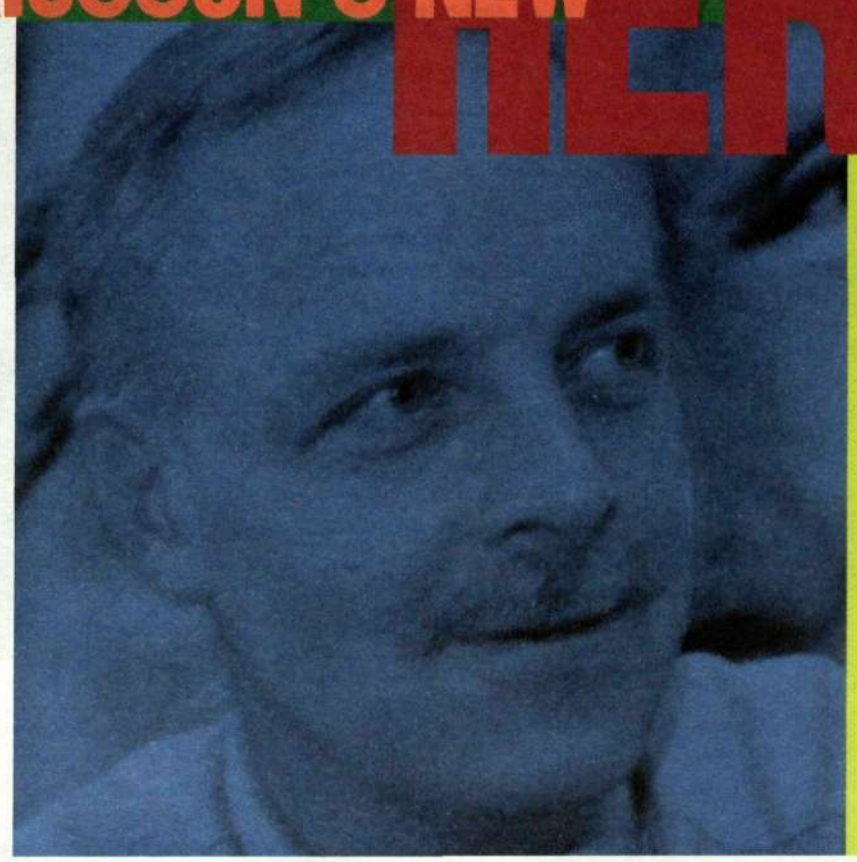
ACCESS

Nov.98

POWER UP WITH IT NEWWWS



ERICSSON'S NEW HEROES PAGES 2–7



"INTERNET PROTOCOL ERICSSON'S FUTURE"

MEET MIKE THURK, PAGE 8

IT SUPPLEMENT TO CONTACT – IN COOPERATION WITH ERICSSON DATA

ERICSSON

They break the mold. They take risks. They do this because they realize it is essential. "If we fail to release creativity and imagination, Nokia will take the lead," said one. One of **ERICSSON'S NEW HEROES.**

THE NEW ERICSSON: FOCUS ON THE CUSTOMER

Sometimes you have to break the mold. And sometimes you find the solution to a problem surprisingly close by.

"In our case, we found the solution just 300 meters away – right across the freeway," said Robert Paulsson of Ericsson in Lund, Sweden. He faced a gigantic global logistic nightmare: straightening out all the parts orders for Ericsson's mobile telephones.

The problem was that it took much too long for customers, local companies, and distributors to order mobile telephone parts.

The web-based solution is Customer Service Partner Network. This communications system was developed in record time in cooperation with Netch, a company in Lund known as a self-assured pioneer of electronic commerce. It is a neighbor of Ericsson in Lund, located within walking distance.

"Our customer communications were disorganized. We sent everyone the same service bulletins. And in return we received unreadable faxes with incorrect prices and specifications."

MR. PAULSSON ACKNOWLEDGES that he was skeptical of Netch. What could big Ericsson learn from a small web company? Hmmm...

"Their track record, with major exporting companies as their clients, caught my interest, but what broke down my resistance was their sheer dedication, expertise and smarts."

The point of Customer Service Partner Network is to provide everyone with easy access to all the information they need and no more. Or: the right information and the right price to the right person at the right time and place! Mr. Paulsson explained:

"The local company in Israel, which sells non-GSM mobile phones, should not have to read about spare parts for GSM phones. One of the advantages of this extranet is precisely its ability to tailor information. No one should have to read about things that don't affect them."

MR. PAULSSON WAS ALSO CONCERNED that the screen that greets the customer, the interface, would not display "a lot of jumping cartoons."

"You should be able to access it from a Palm Pilot, from an MC16 and from countries with limited bandwidth."

To Netch, which had previously worked mostly on projects with end-user focus, it was a challenge to quickly develop a model of how to reach a large, complex, global organization. Johan Rask and Magnus Wettemark of Netch explained:

"The Customer Service Network does not put users in a straitjacket, and Ericsson does not load in all the information on a centralized basis. Each user is responsible for his own part of the database, and this creates greater involvement. Administration is minimized as well."

ROBERT PAULSSON AND NETCH have challenged all the old standards and conventions in this effort to create an overall approach to the flow of information to and from local companies and distributors.

"A typical Ericsson project is rigidly specified from start to finish. In this case, the path was nonlinear at the outset, but Netch's creativity has brought us to where we wanted to be and much further. Instead of focusing on details, they were allowed to come up with their own ideas. And we have to charge ahead, or Nokia will get a jump on us!"

Does the end user, the consumer, notice the new system? Mr. Paulsson smiled slyly, rubbed his hands and said "we have saved the best for last," then allowed Service Point project manager Patrik Persson to take over: "The Service Point counter stands in a corner of the store with an on-line, specially designed repair application – also designed by Netch.

"About 5,000 distributors will be able to get a Service Point – a custom-designed, web-based counter where a distributor can provide instant service and information to customers. Service that used to take weeks, batteries with a loose connection for instance, now takes minutes. With its mandatory education and certification process, the Service Point concept will upgrade distributors' expertise and help build our brand."

MR. PERSSON WOULD LIKE TO use the slogans "one square meter for long term success" and "service while you wait" to promote Service Point. Distributors with Service Point will be connected to the same network as Ericsson Group companies, but at a different access level.

Naturally, all orders and other inputs to the system are statistically analyzed, providing data for use in Ericsson's production planning, research, development and trouble-shooting departments and much, much more.

@ To learn more, contact:
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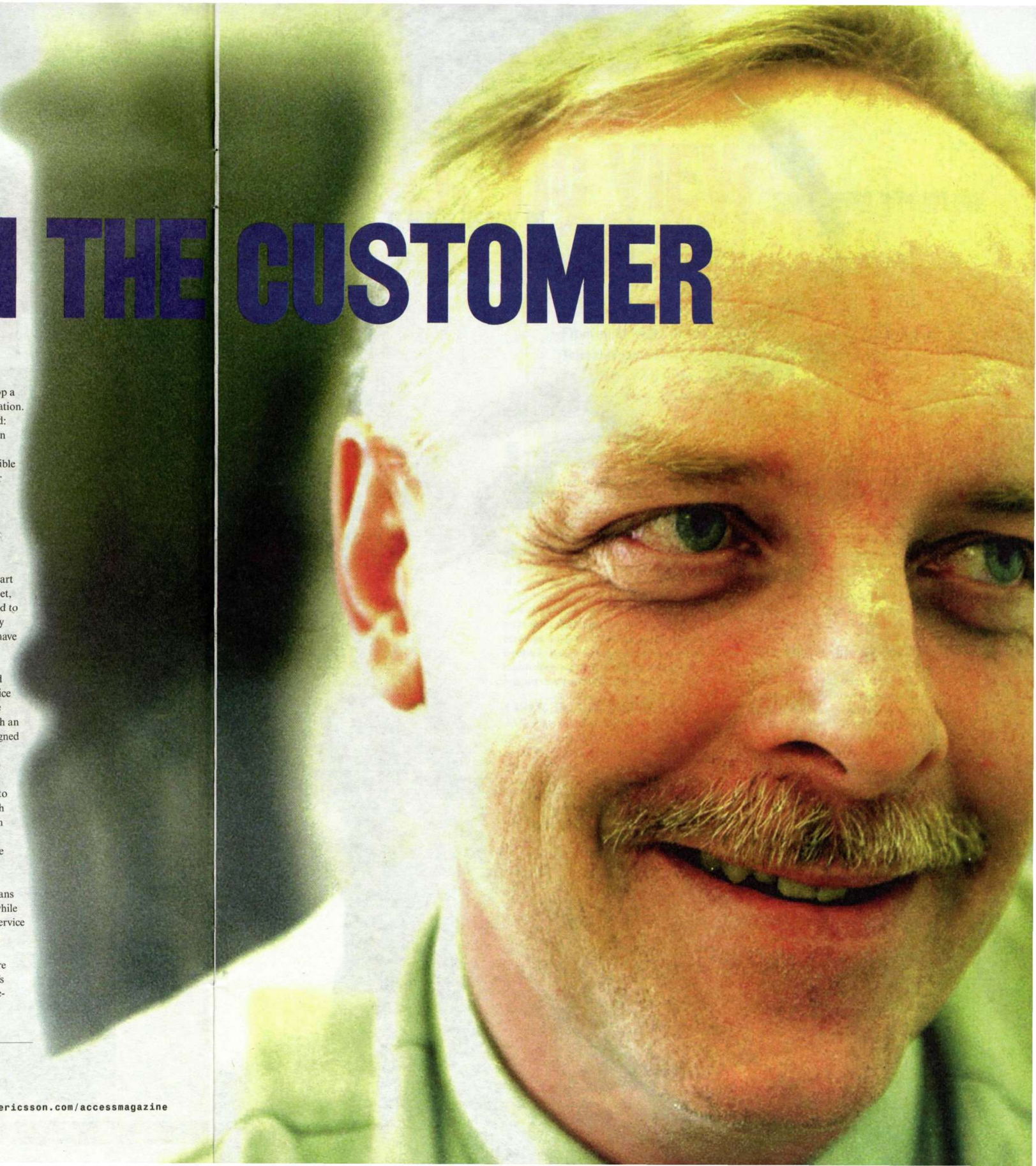
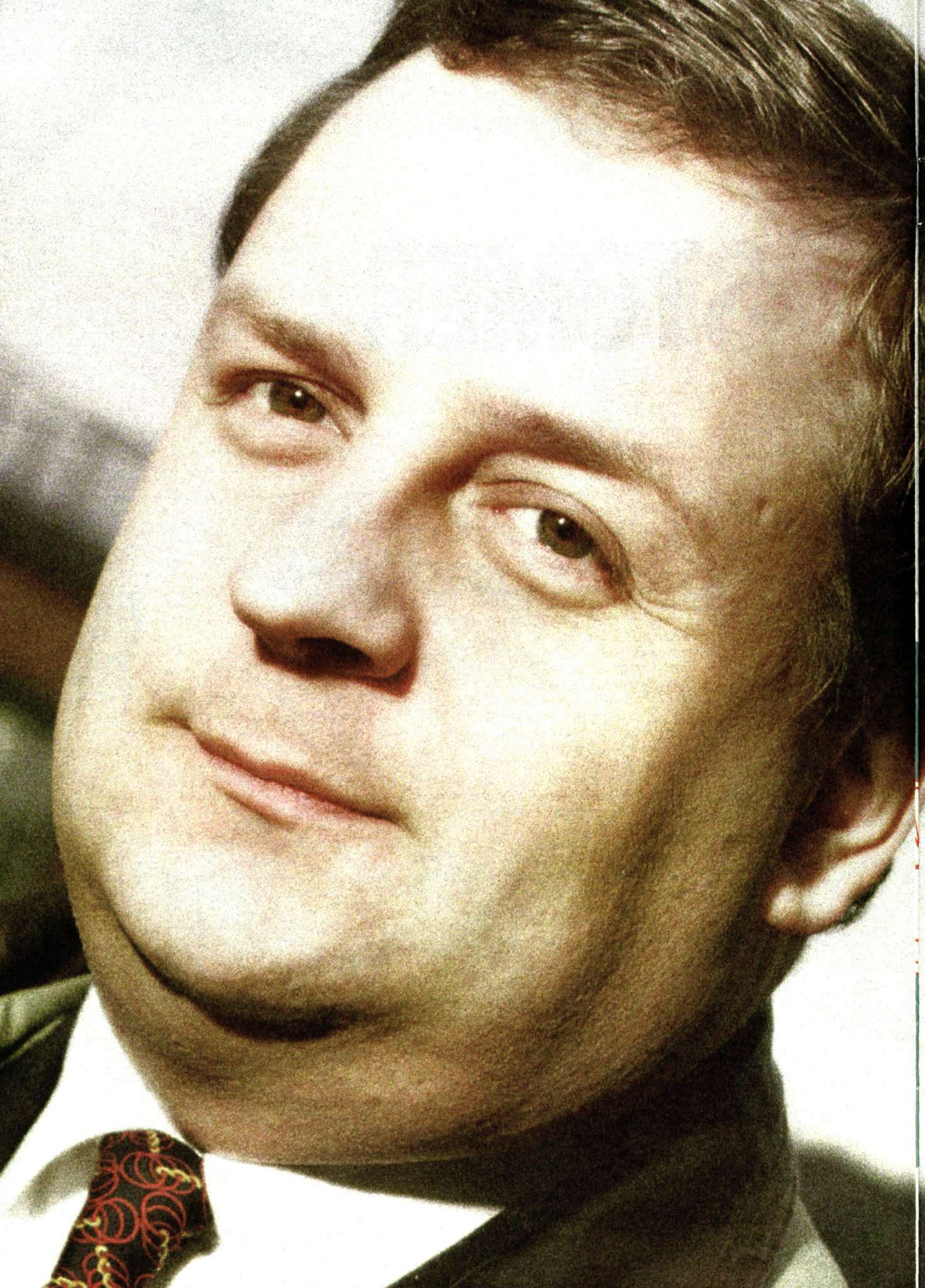




HOLISTIC VIEW – TENDER READY IN 20 SECONDS

SIMPLIFIED WORKFLOW

From eight weeks to 20 seconds – tender processing at Ericsson Telecoms Public Networks is speeding up dramatically. The reason is an IT investment providing a holistic view and a smarter, easier workflow

It all begins with product development work. Product development determines not only function and performance, but also how a product will be managed: marketed, sold, manufactured, assembled, delivered and reported in the accounts.

Everything is affected by the thinking behind the technical solutions, the specifications required to deliver the right product to the right customer – at a profitable price.

The pricing of technically advanced products such as AXE exchanges has required extensive information gathering and numerous official blessings. Sometimes a dozen people have been involved, each providing a small piece of the information required to price technically complex products such as AXE exchanges.

TODAY, THIS IS HISTORY. As so often, the solution to the problem is another IT tool, but Ericsson Telecoms Public Networks' integrated Marketing and Sales Tools platform is more than just another tool.

"This paved the way for a new holistic perspective throughout the operation," said Hans Erixon, the man behind the new concept.

In Mr. Erixon's opinion, it should be easy to put together tenders and orders for technically complex products such as AXE exchanges. "It gets easy when you stop thinking in terms of circuit boards and put together large components into finished products."

A HOLISTIC PERSPECTIVE is required right at the start of product development, both in the flow of development and the flow of customer orders, so that there will be no management bottlenecks in the workflow.

"It requires that individuals think in terms of systems and keep the entire flow in mind from the beginning. This is something most of us have traditionally not been good at."

Robert Puskaric, developer of the Marketing and Sales Tools platform, drew a parallel with the auto industry:

"A car buyer doesn't want the car delivered as a pile of parts that he has to assemble in his garage. It should be a finished product. The same applies to AXE exchanges. Plug and play," Mr. Puskaric said.

The working model has been benchmarked against Lundqvist, a Swedish-based furniture company, and against ABB, a multinational heavy equipment giant. What does the customer need, how should the products be delivered, and how can we do it simply and consistently? The same questions apply to telecom products as to bookshelves, desks and switchgear.

THIS WORKFLOW METHOD is being applied today to products such as AXE exchanges, access servers and wideband connections.

All the information is accessible via the Web. A salesperson can download relevant data to his portable PC, enter specifications based on the customer's needs and determine the right price by pressing a button. In 20 seconds – in complex cases less than one hour. In the future, the customer will be able to place the order himself via the Web.

"The salesperson can argue more effectively that the product generates quality and value for the customer because he has access to all the data and can show the customer what she will be getting. This is one of many positive side effects," Mr. Erixon said.

THE BENEFITS ARE OBVIOUS: shorter lead times, shorter delivery times to the customer. A smart, uniform way to work and manage the tender and production process.

"Quality improves, the customer is more satisfied and sales expenses are reduced. A bulls-eye for those of us at Ericsson Telecom who are working to improve our numbers," Mr. Erixon said.

@To learn more, contact:
Hans Erixon, *etxt.etxhex@memo.ericsson.se*
robert.puskaric@etx.ericsson.se

STRAIGHT TO CUSTOMERS

IT SUPPORT CUTS OUT MIDDLEMEN – AND TRIMS COSTS

Ericsson is simplifying the entire supply chain from order taking to installation at the customer site. With efficient IT support, there is a flow straight to the customer, cutting inventory costs by 80 percent and increasing profitability.

This process is already underway in Ericsson's mobile phone sector. The base transceiver station (BTS) product unit has developed the concept for use in its future operations. Customers used to choose from 2,000 different base transceiver station configurations. When a customer placed an order, there were many opportunities for error, resulting in lengthy delays.

"Seventy-five percent of orders used to contain errors," said Cornelia Ahlberg, head of implementation and logistics for base transceiver station supply concepts at Ericsson Radio.

Ms. Ahlberg and her group have worked hard to implement the new concept. Each transaction has been mapped in detail, always with this question in mind: "How can we do this better, smarter and more profitably?"

THE CONCEPT IS CALLED Supply Chain and features a logical flow: measurable, traceable and controllable from start to finish.

IT tools make a crucial difference. They handle configuration, forecasts, order and information flows. They convert information between various systems, and they monitor distribution and installation. In addition, multimedia is used, both to introduce the concept and to train people in its use.

EVERYTHING HAS CHANGED – the entire process has been turned on its head. Packaged products make up complete systems that are easy to order. And the customer can configure them.

"We already have a pilot project where the customer can be an active partner throughout the process of forecasting, ordering and delivery tracking. The customer can place orders on the Web," Ms. Ahlberg said.

Supply Units put together base transceiver stations, complete with antennas, backup batteries and power supplies. Installed and complete.

"The supply units become our interface with the customer."

These units are now recruiting people with technical product knowledge. People who can answer questions about the orders. Direct contacts between the order and the supply unit make the previous middlemen unnecessary.

LOCAL STOCKPILES are reduced to a minimum. Until now, large inventories have been built up because overall forecasts and controls have been lacking. When companies placing orders have doubted Ericsson's ability to deliver on schedule, they have ordered too much. Products have remained unused until they became obsolete. Billions have been tied up in inventory.

"We can deliver directly to the customer. This reduces inventory carrying costs by 80 percent."

SUPPLY CHAIN can coordinate the delivery of antennas, transmission equipment and backup batteries from suppliers. All parts of the package are delivered at the same time.

Coordination with suppliers is evolving. Forecasts enable them to plan their shipments and guarantee deliveries. Installation becomes more efficient, too.

"Today, our installers have gigantic peaks in their work load."

LOGISTIC NIGHTMARE. The solution is regional installation teams rather than local or national ones. Or outsourcing of installation services, which can also be ordered from Supply Units.

"We have to ask ourselves: What are we really good at? What is our core business? Can we guarantee the quality of our brand if someone else is to be responsible?"

Deliveries are already utilizing the new model in Italy, Turkey, the Netherlands and Germany.

@To learn more, check out the intranet:
http://www2-rmog-bts.ericsson.se/bts_supply/

TECHNOLOGIES, MARKETS, OPPORTUNITIES – EVERYTHING IS CHANGING AS

IP GENERATES NEW BUSINESS

The ability to adapt to rapid change is a key success factor in the red-hot IP and datacom market today. Everything is changing at a furious pace, not just technologies and opportunities, but the market as well. The most rapid change is occurring in the American marketplace.

Mike Thurk is in the middle of this market. Since this past summer he has headed Ericsson Datacom Inc., the global headquarters for Ericsson's datacom operations.

When Mr. Thurk arrived at Ericsson, he immediately noticed the rapid pace, the flexibility and the need to be prepared at all times. One early morning in June, on his first day as an employee, he landed at Arlanda Airport following a night on the plane. He went straight to Ericsson headquarters at Telefonplan in Stockholm.

"I was ushered straight in to give a video interview on my views of the datacom market, the business opportunities it offers, and why I joined Ericsson."

A few hours later, the interview was webcast on Ericsson's worldwide network. It made a big splash.

"I received lots of e-mail from all over the world, from Ericsson colleagues as well as others."

A USEFUL EXPERIENCE, he noted with hindsight. From then on, Mr. Thurk has constantly been on the alert.

"I will never again be surprised."

This very alertness is both important and necessary in the datacom market and at a company such as Ericsson.

Mr. Thurk selected Ericsson largely because he was already familiar with the company from his time in senior management positions at Digital Equipment and General Datacomm.

"I have been both a business partner and a supplier to Ericsson. I know how Ericsson works – and I like it."

The idea of starting Ericsson Datacom Inc. and developing new business opportunities in the American marketplace, based on entrepreneurship, appealed to Mr. Thurk – in part because it is based on Ericsson's position of strength in the current transition from wirebound to wireless communications.

"Our expertise will create new opportunities in the new telecom market."

The opportunity of working in a non-American company, but still in the American market, was appealing as well.

"Ericsson operates in 140 countries and is successful on a global scale. The practice of rotating executive managers between various countries generates unique capabilities for taking successful advantage of this diversity."

HIS AMERICAN EXPERIENCE contributes something important to Ericsson, Mr. Thurk believes. "What's happening in the datacom market is mostly happening in the U.S. The dominant players in the market are American, the startups are American, and over 50 percent of the datacom market is American.

"The players act American, especially in their aggressive marketing. We must be based in the American market so that we can develop a strong global position."

Mr. Thurk is convinced that this is the market where Ericsson's future business is located. This is genuine convergence, with IP as the very framework of future communications, both for voice and data communications.

"You find IP everywhere in Ericsson's products: in radio base stations, in public telephone networks and in the amalgamation of voice and data communications. It is very important that we continue to invest aggressively in this field. I feel a heavy responsibility in leading this development work."

Mr. Thurk considers the acquisition of Advanced Computer Communication (ACC), a Santa Barbara, California-based company making routers and remote access servers, an asset and resource for all of Ericsson in the data communications and radio fields. This is part of the increasing awareness and growing importance of IP that he discerns at Ericsson.

IP – Internet Protocol – is a data and telecommunications language based on Internet technology that is rapidly replacing traditional telecommunications.

"Every time (Ericsson CEO) Sven-Christer Nilsson talks about IP, it enhances understanding of this throughout the Group."

"If you want to be a winner in the IP market, you have to really implement an IP business strategy. Talking about it is not enough. And I know that when Ericsson takes the initiative, we follow through."

Mr. Thurk views his business unit Datacom Inc. as a change agent for such initiatives.

THE WORD CHANGE is a recurrent theme. With his back turned toward a view of Stockholm harbor, beautiful even in the autumn drizzle, Mr. Thurk repeatedly emphasized the importance of change.

One important change is that so far, IT has made possible and

"What's happening in the IP and datacom market is happening in the U.S. The dominant players are American, the startups are American, and they act American. This is where Ericsson's future business is located."

provided a foundation for information and communications. A transition is underway, with IP becoming the framework for all communications: voice or data, wirebound or wireless.

And this change requires expertise. Things are moving fast and the need is always increasing. This need can be met both through hiring and through acquisitions.

"We are talking about tying together several smaller companies with expertise that Ericsson needs. These relationships will lay a foundation for business development and acquisition planning."

MR. THURK IS ALWAYS looking for expertise. He is looking for creative climates conducive to development of the products Ericsson needs, but also to the creation of "Tiger Teams" for sales support, teams that really know and understand the products.

"When we acquire a company, we buy capable people – market share comes second."

He pointed to four investment areas for new business involving Ericsson's solutions and services.

- Infrastructure. Example: routers and exchanges for IP transport.
- Infrastructure access: The ACC acquisition is important in this field. Several technologies are required: modem, DSL and ATM.
- Service platforms. Example: services such as Voice over IP, e-mail, transactions and Web services. Software drives advances in this field. IP@Service is a new platform into which third party services can also be integrated.
- Telephone Network Management.

"Ericsson has products in all these fields, even if we have not yet been very aggressive in our marketing."

The capability of integrating solutions is attractive to large operators, and this is where Ericsson's products fit well.

This positions Ericsson's new IP business in the traditional telecom marketplace. It is a familiar market with familiar operators, where Ericsson can offer new services to familiar customers.

"What's really interesting is that not just technology, but market trends are moving in that direction. Developing products for that market not only suits the market – it suits Ericsson."

There is a trend toward wireless data communications. This is a small part of the business today – but it is growing fast. With its experience from wireless, mobile and data communications, Ericsson will achieve its goal of becoming one of the largest players in this new market.

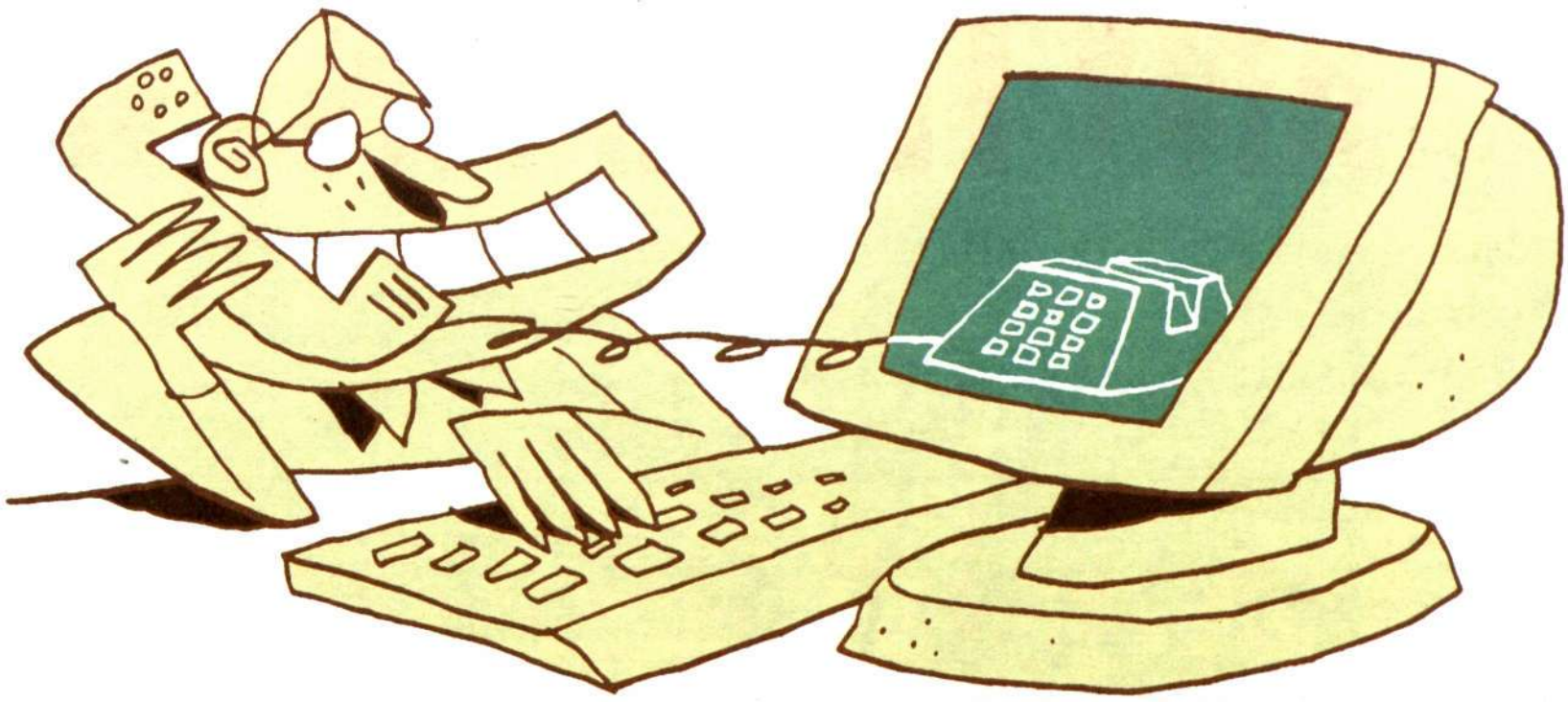
"Winner or loser – that depends on how well we succeed in implementing our plans and meeting our customers' expectations."

MR. THURK IS NOT TOO WORRIED about competition, even if he emphasized that it is hard to describe it today.

"Along with Ericsson, Cisco, Lucent, and Nortel are the largest players in the IP field. We will see which one becomes the leader and which ones are reduced to perennial also-rans. Personally, I'm betting on Ericsson's broad expertise rather than on any of the others."

@ To learn more, contact:
mikethurk@aol.com

MIKE THURK **Home:** Boston, Massachusetts. **Family:** married for 25 years with two children, ages 14 and 17, both Web users. Even with three PCs in the family, they all fight for the one connected to the Web. The children usually win out. **Education:** several degrees. Computer Science, Purdue University; MBA, Babson College, Boston; and from Insead, France. **Previous jobs:** management positions in data communications and telecommunications at Digital Equipment, General Datacomm, Xyplex Networks. **Interests:** golf and astronomy – looking at the stars. "It reminds me of my job." **Reading:** currently Dostoevsky's Crime and Punishment. Otherwise mostly non-fiction, preferably history, nature or law. **Favorite Internet site:** mostly monitoring the industry for my job, and sites where I can check on the weather in Sweden.



RED-HOT IP MARKETPLACE WHERE TOMORROW'S BUSINESS IS EMERGING

Delta Three and Tele2 are two of Ericsson's business partners in the red-hot marketplace for telecommunications based on the Internet Protocol (IP).

"The driving force behind these alliances is that the IP infrastructure being built today is laying the foundation for future communication network services," said Christian Nordberg, IP telephony sales manager at Ericsson's Internet System Solutions.

About 25 percent of the world's IP telephone traffic is already using Ericsson's IP Telephony Solution, which includes a long list of services.

Example: Long distance telephony (IPTC), featuring both voice and fax services, along with customer billing and settlement systems. Phone Doubler, which makes it possible to talk on the phone while connected to the Internet. Phone Doubler Quick Call – click on a link on a home page to start a phone call.

Swedish telecom operator Tele2 has an agreement with Ericsson for Phone Doubler services.

DELTA THREE, one of the new operators, is focusing on large volumes and home subscriptions in a market characterized by a transition from data traffic on phone networks to phone traffic on data networks.

Ericsson is selling new IP services both to startup operators like Delta Three and to traditional telecom operators as a supplement to their regular telephone traffic.

The portion of the IP marketplace where Tele2 is working largely consists of telephone operators and ISP's that aim to differentiate their offerings from those of their competitors. Today the only real competitive tool is pricing.

Right now, Ericsson is working on a Web version of Phone Doubler for home computers, which can be installed via the network – so the user needs no pre-installed software. It is called Phone Doubler Web Call. Because it can simplify Web commerce, there is heavy interest among American ISP's.

A third segment of the IP market is the integration of voice and data, focusing on corporations. This business consists of complete telephony, Internet and mobile communications solutions.

The fourth segment consists of multimedia: voice, data and video. In this area, Ericsson's solutions include Gatekeeper, a standard for subscribers and services on the same IP network, a telephone system for multimedia and the IP@Services platform.

"Today, it is not the technology as such, but the related business opportunities, that is driving operators to invest. Ericsson has an excellent opportunity to become a major force in the IP marketplace," Mr. Nordberg said.

"Ericsson's experience in mobile telephony provides us with unique opportunities for success in IP telephony. We are very good at real time communications.

"ERICSSON'S BASIC RESEARCH in the area of voice quality is the best in the world," according to Mr. Nordberg. He believes that in combination with established customer relations and a global presence, which makes comprehensive support possible, this will enable Ericsson to become a major player.

@ To learn more, contact:
christian.nordberg@etx.ericsson.se

@ Read more about Gatekeeper
www.ericsson.se/Eripress/Archive/1998Q3/h323.html

THREE COMMUNICATION HUBS:

ANYTIME, ANYWHERE, BY ANY MEANS

Ericsson Group employees will be able to communicate with their colleagues, customers and business partners anytime, anywhere, by any means. This is why Ericsson is now building a new global network, adapted to new markets in a new telecom world. One of the network hubs is located in Kuala Lumpur, capital of Malaysia.

www.ericsson.com/accessmagazine

Three hubs are a central element of the new Ericsson Global Infrastructure Program (EGIP): Stockholm, Dallas and Kuala Lumpur have been selected to guarantee availability and support to all Ericsson units – without regard to geographic location.

"Quite apart from being junctions in Ericsson's global network, the hubs serve as process centers," said Rabbe Wrede, head of Ericsson Data's operations in Kuala Lumpur. This means that the hubs offer services such as the Exchange mail system, the Ericsson Standard Desktop (ESOE) and more.

WITH THE ESTABLISHMENT of the hub in Kuala Lumpur, Ericsson's new global network is well on its way toward completion.

"We have made a major effort to identify all the critical parts of the network and to provide back-ups for these in order to minimize the risk of interruptions," Mr. Wrede said.

The hubs – powerful computer packages in secure, air-conditioned rooms – are vital if Ericsson's employees in 130 countries are to be able to communicate with each other at any time. Larger and larger documents, voice and video streams are being transmitted over the network, and this requires ever more bandwidth.

"The Kuala Lumpur hub will provide local help desks in the Asia Pacific region with an effective connection to the global help desk system," Mr. Wrede said.

In a few years, the hub in Malaysia will relocate to a special IT company zone, the Multimedia Super Corridor. Malaysia is investing heavily in IT. The biggest investment is this IT campus, which combines educational facilities with space for companies. The government wants companies to transfer know-how to Malaysia. This is why domestic and foreign companies are being offered an opportunity to establish themselves on favorable terms in this zone, known locally as Cyber Jaya (Cyber Village).

"TODAY, ERICSSON HAS two companies that participate in the Super Corridor. Ericsson Data has applied for membership. As soon as it is granted, we will form a company – Ericsson Data Malaysia is the working name.

"Establishing operations here is important in several ways," Mr. Wrede continued. "Not only is it a network hub, but it is also close to our markets in the Asia Pacific region. Until now, we have had to serve this market at a distance, from another time zone."

ERICSSON'S NEW organizational structure makes it even more important for Ericsson Data to be close to the other Ericsson companies in the region. Ericsson Data will not only serve Ericsson companies with the best possible IS/IT, but will also be their partner in the external marketplace.

@To learn more, contact:
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"WHEN INVESTING IN IT, THINK PAST THE END OF YOUR NOSE"

"Investments in information technology are a long term proposition, often without immediate returns. It is hard to make customers understand that they really provide a return in the long run – a very large payback," said Mats Holmlin of Ericsson Data in Kuala Lumpur.

Mr. Holmlin is managing the hub installation effort.

As of January 1999, all Ericsson offices in Asia will be connected to the global Ericsson Corporate Network via Ericsson Data in Kuala Lumpur. Ericsson's Standard Desktop (ESOE) is based on centralized distribution of all software and upgrades, first to the hubs and from there via local networks to each workstation.

"The technology works well," Mr. Holmlin said. "The difficulty is mental, in part because PC means 'personal computer' and many users want to have full control of it, and in part because a standard desk top presupposes a thorough clean-up of the office computer environment – a clean-up that costs money in the short run."

THE DILEMMA MR. HOLMLIN faces is that he must persuade the local companies in Asia to invest local funds in ESOE – despite today's tight financial situation.

"Everyone wants Exchange, which will replace Memo with Outlook as the mail client. But ESOE is a precondition for an efficient launch and an efficient system, and few say they can afford it."

This situation may get easier in the future, since the Ericsson Group will now pay for the portion of the new infrastructure, the backbone, that the local companies cannot affect themselves.

"Another good thing is that we have introduced new pricing for the new Ericsson Corporate Network – which is independent of geographic distance – and this is favorable to companies that are far away from Stockholm."

TO ALL RELUCTANT local companies that say they cannot afford to make their infrastructure more efficient with Exchange, Ericsson's Standard Desktop, increased bandwidth etc., Mr. Holmlin has this message:

"You cannot say: 'We cannot afford to improve our communications,' when communications are our core business."

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Mats Holmlin, Rabbe Wrede and Mikael Hansson are building up the Kuala Lumpur portion of the Ericsson global network.

HUB FOR CONSULTING SERVICES

"Ericsson Data in Malaysia is more than infrastructure. We foresee a lot of synergies because now, in conjunction with establishing the hub, we are also starting to provide consulting services," said Mikael Hansson of Ericsson Data in Kuala Lumpur.

Mr. Hansson is confident that the entire region (which excludes China and Australia) has the proper focus – offering the entire range of services in SAP R/3, Internet and operational development.

"Today we can offer various Internet solutions, such as multimedia for Internet Service Providers and intranets, electronic commerce etc."

Malaysians are very interested in the Internet, and Ericsson is positioning itself in the market as an Internet company.

"One of the most exciting areas might be the combination of SAP R/3 and the Internet. We call it SAP@WEB, and it includes everything from simple access to extensive Web applications supplementing R/3."

IN THE FIELD OF INTERNET solutions, Ericsson Data will also reach out into the external market. But all external operations will be carefully coordinated with the activities of other Ericsson units.

Mr. Hansson also pointed out that there will be no mass recruitment of Westerners to Kuala Lumpur.

"In the beginning, we need some outside expertise, but when we have developed our capacity, we will recruit locally or in the region. There is local expertise available. One Internet ad pulled 60 responses from high-quality applicants – in one weekend!

"YOU CAN'T JUSTIFY bringing Swedes when there are local people with the same expertise who are familiar with the culture, language and everything else that is required for a good rapport between customer and salesperson."

Ericsson Data must be able to offer services based on regional conditions. Malaysia has some of the lowest price levels in the world for SAP consultants, for example. The company has to face up to that.

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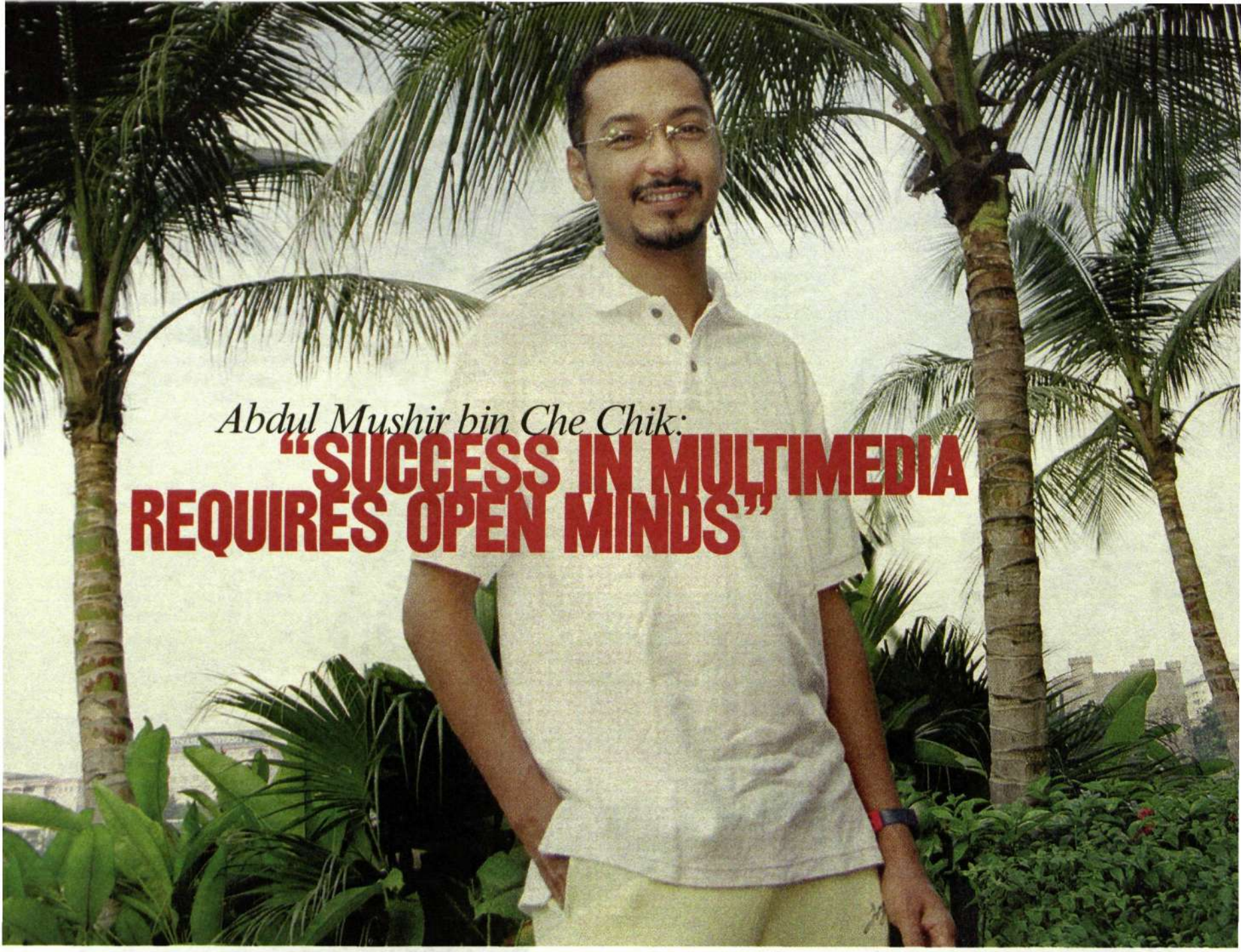

Abdul Mushir bin Che Chik:

"SUCCESS IN MULTIMEDIA REQUIRES OPEN MINDS"

If there is anyone in the new Ericsson who fits the definition of politically correct, it is Abdul Mushir bin Che Chik of Ericsson in Malaysia. He is one of the new Ericsson employees to whom the Internet is self-evident. He thinks a lot about what new media should offer.

"We have seen a convergence of data and telecom. Now comes the third dimension – media. This convergence has created products that have to be filled with content."

Mr. Mushir was educated in Silicon Valley and worked at IBM for 12 years before joining Ericsson.

"IBM, too, is an old company, founded in 1911. What IBM and Ericsson have in common is that they must adapt to a new telecom world, with new challenges and new customers."

YOU CAN SEE THIS in Ericsson Malaysia's house organ, Berita Ericsson, which devoted an entire spread to Ericsson's multimedia products: Home Internet Solution, Phone Doubler Quick Call, the new IPTC Internet protocol, Prepaid Calling Service etc.

Mr. Mushir is working hard to train Ericsson employees in Malaysia. To them, he is Mr. Multimedia, always preaching the new terms of the marketplace.

End users have not historically been aware of the equipment Ericsson has delivered – large machines in locked rooms, or underground cables.

All this changed five years ago with the success of Ericsson's mobile telephones. Communications through multimedia means voice, data and video – everything can be transmitted, with or without cables.

MR. MUSHIR EXPECTS Ericsson to become a leading problem solver in the multimedia industry.

"A kid in the U.S. playing GameBoy will be able to play online with children here in Malaysia. The gaming industry is global and Ericsson must participate in this marketplace, which may lead parts of the Ericsson Group into shopping center gaming halls, or into more serious applications such as distance learning and electronic commerce.

"We will not have all the answers," Mr. Mushir continued, "but neither will our competitors. We will be aggressively developing our R&D in multimedia and will extend our influence through acquisitions and alliances..."

As a country, Malaysia is fertile soil for the new Ericsson. By 1996, more than 10 percent of the population over age 15 had their own mobile phone. Ten percent of the labor force has access to the Internet and 30 percent of managers do. The Internet is growing by 70 percent per year.

In a newspaper interview, the Prime Minister recently acknowledged that the government had failed to anticipate the enormous impact of IT. Now, it is trying to catch up – by investing in the Multimedia Super Corridor among other things (see page 14, top).

Mr. Mushir is now also working on a project with Telecom Malaysia, aimed at developing high speed Internet access, video broadcasting and distance learning. Discussions are underway with a TV network on the development of interactive programs.

MALAYSIA LIES AT THE HEART of a rapidly developing region. Since the population is made up largely of people with Indian, Malay and Chinese heritages, there are also Malaysians who are familiar with how people in other countries of the region think. Mr. Mushir thinks that Malaysia could become a content customization center, a country well suited to adapting media content to local conditions.

"Multimedia needs cultural diversity," Mr. Mushir said. "The most important reason why Silicon Valley has been so successful is that people who live there are so open to new ideas. The same is true of Melbourne, which has become Australia's multimedia center. So let us learn from these places and be open to new ideas!"

@ To learn more, contact:
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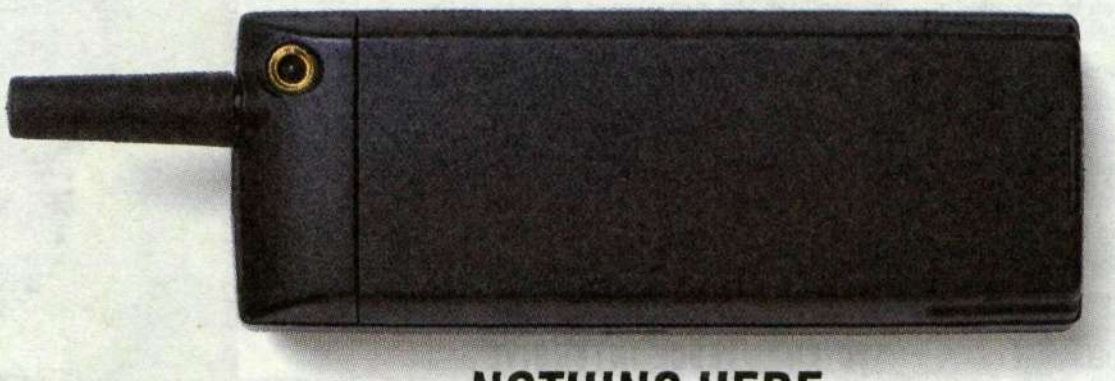
ERICSSON'S NEW MAGIC TRICK: HOW TO MAKE THE INTERNET MOBILE.

NOTHING HERE.



NOTHING HERE.

BUT HERE.

AND HERE.

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The new SH888 is so advanced you can't even see how advanced it is. Everything you need is hidden inside.

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ERICSSON

BRAINPOWER!

INCLUDED IN FUTURE FINANCIAL STATEMENTS

For 500 years, mankind has been familiar with the accounting principles that apply to trade between people. Even today, Italian double-entry bookkeeping defines the principles of corporate financial reporting. Another 500 years in the future, mankind may perhaps similarly recall the earliest accounting principles for valuing intellectual capital. How, during the 1990s, we learned how to include creativity, expertise and other forms of human capital in our financial statements.

The brain's power output can be measured at 20 watts. But the output of the expertise and thinking of many brains in an organization is much harder to measure. There are no income statements or balance sheets to account for human capital or brainpower.

But just as Tuscany in northern Italy was the birthplace of financial accounting, perhaps the town of Vaxholm east of Stockholm will be recognized as the birthplace of human capital accounting.

Vaxholm is home to the Skandia Future Centers, directed by Leif Edvinsson. The British Brain Trust Foundation declared him "1998 Brain of the Year" in recognition of his work on defining intellectual capital. Leif Edvinsson, Göran Roos, head of UK-based Intellectual Capital Services, a "think tank" in this field, and Ericsson Data are now collaborating on the development of new methods for measuring and reporting a company's intellectual capital.

"NOT MANY PEOPLE drive with their car windshield taped over and their gaze fixed in the rear-view mirror. But many companies are still being run that way. Financial results are historical information. Today, it is becoming more important to examine the forces driving future growth. And the methods necessary to get this information are now being developed," Mr. Roos said.

Leif Edvinsson at Skandia was a pioneer in defining intellectual capital. Göran Roos and his company have developed methods for measuring this capital. And Ericsson Data embraced their way of working at an early stage – by applying it internally and by managing an effort to do the same within the entire Ericsson Group.

But this collaboration has also resulted in a PC application for describing intellectual capital, Cockpit Communicator, developed by Ericsson Data in Norrköping. Skandia and Ericsson Data are also collaborating on the development of an "IC dictionary" and an "IC index" for comparing the intellectual capital at various companies or departments of one company.

"TO KNOWLEDGE INTENSIVE companies, this is becoming more important. And in this regard, it matters little if it is a service or manufacturing company. Creativity is of crucial importance to a company such as Ericsson. And new products also create services for consulting operations," Mr. Roos said.

Mr. Roos is in a good position to compare attitudes toward human capital, through his contacts with companies in the Nordic countries, elsewhere in Europe and the U.S.

"My impression is that in the Nordic countries there is a thirst for knowledge and an openness that is rather unique. Here, people have long understood that money flows from something else. People here speak of 'industry and commerce,' whereas the Americans use the term 'business.' If you wanted to make a nasty play on words, you might say that Americans are obsessed with being busy."

WHEN YOU LOOK AT the valuation of IT companies, you can see that financial markets have difficulty assigning a value to the non-financial parts of companies.

"Many IT companies tend to go public at high share prices, which later fall. Often, this is due to a lack of familiarity with the valuation of human capital. What is needed is a complementary perspective that clarifies and provides in-depth understanding. Company managers need this too.

"But some people will object that this is nothing new. Of course it is not new. Good managers have always developed an intuitive feel for this. But it is hard to pursue a dialogue about intuitive things. If we help develop models for measurement, others can examine our findings with a critical eye," Mr. Roos said.

We will probably have to continue looking at the rear-view mirror. But when the driver has a clear view ahead and can monitor the information on his new measuring scales on the dashboard, we can hopefully reach our goals faster and safer. Or to cite "Brain of the Year" Leif Edvinsson: "Better to be approximately right, than to be absolutely wrong."

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PRODUCT: THE BRAIN. Product description: Self-organizing, massively parallel, emotionally driven, malleable memory machine. Adult weight: about 3.2 lbs. Contents: 70–100 billion neurons, of which about 80 percent are "controlling" neurons. Power output: normally about 20 watts. Manufactured by: about 50,000 genes (out of the 100,000 genes that are human building blocks). Care: Both heredity and environment determine the development and future functionality of the brain. Cleaning and polishing of the brain take place automatically during sleep. It is especially important that the network be continuously connected. The product comes with no guarantees or service agreements. Facts: Martin Ingvar, brain researcher and professor at Karolinska Institutet medical school in Stockholm.

STARGATE

IDENTIFIES AVAILABLE EXPERTISE

Defining intellectual capital is one thing. Using it properly is quite another.

Stargate is a project at Ericsson Data aimed at increasing knowledge of existing expertise in the organization.

Knowing what you know may seem self-evident. This is probably true in a small organization where everyone works closely together. But in a large company, it is harder to keep track of what is actually available in the collective knowledge bank.

"Ericsson Data has conducted many internal local experiments in the field of knowledge management. But most often, they only describe the immediate surroundings, people who are familiar," said Peter Baladi, manager of the Stargate project at Ericsson Data.

Unlike these local experiments, Stargate is a global project run by an international steering committee. It provides a prototype for knowledge management efforts that other parts of the Ericsson Group can emulate.

THE BASIS OF STARGATE is that individuals describe their own expertise and project experiences, and at the same time spell out what they want to do.

"We want to be able to use this in our customer communications. If I have a customer who is interested in call center solutions, I should quickly be able to determine what people in the company have worked with this before, regardless of country. This will also provide us with a collection of reference projects that will demonstrate our expertise to our customer," said Peter Söderquist, Ericsson Data project manager.

A shout down the hall is being replaced with exact information about experiences in a given field. Stargate starts with SAP and Internet solutions. Six other strategic areas will be added to the project: Call Center, Productive Workplace (the Ericsson Standard Office Environment), e-commerce, e-mail, Business Support Systems and Help Desk.

"THIS IS NOT some mechanical warehouse for consultants or a system to determine availability," Mr. Söderquist said. "But the fact that we can take advantage of prior experience will make us more fleet-footed and competitive in our business. Today we know too little about ourselves."

"Knowledge management via Stargate is about providing the right information to the right person at the right time," Peter Baladi said.

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A VIRTUAL GREENHOUSE

GERMINATING NEW INTERNET PRODUCTS

a former cable factory in Älvsjö, southern Stockholm, today a huge experimental workshop for future Ericsson products. Independence, speed and commercialization are the buzzwords here.

THE ENTRANCE to the experimental workshop is inconspicuous. Next to the door, large orange lettering spells out "08B." A hand-printed Swedish-language sign on the door says "The System." You get few clues that one of Ericsson's most extensive development operations is housed here.

"There used to be a cable factory here, but the building has been gutted. A bunch of Ericsson development companies work here, and the Internet group provides practical backup services for them," said Harald Hynell, head of marketing for one of these companies: Ericsson Internet Payment Systems.

Inside, the building is anything but modest. The ceiling is high, and light enters through many ceiling windows. The walls are painted in warm shades of red and blue, and a coffee lounge is located in the center.

Numerous staircases connect the various floors. Everywhere are people in cubicles working at computer terminals.

The workplace is open-plan – it creates an impression of effortless mobility. It would be easy to move the inside walls and create something altogether different.

And that is precisely what Mr. Hynell and his employees are doing. Ericsson Internet Payment Systems is developing a general payment system for the Internet. As a start, the focus is on micro payments, but large payments may be included later. This is not about credit card numbers or e-cash via the Net, but about an open, flexible system that handles anything from payment of a few pennies to large sums.

THE PAYMENT SYSTEM IS ADAPTED so it can be integrated into existing applications, such as Internet computer games. The system can record elapsed times, quantities, mouse clicks, data files or whatever other parameter the customer will be paying for.

When the customer wants to use a fee-based service, the payment system will create a contract, with the information required to charge the customer's account. The customer signs the contract using a personal code, via PC or mobile telephone – or via any other terminal that is connected to the Internet, possibly a TV set.

The heart of the payment system is the payment server where the digital contract is stored.

Because the payment system can be built into any application, this opens new, vast opportunities for selling goods and services on the Internet.

"This payment service makes many other Internet services possible," said Sven Berg, a marketing specialist at the same company.

Potential users are telephone, cable TV and credit card companies; banks; companies offering services on the Internet; and energy companies. These often have many customers who make numerous small payments.

"At the moment, we are conducting a pilot project with the Swedish telecom operator Telia," Mr. Hynell explained.

POTENTIAL APPLICATIONS are numerous. The payment system enables cable TV companies to let their customers to pay for movies they actually view, instead of paying a fixed subscription fee as they do today.

Energy companies can sell electricity at the time of use. The system is also attractive to companies that sell server space, for example.

"One idea for the future is a smart ceiling lamp that creates a digital contract with the electricity company each time it is used," Mr. Hynell said. "You pay for electricity during the period the lamp is lit."

One advantage of the Ericsson Internet Payment System is that it will reduce the transaction cost of each payment. The system makes payments as small as a penny quite feasible and profitable as well. The payment server handles pennies by adding up small payments to a larger amount, which is then charged to the customer at regular intervals.

THE PC VERSION of the payment system was unveiled in October, and a demo of the mobile telephone version will be ready before the end of the year.

Harald Hynell's company is located on the ground floor. Programmers, marketers and the President are clustered together. He recently moved his workstation; everything is packed in boxes. This reinforces the impression of agility, flexibility and dynamism that characterizes the environment in this former cable factory turned experimental workshop.

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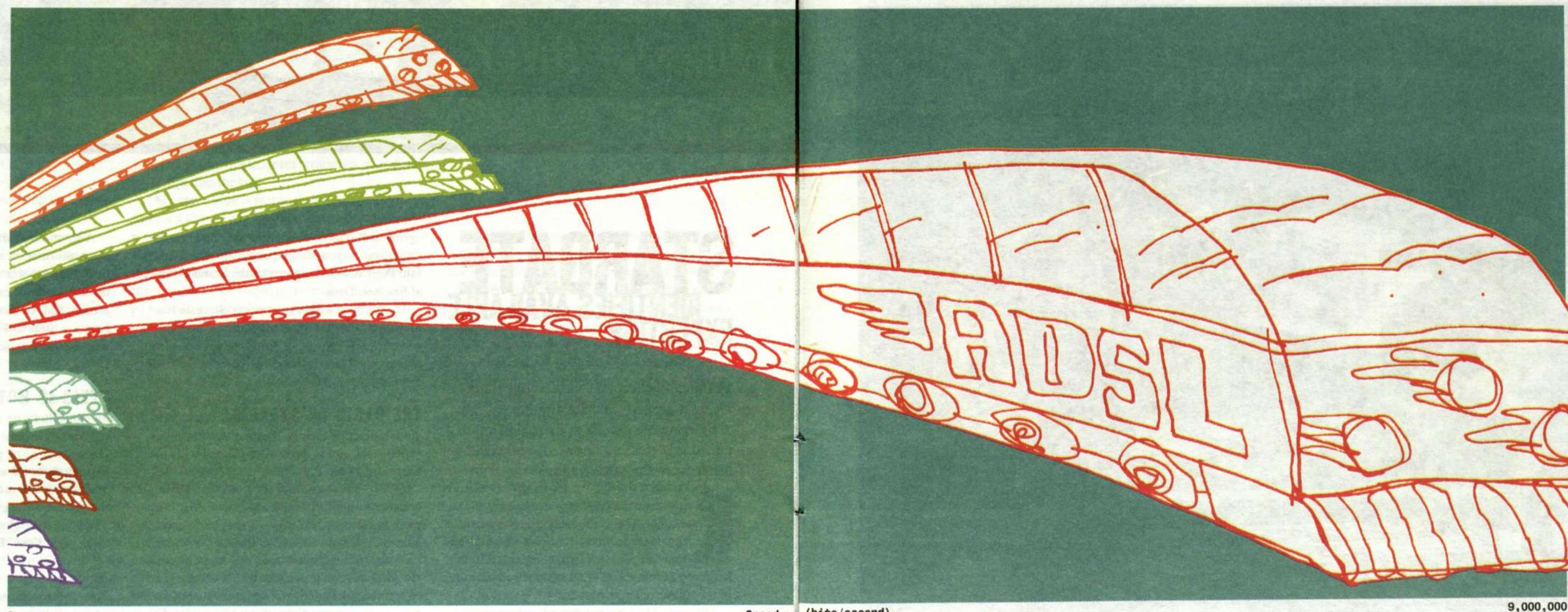

CONNECTED – BUT HOW?

This axis describes products using various technologies. Copper cable, used for phone conversations, is generally a medium for the transmission of analog information. Using ADSL technology, we can send digital information over the same wire. Using fiber optic cable, we can transmit data faster and easier. Radio links, micro links, and satellites are used to send both analog and digital information through the air. Today's mobile phones are not made for high data transmission speeds, but a great deal will happen in this field over the next few years.

A WINDOW TO THE WORLD

Some 15,000 visitors per month can't all be wrong. They visit Ericsson's Business Information Center (BIC) to quickly and easily obtain the information they need to keep up with the accelerating pace of change in the world where Ericsson operates.

An intranet system with a search engine provides speedy information about Ericsson's business environment and competitors, combined with financial and marketing research.

This information is supplied both by external industry analysts and by Ericsson's own business intelligence network. Other news is supplied by Reuters.

All Ericsson employees can access the general business intelligence pages at the Business Information Center. In addition, Ericsson's own business intelligence analysts can access a secure site of their own that provides in-depth analyses. A special Executive Site will be offering tailor made information to top executives, customized to their respective fields of responsibility.

"Searching for information used to take a long time. Today our analysts can spend more time producing analyses. Search engines are replacing paper-flipping," said Jesper Ejdling, Ericsson Business Information Center manager.

The embryo of the service was the growing need for rapid business intelligence in the mobile telephone field during 1995. As the site expanded, more and more Ericsson business units became interested. By the end of 1996, the Business Information Center was elevated to Group level, where it remains today.

Ericsson Data supplies the "Web hotel," the Infoseek search engine and several of the applications.

@ To learn more, visit BIC:
http://bic.ericsson.se

@ Contact:
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A VIRTUAL WEBMASTER

On the Web, content is king. But what to do about outdated pages or corrupted images? Keeping a Web site up-to-date may be synonymous with propping it up so it doesn't collapse altogether.

Lewis can change all this. Who is Lewis? Lewis is a virtual Webmaster that keeps order on your Web site. Lewis knows when a page is becoming outdated and keeps track of who is authorized to change what.

"Lewis enables you to distribute responsibility to several people. You no longer have to have one single person keeping track of all the documents on a Web site," said Johan Swedmark of Ericsson Data, product development manager.

Lewis was originally developed at Ericsson Radio Systems to keep track of its internal Web sites. Ericsson Data has now taken over responsibility for Lewis in order to support all users on a global basis.

Jonas Lindeqvist is intranet coordinator at Ericsson Radio Systems and has worked for more than a year to develop a sensible solution to malfunctioning links and poorly updated information.

"A Web site is very demanding of the person who is supposed to keep it up-to-date. I work in a virtual organization and need a virtual system. Our motto all along has been 'Content is king.' Lewis provides us with a functional site, automatically."

@ To learn more, contact:
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IP TELEPHONY & MULTIMEDIA
THE FOCUS OF THE INTERNET WORLD SHOW

There was an emphasis on server hardware and software and e-commerce solutions at the Fall Internet World show in New York this past October, with Microsoft and IBM commanding the most floor space.

New to the show, however, was the strong focus on Voice over IP and other multimedia communications solutions from both startup and established companies. A number of companies had phone booths available for attendees to make free VoIP calls.

Real Networks heavily promoted its new G2 architecture, which supports open audio and video standards and implements SMIL, the new synchronized multimedia standard.

Lernout & Hauspie demonstrated its latest speech recognition technology, recently licensed by Ericsson, which worked quite well even in the very noisy Javits Convention Center. The company also played samples from its next generation speech synthesizer, which comes very close to sounding like a human being.

Mate-Media demonstrated "Visionary," a search engine that uses computer vision to catalogue and retrieve images and recognize faces in video files. New York-based Soliloquy presented a product that, with the aid of speech recognition and synthesis, allows a user to have a "conversation" with a database in natural language.

This was the first time Ericsson was represented on the floor of the East Coast show, and the Ericsson employee contingent was as international in flavor as the rest of the show. Among the many Ericsson products demonstrated at the show were IP@Services, Zopps, Internet Advertiser, Ericsson Virtual Office, the H.323 Gatekeeper and Arena World 2000. The VoIP free phone cards from Delta 3 were quite popular.

A live presentation built around Ericsson's webcast of the move of Keiko the killer whale (who starred in the "Free Willy" movies) to Iceland was well received.

@ Read more!
About Internet Advertiser:
www.ericsson.se/Eripress/19981009-0014.html
About Gatekeeper:
www.ericsson.se/Eripress/Archive/1998Q3/h323.html
About Soliloquy:
www.soliloquygraphics.com

EPOC TURNS A PHONE INTO A COMPUTER

A telephone is much more than a telephone. It is a communicator that can provide access to all the information in the digital world, a small pocket computer with an infinite contact network.

Three mobile phone makers – Ericsson, Nokia and Motorola – want to use a common operating system called EPOC to speed up software developers and accelerate progress in this field. A billion dollar market is opening up, where independent companies can develop mobile and data communications services.

"We have joined forces in order to stimulate widespread software development," said Jan Ahrenbring of Ericsson Mobile Communications.

Mr. Ahrenbring would like to see more makers of mobile phones sign on to EPOC. The more the merrier, but the trio of Ericsson, Nokia and Motorola – controlling more than 60 percent of the world market – provides a solid foundation.

Mr. Ahrenbring is mum about what phone services are under development behind Ericsson's walls. But he looks forward to a future where he will begin each day by turning on his phone, which will immediately download news of interest to him and display *Financial Times* headlines and the latest developments on the Tokyo Stock Exchange. It will then provide warnings about the morning's traffic jams and remind him of the day's meetings. On his day off, he will turn off these services and instead ask his phone to look for the best sea food restaurant in North Brittany.

Competitor Microsoft is promoting its operating system as an alternative to EPOC, but Mr. Ahrenbring is not worried.

"EPOC was developed for pocket computers – Personal Organizers – and was customized for people who move about," Mr. Ahrenbring said. "Microsoft understands stationary computers."

The first EPOC telephones are expected to hit the market in the year 2000.

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GARY PINKHAM of Ericsson Inc in Richardson, Texas, sent us a tip on a good book: ***Why Things Bite Back: Technology and the Revenge of Unintended Consequences*** by Edward Tenner (1996).

ANOTHER READER tipped us off about ***Designing Business – Multiple Media, Multiple Disciplines*** by Clement Mok. This is an excellent source on "the childhood of the Web" (1996), complete with a CD and samples of sites built by Mr. Mok, such as the Herman Miller site featuring the Aeron chair.

CARIN OLOFSSON, of Ericsson Data Web & Internet Resources advised us on what really ties together the various communications tools she herself uses: the Palm Pilot. She listed several advantages:

"Password security, mobility (it fits in your pocket or purse), its ability to coordinate your calendar, e-mail, time reporting and telephone directories. And the infrared connection makes it easy to communicate – without cords!"

You are less vulnerable because it is easy to synchronize information between your computer and your Palm Pilot on a daily basis – so the information is safe even if you happen to lose your Palm Pilot.

ACCESS
THE ERICSSON IT MAGAZINE
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ERICSSON

SOUND ON THE NET
– NOT MUCH TO LISTEN TO SO FAR

Considering how sophisticated our sense of hearing is, it is surprising how silent the world of computing is. Currently, sound is used mainly for negative feedback. Your computer scolds you with an unpleasant noise when you do something wrong, but does not reward you with a pleasant sound for doing something right.

Even worse, the sound contains no information on what you may have done wrong, or the severity of the mistake.

Take a moment and close your eyes and listen closely to the sounds surrounding you.

What do you hear?

If you hear the soft whoosh of AC; the whir of the fan on a computer; behind you, the muted voice of someone speaking on the telephone; to your left, the annoying squeak of a chair that needs oiling, perhaps you are in an office.

If you hear clanking of silverware; a jumble of voices; snatches of conversations about a new movie, the stock market or food, perhaps you are in a lunchroom or restaurant.

We are constantly surrounded by a rich sea of information in the form of sound. Without having to use our eyes, we can tell when someone enters a room, and often, who that person is; we can hear around corners and through walls. As anyone who's been startled awake by a bump in the night knows, we can hear in our sleep.

In the last few years, a number of Internet-focused audio products have been released. The most obvious are streaming audio products, such as Real Audio and Netshow. These products, however, are not particularly interactive.

A few steps have been made toward truly interactive audio applications. Headspace (*http://www.headspace.com*) has created the Beatnik plug-in for web browsers that allow designers to "sonify" their websites. Sonification allows audio events to be associated with user actions. For example, placing the cursor over a link can trigger a spoken caption or specific sound associated with the link. Soliloquy (*http://www.soliloquyinc.com*) has introduced a product that uses speech recognition and synthesis to allow users to speak with a database or a Web page to retrieve information.

There are many potential uses for sound design in communications products. A caller could be assigned to a specific ring, eliminating the need to look at the caller ID display. A synthesized voice could state the name of the calling party.

Sound design is still a rarity in user interfaces, often used only for its novelty value. As technology progresses and ideas catch up with PCs' new abilities, the power of one of our most important senses is likely to play a more important role.

JOHN MAXWELL HOBBS *develops multimedia at Ericsson's CyberLab in New York. His background is in music and computers..*

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