

Contact

ERICSSON 

PUBLICATION FOR EMPLOYEES WORLDWIDE

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A brilliant performance

Report from Telecom 91 • Pages 12-15

INSIDE:

A WINNER on the bourse

Ericsson has had huge success on European stock markets with its computer network ERIPAX, which now forms the backbone in the computerization of stock trading on several of the world's most important exchanges. Page 6.

TANKERS berth with people pagers

Another way of using people pagers. This is true of the technology that was developed at the ScanRaff refinery. There, super-tankers are brought into harbor with the help of a people pager system from Ericsson. Page 7

PUSH forward for Mobitex

Now it feels that Mobitex has made a real breakthrough. In a huge order from the American Bell South and RAM Broadcasting Corporation, Ericsson has received orders for Mobitex equipment for the U.S. and Britain for 1.4 billion kronor. Pages 4 and 10

GRAND tour for royalty

Grand Duke Jean of Luxembourg and his wife, Josephine, accompanied by the Swedish royal couple, visited Ericsson headquarters during their three-day state visit in mid-October. The Grand Duke himself, who has an interest in technology, suggested the Ericsson tour. Page 24.

Big orders from U.S. and Britain • Pages 4-5

Cellular solution for personal telephony

At Telecom 91 Ericsson Radio Systems presented a new concept for cordless personal telephony. It gives Ericsson customers a trump card in the tug-of-war in this important future market.

Ericsson is way ahead when it comes to personal telephony and especially in a business context. DCT900, the company's solution for cordless business communication, is being tested by operators in many parts of the world.

DCT900 is a system that is built on so-called picocell technology, with many small base stations, each with relatively limited range.

Trump card

A similar solution, but where also more traditional cellular technology is used outdoors, is now being presented by Ericsson. With this new concept the company also wants to give its cellular customers a trump card in the tug-of-war over tomorrow's personal telephony market.

The new concept for personal telephony is based on digital cellular technology. Much of the technology used is developed for cordless business telephones, that is DCT900.

High capacity

Ericsson's involvement with a further solution is partly to give the operators who invest in cellular radio technology the opportunity to assess capacity increases in the future and partly to give them the chance to compete in the personal telephony market, when it takes off.

During the first phase of development Ericsson is now sketching, it will be possible in a couple of years to reach capacities in the digital cellular network that are up to 10 times higher than in today's analog technology, without changing today's structure in the base stations.

New markets

In the long view it should be possible to raise capacity a hundredfold. A unique property with Ericsson's solution is that high

capacity can be united with the good surface coverage that already exists in many places.

For operators, the new technology means the possibility to approach new market segments in the business world, above all. By combining existing outdoor installations with so-called picocell technology - small cells - inside, the business market can offer personal telephones that function both in the office and in the surroundings outside.

Ericsson's new concept is built on just this mixture of picocell internally with "ordinary" cellular technology outside.

Low power and three-dimensional resetting of frequencies are other technical cornerstones, as well as a dynamic apportioning of channels.

The concept was presented at the Telecom 91 Forum by Jan Uddenfeldt, technical director at Ericsson Radio Systems. For the moment the aim is on the North American market, since standards in this area are still lacking in Europe.

Lars-Göran Hedin



Minilink is produced at ERE's factory in Borås.

Minilink for German D2 network

Ericsson Mobilfunk GMBH has received a letter of intent from Germany's Mannesmann Mobilfunk GmbH for supply of digital microwave equipment.

The equipment will be used for linking base stations with switching units in the German D2 network, one of Germany's two GSM networks that Mannesmann will run. Ericsson and Mannesmann are now negotiating details

of the contract. It is Ericsson Radar Electronics, ERE, that developed and manufactures the equipment Mannesmann will have - Minilink 23.

Minilink, which has had tremendous success around the world, is a system for signal transferring using microwave technology.

In many installations microwave technology is an economically interesting alternative to cable laying.

Important step to ISO certification

T division in Ericsson Business Communications cleared their final review. With this the first step was taken toward ISO certification of the entire company.

The division got 16 small notations on the points of contract follow-through, design direction, document handling, purchasing, control of measuring and testing equipment, quality documents and internal quality reviews.

Within six weeks after the review one should present to SIS what corrective measures would be taken and the plans for carrying them out.

It was very tough work before the final review and this can be attested to by the division's quality manager, Birgitta Albertsson, and her colleagues.

Internal total review

What was it then that was most important in the task of passing the review? Birgitta answers without the shadow of a doubt: the seminars and the internal total review.

"Two days in January, two in



Easy breathing is followed by merry laughter when T division got the word that it had passed ISO 9000 certification. From left, Per Bramfeldt and Bertil Allén.

June and one in August, all personnel gathered for seminars with group work," she recounts. "This way we achieved knowledge and understanding and full commitment among all those working in the division." Group work had as its starting point, "If review comes to us."

"In the end we decided to make a total internal review and to go through all the operations, visit

every group, ask questions and examine documents. If we found the same problems in several places the concerned group together had to draw up a plan to correct it.

When the victory was digested and the champagne was finished it was time to take up ISO work again. Corrective measures had to be carried out. New and corrected documentation was made and distributed, but this time at a more relaxed pace.



Ten-year anniversary celebrated at Strand in Borgholm. Margareta Johansson is honored by the board chairman Kjell Ulmefeldt.

E-P Data celebration

E-P Data is a company that is equally owned by Ericsson and AB Programator. On October 1 it celebrated its 10th anniversary.

During the ten years since its founding, the company has grown a lot. Today, there are 130 employees at E-P Data. Presently, E-P Data is active in two areas of operations - telecommunications and ADB. The ADB unit goes by the name of E-P Systems. It is involved in development and maintenance

above all in IBM mainframe milieu and employs some 20 persons.

E-P Telecom is responsible for the other area of activity. The unit works as a consultant in telecommunications with, among other things, mobile telecommunications, operation and maintenance systems, business switches and communications strategies. There are about 100 consultants in this unit.

Today, E-P Data is found in five different places around southern Sweden. The head office is in Karlskrona and other units are in Växjö, Ronneby, Hässleholm and Lund.

EDITORIAL

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Ericsson Radio conquers Central Africa

Ericsson has received an order for a mobile telephone system for Nigeria, Africa's most populous nation. The delivery, which should be ready within a year, is worth 40 million dollars (about 250 million kronor).

Nigeria buys mobile telephony for 250 million kronor

After a lot of work Ericsson has sold a mobile telephone system of the TACS type to Nigerian Telecom Ltd. The system will cover the capital, Lagos, and the region around Enugu.

The network is designed for 7,000 subscribers. It is built with two switches, which will be the first switches in the country, and 20 base stations. All material will be shipped from Sweden.

Ericsson has already been there



Within a year Nigeria will have a mobile telephone system for 7,500 subscribers. One of the base stations will be set up at Ipara, north of Lagos.

for some time and has checked out how the network will be built up and where the base stations will be placed.

"We have farmed out the instal-

lation work to people from Ericsson's company in Ireland," says Frederik Wijkander, who has overall responsibility for the project.

The Irish have a lot of experience in Nigeria; they know the country from other Ericsson projects.

"We also have very good collaboration with Nigerian NITEL, which was very efficient during the preparatory work."

Quick solution

The fixed network in Nigeria is deficient and does not suffice. In such a case the mobile telephone system would be the fastest way to boost the most needed communications. The situation is about the same in the majority of African states.

"If the project goes well this could mean good possibilities for expansion," says Frederik.

"In Africa there are countless people who need tele connections."

Ericsson's mobile telephone investment on the African continent includes so far systems in Morocco and Tunisia.

The Nigerian contract is the first system south of the Sahara desert.

Lars Cederquist.

Ericsson develops collaboration strategy

Ericsson continues to invest in strategic alliances. In recent months there has been a lot of news about strategic collaboration.

In Ericsson, there is a long tradition of technical collaboration that stretches back to the company's early years. In the past few years not least the collaboration with the Swedish Televerket has been of immense significance for the company.

Strengthened by its successes in earlier collaborations, Ericsson's group leadership continues on a winning path.

Ericsson-Melard

In mobile data communications Ericsson has recently formed a strategic alliance with the American company Melard Technologies Inc. It is Ericsson GE Mobile Communications Inc. that has now begun to work with Melard. It involves offering Mobitex as an important part in the system for data communications between service technicians out in the field and their computer system at home base.

Melard is a leading supplier of mobile information systems in this market segment, in the U.S. as well as in other countries.

Ericsson GE will supply Melard with vehicle based radio modems and with future portable products that will make it possible for Melard's mobile work stations to communicate over a Mobitex network.

Ericsson-Digital

The American computer giant Digital Equipment Corporation and Ericsson have agreed on collaboration in mobile data communications. The agreement covers technology for radio communications between portable computers and the company's fixed computer network. At the center of this collaboration is Mobitex and the Mobitex network, which today is growing in North America and Europe, among other places.

Digital will sell Ericsson Mobitex equipment and together the two companies will develop software that is needed for integrating Digital's products into the Mobitex network. Digital will also offer its customers to expand current networks with mobile functions.

Sun Microsystems is another company with strong standing on the market for computer network. Like Digital, Sun also takes to the open systems philosophy.

Ericsson has now signed a collaboration agreement with Sun that covers development of standards and products for the computer industry. An important area of common interest for both companies is a system for the supervision and guiding of the tele network.

Ericsson-IBM

At Telecom 91 in Geneva Ericsson and IBM demonstrated for the first time the results of a collaboration project that deals with connecting different geographically dispersed work stations with large computers, with the help of broadband services in public tele networks.

Together, the companies have developed a technology that will link different local networks and that in future can give the companies' customers access to better information about and control over different types of services in the network.

Business-Phone in new version

A new release of Business-Phone 150 was launched in October. With this new release the system is improved from the point of view of the end user, of those responsible for operations and of Ericsson.

One of the most important bits of news is that BusinessPhone 150's built-in ACD function is reinforced and is now more flexible. ACD stands for Automatic Call Distribution, that is a queue handling system for incoming and outgoing calls.

Reduced costs

In the new system there is also cause for joy among Ericsson employees. When the customer wants to expand his system Ericsson's service technicians, easier than before, can do so from afar. This has advantages both in reduced costs for Ericsson and better and faster service for the customer.

In October, the new system was launched via local companies and distributors on more than 30 markets where BusinessPhone 150 is introduced.

MD110 for Britain...

The international company Agfa Bayer has placed an order for Business Network which covers the greater part of Britain. The network comprises 2,200 lines MD110, two ERIPAX nodes of the PS500 type and four PS10 as well as the operation and monitoring system NM400. Twelve of the country's largest cities will be linked together through the network. An important reason for Agfa Bayer's choice of supplier is Ericsson's international presence.

... and for Germany

Stadtwerke Düsseldorf AG, the communal company responsible for production and distribution of electricity in the Düsseldorf area, has placed an order for MD110. The order comprises 3,600 lines, spread over seven sites in the city, as well as Team Directory, Voice and a large number of digital telephone sets. The system will be used for integrated voice and data communications via the company's private cabling system with access to the public ISDN network.

NEWS IN TELECOM

Contract on home turf

Ericsson GE Mobile Communications has received an order on its "home turf." The city of Richardson, Texas, home to many Ericsson companies in the States, ordered a digital mobile radio system for 3 million dollars. The system will be used for two-way communication between all of the city's offices.

The system, which is of the so-called DACS type, will be built up around the new communications center that the city of Richardson procured for the police and fire departments. Equipment, radio stations and hundreds of hand terminals will be manufactured at Ericsson GE in Lynchburg in Virginia.

Brazilian bank chooses Ericsson

Brazil's second largest bank, Banco Itau, continues to invest in Ericsson's MD110 for its business communications. In a new order for Ericsson's Brazilian collaboration partner, Matec, Banco Itau has ordered an additional MD110 for about 25 million kronor. The order means that the bank is expanding its existing MD network to about 13,500 lines in the Sao Paulo region.

Televerket first out with DCT900

The Swedish Televerket has decided to invest in the marketing of Ericsson's new digital cordless system DCT900. DCT900 is based on a technology that was developed jointly by Ericsson and Televerket and that is a forerunner to the coming European standard DECT.

The world premiere for commercial introduction of DCT900 will be in the Malmö region where Televerket will start sales in February-May next year. When experiences with this regional headstart are assessed, marketing throughout all of Sweden will begin in August.

Bell Atlantic buys Metro Mobile

Bell Atlantic, one of the seven Bell operating companies in the U.S., has recently taken over America's largest mobile telephone operator, Metro Mobile CTS. Bell Atlantic is taking over shares in Metro Mobile for 1.65 billion dollars and at the same time is taking over debts for an additional 800 million dollars.

The deal means a heavy increase in Bell Atlantic's commitment to cellular mobile telephony. It also means further expansion of the company's cellular network. The company has a regional tele monopoly on the East Coast, between New Jersey and Virginia. This also means one of the two licenses for cellular mobile phone systems in the area.



Success at Telecom 91

Over the past weeks many eyes have been cast on the Telecom 91 exhibition in Geneva. Let me extend hearty thanks to everyone involved in the exhibition. You have put in a lot of preparations and you have given proof of real professionalism and perseverance in seeing that Ericsson's participation at the exhibition would be the best possible.

This time the group has consciously invested less than many of our competitors in the stand itself. But instead we have been more active when it came to using Telecom 91 for contacts with our customers.

The results of this investment must be seen as something of a success. We can point to several major orders during the days of Telecom. You have certainly already read or heard about these successes in the media, but let me nevertheless point to three orders that are particularly significant.

The English Mercury Personal Communications and Unitel have ordered switch and radio equipment for a new so-called PCN network in Britain, for a value of more than a billion Swedish kronor. Bell South and RAM Broadcasting Corporation has given us an order for Mobitex equipment for 1.4 billion kronor. And Pacific Link in Hong Kong has put its faith in us to supply the first phase of a digital mobile telephone system, the first in Asia, a delivery that will amount to 240 million kronor.

These transactions show, with all due clarity, that Ericsson is a "global telecommunications company," just as we presented ourselves at Telecom 91. We are global both in the geographic sense and in the range of our systems. Even though it appears that the current transactions deal only with radio, all of us who work at Ericsson know that this is not the case. These deals are shining examples of Ericsson's strength - our collective and unique competence in switching technology, radio and network construction.

What is a lesser heartening experience from Telecom 91 is that it is clear from our contacts with tele operators, and especially with telecom administrations, that investment volumes will be reduced in 1992. This reinforces the fears that I expressed earlier: Recession is a reality for our customers and, hence, for us too.

How seriously the recession is hitting tele operators can be seen from the constant news about manpower reductions. British Telecom, to take an example, will reduce its operations by 16,000 people over the next 18 months and by a further 22,000 by 1994. At the same time it is cutting back on investments.

All in all, it is a down market that we have to work with in the immediate future. We must, therefore, continue to exercise caution with costs in our budgeting for 1992. And we must stick together internally in the Ericsson organization. Now it is a matter of adapting to changes and of being prepared for even more flexibility.

Even if the immediate future seems grim, let's remember that we are well equipped to face it. Our financial resources are solid and our technology investments steadily achieve new victories.

Lars Ramqvist

A real push forward for Mobitex

BellSouth Enterprises Inc. and RAM Broadcasting Corporation have joined in an investment in cordless data communications. The two companies have teamed up on investing in Mobitex, Ericsson's system in this area.

The joint investment that BellSouth and RAM have now decided on means huge outlays in both companies' networks in the U.S. and Britain. In money terms it means that 1.4 billion kronor will be put into Mobitex equipment from now through 1994.

Commenting on the order, Lars Ramqvist pointed to the immense significance the choice of Mobitex has for the Ericsson Group:

"That the company chose Mobitex for its investment is further proof of the advantages with Mobitex and its open architecture."

The new joint venture company will make use of the fact that BellSouth's and RAM's operations in mobile data communications and mobile people pager systems complement each other. BellSouth is putting more than 300 million dollars into expanding RAM's network first and foremost in the U.S. and Britain, but with a view to other parts of the world also.

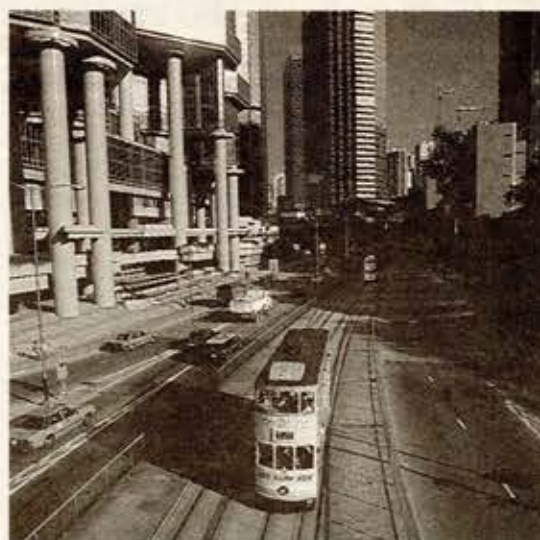
"Cordless data transfer is the next growth area in the tele branch," says Anders Torstensson, head of the mobile data division in Ericsson Mobile Communications AB. "This area stands today where mobile



Until now Mobitex has been spread mostly among companies in the transport sector. Now interest is rapidly growing for other applications of Mobitex technology.

telephony stood ten years ago. RAM's cordless data network is already based on Mobitex today, a technology that is developed by Ericsson and Televerket jointly. The system is built on radio transmission of a digital

data packet. Until now, it has been used mostly in mobile applications with vehicle mounted terminals but there are many other interesting areas of use. Read more about the Mobitex order on Page 11.



Hong Kong - first with digital mobile telephony in Asia.

Digital breakthrough for Ericsson in Asia

At Telecom 91 in Geneva Ericsson announced an important mobile telephony order for Hong Kong.

The order came from Pacific Link, which will now build Asia's first digital mobile telephone system with the help of technology and knowhow from Ericsson.

The contract with Pacific Link covers the first phase in the construction of a digital mobile

telephone network for Hong Kong. The network will be built according to the American standard ADC and is based on the Ericsson-devised TDMA standard. This first phase involves a deal of 103 million SEK, but in the longer term the project is estimated to be worth 240 million SEK.

Pacific Link is one of the operators in Hong Kong today that offers a mobile cellular telephony network. The first phase of the project covers infrastructure and terminals.

Televerket buys FMAS

Ericsson has been commissioned to supply a computerized system for management and operation of Swedish Televerket's digital tele network. The contract is worth about 50 million kronor.

It was FMAS, Ericsson's Facility Management Application System, that Televerket chose. FMAS is one of the cornerstones in Ericsson's new range of operational and guidance services under the collective name of TMOS. Several FMAS systems will come into operation next year.

Transmission system

In addition, a high-technology product is part of the present contract. It is Ericsson's transmission system for so-called PDH (Plesiochronous Digital Hierarchy),

developed in collaboration with the company GN Elmi.

The FMAS system will be used in the operation of those parts of Televerket's network that use the high transmission speed of 140 Mbit/s. It will make it possible for Televerket to continuously supervise and analyze quality on the lines different customers lease, but also Televerket's own lines as well.

Suits all systems

A finesse with FMAS is that it functions equally well, regardless of who supplies the supervision equipment. In the future, FMAS will be equipped to handle the next generation of transmission system, the so-called SDH (Synchronous Digital Hierarchy).

Earlier, Ericsson had an important FMAS order from the Deutsche Bundespost in Germany, which bought six FMAS systems.

Go-ahead for AXE to China

The Swedish government has approved a so-called BITS loan - an aid credit - for 300 million kronor to China. It was news that many in Ericsson have long been waiting for. The money will be used for the first phase in an AXE project in Guangdong province. Simultaneously with the approval of the new credit, the government has given BITS, the Swedish economic aid agency, permission to go ahead - after assessment - with phases two and three of the project.

The entire project is estimated to be worth more than 900 million kronor.

Supplies to China are of major importance to operations in Ericsson's Swedish factories. It corresponds to about 1,000 year-employees. In the first place it is Ericsson in Norrköping that will manufacture the material that will now be shipped to Guangdong.

Billion contract in Great Britain

Ericsson's (U.K.) Ltd., the group's company in Great Britain – has received a billion order from Unitel and Mercury Personal Communications. The order resulted from that Ericsson Ltd. is seen as the sole supplier of all equipment for the first phase in the building of a so-called PCN network.

PCN – Personal Communications Network – is the British designation for personal telephony. This is the next generation's telecommunications network, which is based on digital mobile telephony technology in the 1800 Mhz band.

PCN will be first introduced in Britain. The European standardization body ETSI works with a European standard, DCS 1800, for this type of telecommunications. PCN is a further development of GSM, the pan-European digital mobile telephony standard.

Goes together

The contract Ericsson just got resulted from that Mercury Personal Communications (MPC) and Unitel will compete as operators in the network with different services.

Ericsson will supply switches, transmission, and radio equipment for the network, but also software and other services in the jointly owned network organization.

The contract is worth 100 million pounds, about 1.06 billion SEK.

World leader

The contract calls for Ericsson Ltd. to deliver a technology that is in full accord with the coming DCS1800 standard.

It also specifies that the network should be based on the new parallel network structure



Mercury är en av de operatörer som släppts in på den avreglerade brittiska telemarknaden. Företaget satsar bland annat på avancerade tele-tjänster.

PNA – Parallel Network Architecture.

"During the months we held discussions with Ericsson it was shown that it was a world leader

in the development of DCS1800 and PCN technology based on GSM," says Richard Goswell, president of MPC. "Ericsson proved to be a partner in bringing

about this new exciting service on the consumer market."

Imposing

"During the assessment of the international bidding contest we have had close discussions with Ericsson for many months, first as Unitel, then together with our partner to develop the PNA concept," says Lan Loebe, president and CEO at Unitel. "During this time I was very impressed with Ericsson's technical and commercial competence, as well as with their delivery time and price. This made me have a lot of faith that the PCN services could be launched according to plans, at the beginning of 1993.

Tough competition

"This is a tremendous step in the development of the PCN network based on DCS 1800 specifications. We are happy over having been selected as suppliers of the combined infrastructure for two such strong companies," says Anders Igel, president of Ericsson Ltd.

"Strength in Ericsson's operations in Britain has been important in securing this deal. We got this contract in the toughest international competition."

Wideband order from Mercury

Ericsson Ltd. in Britain received an additional important order from Mercury, along with the PCN order that the company shared with Unitel. It concerns an order for eight switches for so-called "wideband transmission."

Mercury will use the equipment to give its customers the possibility of having hooked-up connections with transmission speeds of up to 2 Mbit/sek. Customers are offered links for national as well as international communications to several European countries. This

service is known in Britain as Cable & Wireless SWITCH-BAND.

"The choice of Ericsson as supplier means a further strengthening of the solid relations that in recent years have been established between us and Mercury," says John Robbins, marketing director in Ericsson's Public Systems Division. Mercury's wideband network consists of local exchanges that are linked to a midway switch. In its turn this functions as a link to and from other networks. The system also includes operational and support systems.

The customer can establish a connection with any other network

subscriber. This can be done manually by using push buttons on the phone or automatically via computer commands. There is also the possibility to select a desired band width, for example for vide conference or data transmission.

"Wideband" is a concept that is used in, among other places, Britain and that should not be confused with "broadband." Wideband covers transmission speeds in the area of 64 Kbit to 2 Mbit/s, while broadband is further up in capacity.

The system has been designed and manufactured by DIAX Telecommunications A/S in Denmark, a company that Ericsson owns together with Bang & Olufsen.

Keen interest for new opto training

A new training unit, with its own responsibility for results, has been established in Business Area Cable and Network.

Geographically, the unit is attached to Ericsson Cable's tele cable division in Hudiksvall, but since it will serve as a resource for the entire business area of Cable and Network it comes directly under the aegis of the business area operations in Sundbyberg.

The unit offers training in fiber optics, splicing, measuring and installation of opto cable to network owners, network installers, network operators and others. Already this far in the chain of ser-



Stefan Nilsson-Gistvik (standing) instructs Elvind Slönäs and Göran Danielsson in fiber splicing.

vices interest is very keen, with many inquiring about training. Among them are Swedish Tele-

verket, Swedish railroads, various electricity companies and Ericsson Telecom.

"We are aiming at all opto users outside and inside the Ericsson Group with a need for more profound knowledge in this area," says Stefan Gistvik, one of the two employees in the unit. He goes on to say that the first trial course was held in Hudiksvall before the vacation period. Four installers from Hungary participated.

Four courses

Until further, four different courses are offered, lasting from one to five days, both in English and Swedish. Moreover, in the training program there is a fiber

optic seminar that can be "tailor-made" to a specific need.

The courses are held in Hudiksvall, where there are new and related training facilities with Ericsson's latest fiber welding and other modern technical means of assistance. But if customers so desire, the courses can be held elsewhere, even abroad.

"An important part of the entire program is what is known as "on the job training," which involves us instructors helping trainees at the end of the course with their first opto installation. There we act as guides for a week or two.

Those who want to know more about the training can call Stefan Gistvik in Sweden on 0650-17000.

NEWS IN TELECOM

Mobile telephony via satellite

A globe-girdling network of satellites, 30 to 40 of them, could revolutionize mobile telephony of the future. In any case that's what Olof Lundberg, president of the international satellite consortium Inmarsat, believes. Inmarsat is working with something known as "Project 21," a mobile telephone network that will make possible contact via mobile telephone from wherever in the world – on land, at sea or in the air.

Inmarsat, which is owned by 64 countries, including Sweden, reckons that the mobile telephone network around the world and the national cable network could be hooked up to a satellite network. The objective is that the mobile satellite terminals should cost less than a thousand dollars and that the cost of calls should be kept to under a dollar a minute.

(Dagens Industri)

British Telecom abandons Telepoints

Investment in Britain in so-called "Telepoints," a one-way type of cordless personal telephony, has been hit further by a serious backlash. British Telecom has chosen to abandon its commitment in this area.

The decision to quit came as a surprise to those who follow tele developments in the country, since one expected instead that British Telecom would make new investments in its "Phonepoints." Instead, there has been an immediate halt in this type of service.

The idea behind Telepoints was to offer the general public light, portable and cheap pocket phones that could be used for outgoing calls from specific points, so-called Telepoints. The service was introduced in 1989, but it never really got off the ground. Four different operators were to share a market that was reckoned by the turn of the century to involve some 13 million subscribers. After three years only about 10,000 people went for the tele idea.

Now that BT is closing down its Phonepoints, none of the four operators today will be offering Telepoint services.

(Financial Times)

Northern Telecom in Swedish collaboration

In conjunction with Telecom 91, the Canadian Northern Telecom and Sweden's Televerket have signed an agreement on long-term development and technical collaboration. The accord covers joint development of an advanced digital business switch for the Swedish market. Northern Telecom is one of the world's largest manufacturers of telecom equipment.

According to sources, the agreement is worth about 200 million SEK for Televerket.

(Televärlden)

Ericsson a bourse winner with ERIPAX

Ericsson has something that appeals to the financial world. Stocks? Sure, but the company has other attractions. Among them ERIPAX, Ericsson's system for data communications, which has been chosen by nine major exchanges and a large number of banks around the world.

A stormy sea of screaming young men, elegantly dressed in suits or, as is the latest trend, in white shirts with sweating outstretched arms. Men who wave frantically with fingers and paper in the air. For many, this is the picture of a stock exchange floor, a picture that is becoming more and more rare. At bourse after bourse the screaming is being silenced. The trend is toward electronic trading, trade via computer systems.

In this development, ERIPAX is one of the winners. In turn and in order the exchanges in London, Stockholm, Helsinki, Frankfurt, Milan, Madrid, Barcelona, Mexico City and Caracas have chosen the Ericsson system. Why?

The reason is that ERIPAX is an open system based on the dominant standard for data communications X.25, which is backed by all computer suppliers. Since the customer, for example an exchange, as a rule has computers of different makes, it needs a computer network based on a standard that makes it possible to hook up different computers. Furthermore, all players on the exchange, brokers, banks etc., must be able to connect their computer equipment to the network. They make their buys and sells from their terminals. This is the standardized base that gives ERIPAX its special appeal.

Operations security

Mats Nordin, at the sales department of the Computer Network division in Ericsson Business Communications, explains:

"Exchanges have special demands for a data communications system. One of the most important is operations security. There are unimaginable sums that change hands in a matter of moments via the computer network. An interruption, even for a few minutes,

could have enormous economic consequences for users.

The Ericsson system has extremely high operations security and is well suited to the milieu where suppliers like Tandem, Stratus and IBM with its System 88 specialize in developing specific operations secure computers for this category of customer.

Time is money

A second can mean the difference between rise and fall on the bourse. First to the gates....Time and access to information are therefore two of the key factors for bourse investors in their battle for the millions. Therefore it is important for all to have access to specific information simultaneously.

The Ericsson system makes this possible through a unique function, Packet Broadcasting. Packet Broadcasting rapidly copies data that is sent out, for example from the bourse's central computer system and distributed to all brokers and banks etc., which must have the information. It is but a fraction of a second between the first and last of these receiving this information. No competitor can offer a similar solution.

Packet Broadcasting was originally developed to meet demands that the Stockholm exchange placed on the system.

"This is one of our strengths, that we are willing to develop according to customer needs," says Mats. If the customer's demands are sensible and possible to incorporate into the system, we benefit from the experience of adapting to his needs. This way, our system is strengthened. And with that in mind, the computer network division keeps an eye on those exchanges that have still not reached for the Ericsson appeal, ERIPAX.



The high tempo on the exchange floor has been replaced by a more quiet mumbling in front of the computer screens.

Continued victories for ERIPAX in finance world

An additional four exchanges – Madrid, Barcelona, Mexico City and Caracas – have chosen ERIPAX for their data communications. The last two are the first outside Europe to install ERIPAX. Earlier, five major European exchanges bought the Ericsson system. Among them is London, which recently upgraded its network.

London, Stockholm, Helsinki, Frankfurt and Milan. The reference list for ERIPAX in the financial world is impressive. With the latest four orders, the list grows longer. The bourse in

Madrid, Spain's largest, has decided to install an ERIPAX network that includes 50 nodes. The order also covers the operation support system NM400.

Trading network

In the first place the computer network will be used for trading. Installation has begun and already more than one hundred brokerages are hooked up. The exchange in Barcelona chose the same solution as Madrid for data communications and installed an ERIPAX network with 25 nodes.

The other two exchanges in Spain, Valencia and Bilbao, plan to set up a network similar to that of Madrid and Barcelona during the year. The next step is to have a national network by linking up the four exchanges together.

The orders from the exchanges

in Mexico City and Caracas in Venezuela is a major breakthrough for ERIPAX, since they are the first from exchanges outside of Europe.

The Mexican network will be expanded to a national one with 30 nodes. In Caracas, data communications will first be based on one node, later to be developed and connected to other networks in Latin American exchanges.

The London exchange was one of the first to install ERIPAX. Recently, the network was upgraded. Among other things the processors were changed and two NM400 systems for operation and monitoring of the network were installed – without any disturbance to ongoing traffic in the network.

Maria Rudell

News about shares and convertibles



The Stockholm bourse has been tumbling heavily since mid-September. There has been speculation that this resulted from the many attempts to form a government after the elections and government declarations that were interpreted by many as far too vague.

Analysts in Stockholm are not completely sure that this is the most important explanation for the bourse's behavior. Even more important, most of them say, is the recession outlook. In the uncertain recessionary situation many of the larger players on the bourse, for example insurance companies, are trading lightly, brokers indicate.

For Ericsson's part, shares continue to ease. At the time of publication, B Free shares were trading at 157 kronor. Today, tele invest-

ERICSSONS SHARES

Date	Mutual Fund		Share Savings Fund	
	Share price (SEK)	Assets (MSEK)	Share price (SEK)	Assets (MSEK)
1988-12-31	135	52,2	343	56,0
1989-12-31	304	94,1	825	77,1
1990-12-31	317	86,4	86	65,6
1991-06-30	362	92,5	98	71,2
1991-10-14	284	72,4	76	54,6

Share prices on October 14 are based on a trading day price of 158 SEK and a convertible rate of 290%.

tors are also sensitive to the recessionary situation, to a far greater extent than earlier, when state telecom administrations had the protection of monopoly decisions. The dampened investment climate now appears to be continuing into next year. It could be some time

before the tele market takes off again. However, there is a plus for buying Ericsson shares long term because of the company's technological successes and the fact that it is precisely investment in research and development that to a great extent holds down Ericsson's profit forecast.

Digital HotLine – a technical breakthrough

At Telecom 91 in Geneva, Ericsson presented its first digital pocket telephone for both the GSM system and the North American standard ADC. New HotLine is Ericsson's first digital model, but it is still technically very far advanced. It is second-generation digital technology that is being presented now.

Unique for Ericsson's new digital pocket telephone is that it is just as small, light and user friendly as today's smallest analog telephone. The pocket phone that was presented previously on the market does not correspond to the description, so Ericsson is first out with this "second-generation" digital pocket phone.

At the very earliest, in 1993, is when they said previously that this technology would be accessible. But Ericsson is presenting it now.

Simultaneously with the pocket phone, Ericsson presented a GSM phone for installation in cars. But above all, it is pocket phones that are the "hottest" thing on the market right now. So it is here that the company is pushing investment the most.

Car phone first

HotLine GH197 is the designation for the pocket phone for GSM. Alongside this there is a similar

model that has been developed for the American ADC system. The American variant functions along something called "TDMA Dual Mode." This means that it can function both as analog and digital. In the U.S. this model has already undergone comprehensive field tests, among others, with Northern Telecom, in Texas. With the American pocket phone Ericsson is now one of four manufacturers taking part in CTIA's testing program for mobile phones.

Both the European model, GH197 and its American counterpart are reckoned to be accessible on the market during the second half of 1992. The new car phone, HotLine GM120, on the other hand will begin to be sold as soon as the European GSM network comes into commercial use at the beginning of next year.

Development

Development of the digital pocket

phones is done on both sides of the Atlantic, at Ericsson GE Mobile Communications development center in Sweden and in the U.S. In the States it is the technicians at the new research center in Triangle Park, North Carolina, who are involved, and in Sweden it is those in Lund who are responsible for shrinking down technology to the manageable format. There is advanced knowledge about the technology for reducing and integrating behind the performance.

The design recalls the earlier pocket phones in the HotLine series, but the new ones are not only smaller but also a little softer and rounder. Orange-colored push buttons link it to the typical "HotLine look."

Top performance

As for technical performance so far the new phones are unique in the digital context. The GSM variant weighs 345 grams, is 147 mm high and 62 mm wide. It has a stand-by time of a full 40 hours and a talk time of 2 hours and 45 minutes.

Since the American digital system is a bit different, the corresponding performance for the American digital pocket phone is 13 hours standby and 2 hours talk time. Technically, Ericsson is now



The new digital HotLine phone is considerably smaller than today's analog model.

way out front in the matter of digital pocket phones. This is needed before the "face off" on the European market for digital mobile phones.

In Europe, the first hit will be in Germany, where Ericsson is a supplier to the sole GSM network. In the

States, the transfer to digital technology is being made in Los Angeles, Dallas and New York. There Ericsson is supplier to the very first system at Los Angeles Cellular.

Ericsson's recipe

A decisive success for Ericsson in the States is also the fact that CTIA, a branch association for that part of the tele industry that works with cellular radio technology, approved TDMA as a standard. TDMA is a technique that was developed and introduced by Ericsson. The company has a very strong position on the system side with more than 40 percent of the world market. The technical successes with the digital system and mobile telephone have strengthened Ericsson's position on the market.

Market forecasts for digital technology speaks a clear language. Already in 1994 one reckons that sales for GSM telephones will be greater than for analog mobile phones in Europe. Still, development does not come to a halt on the analog side. Ericsson is working further on refining the analog technology also for the three systems that the company supplies with mobile phones – TACS, AMPS and NMT.

Lars-Göran Hedin

People pager pilots oil tanker into port

At Scandinavia's largest oil refinery, Scanraff, north of Lysekil on the Swedish west coast, they use people pagers in an unusual way. As a means of assistance for bringing the large oil tankers into port.

Every week at least one vessel between 50,000 and 500,000 tons comes into Scanraff for unloading crude oil. Earlier, they had huge problems with knowing the distance between the vessel and the quay as well as the speed of the vessel.

Level radar

Two modified level radars from Saab-Marine were procured and placed at each end of the quay. Communication from the radar unit to the pilot was initially done with communications radio. But that meant that the pilot was obliged to carry both a communication radio, a huge numerical terminal and a battery. In total, 4-5 kilos. Plus the pilot had to press in different commands on the terminal.

After a talk between Saab-Marine and Ericsson, a solution was presented by Ericsson in the form of people pagers.

The radar measured and calculated the vessel's distance and speed to the quay. An instrument in the water measured current

flow and force. Information is gathered in a personal computer for which the firm Emil Lundgren Innovation produced a software that relayed the information further to a people pager system.

There it is kept in a "mail box" in the receiver. The display is divided so that all four elements are shown simultaneously. One gets information fast, clearly and automatically.

Four alpha-numeric contactor-receivers have been bought. One is used by the pilot, two by personnel on the quay and one is kept in reserve.

The people pager system has now been in operation since the end of 1990 and has worked well ever since then.

Martin Steinkamp.



When an oil tanker has to berth at Scanraff's quay, north of Lysekil, they use people pagers. Through them, the pilot and two men on the quay get all the information they need. The vessel's speed and distance from the quay, current flow and current force.

PIRAT project in Katrineholm



"The will to change must come from the bottom, especially when it concerns changing attitudes. And you have to give it time," says Lars-Åke Eriksson, project manager for PIRAT. PIRAT is a large project for changes in the department for pin-device manufacturing in Katrineholm.

Within Ericsson Telecom's S-division, there are several projects for changes going on. One of the largest is in Katrineholm. Department 55, which manufactures pin-devices, is undergoing a total change in order to increase the capacity and to decrease personnel turnover and absenteeism due to illness. The project also includes a reduction of employees by more than a half. A delicate problem.

In Katrineholm, which is Ericsson's oldest plant in the countryside, printed board assemblies, transformers, inductors, cable packages and above all connectors are manufactured. The plant, with about 1,000 employees, is the largest private employer in the area, but Katrineholm is an industrial town and the competition is tough to get qualified manpower. Those who are available today in the job market are mostly young people. The total

personnel turnover at Ericsson in Katrineholm is about 10 percent and young people under 25 account for more than half of it. "Meanwhile we know that the number of young people will decrease in the near future," says Pauli Liimatainen, personnel manager. There will not be so many young people to choose from. Therefore, one of the reasons for the project for changes is to decrease the personnel turnover.

The second reason is to increase productivity and profitability, which is a must for all companies today.

In 1989, a long-range forecast which extended to 1992 was made. It showed that the largest need for changes was in department 55.

38 million

Until June 1992, 38 million kronor will be invested in mechanization, changes in the working organization, logistics and education in department 55, all within the frame of project PIRAT.

The career fund has contributed 6.7 million kronor and also shows a significant interest for the project, which is an overall investment beyond the usual.

There are clear goals and guidelines for the project:

"We will decrease the operating

costs by 20 million kronor per year and at the same time we will halve the lead times from 10 to 5 days and reduce the manufacturing cost by 20 per cent."

This implies a large increase in capacity since one simultaneously will reduce the number of shifts from four to two!

The goal also implies that both personnel turnover and absenteeism due to illness will be reduced to less than 10 percent, from 26 and 19 percent respectively at the time the project was started.

No cruddy jobs

The project manager, Lars-Åke Eriksson, is enthusiastic.

"We have to change the attitudes and this can not be done from the top, he concludes. Instead, one has to give the employees conditions for changes

in the form of technology, equipment and education. And not to just talk about it, but also to do it!"

"To have flow-groups where everyone learns several cruddy jobs does nobody any good, he continues. One has to increase the work's level of difficulty and move white-collar work out to the floor."

Homogenous level

To change the work organization is one of the subprojects in PIRAT. So is indoor environment, with a new layout in the workshop.

Investments in machinery are other subprojects. Major parts of what was previously done manually will now be done by machines.

"The point is not only to mechanize where it is financially justifiable, but to create a homogenous level of technology," says Lars-Åke Eriksson.

Another subproject is logistics, which implies that a detail planning system is being designed and introduced in the workshop.

Those who are included in the flow groups will get the orders by themselves from personal computers in the workshop and also take care of the occupation of the machines.

70 will leave

The big problem is that everyone who works at department 55 today, will not be part of the changes. Out of 120 there are only 50 that will be able to stay. The rest will get new jobs within the plant.

"We felt that it was important to form the groups early, in order to be able to make the changes gradually," says Lars-Åke.

To choose the ones who were supposed to stay, was done in a new manner. All 120 of them participated in deciding what qualifications would be demanded of those who would stay.

The personnel did not only want the best to be chosen, but a cross-section of the personnel.

Individual demands were that people should be willing to "help and support." The only restriction was that the chosen ones had to speak Swedish.

"It turned out much better than if we had done it by ourselves," says Pauli Liimatainen. We got what we wanted and a little bit more.

No A-team

All 120 were interviewed, thereafter they were told which ones were going to stay.

"Of course there were those who got very disappointed, but it is important to bear in mind that it is not a matter of an A-team and a B-team," says Pauli. A lot of those who cannot stay are skilled, but they could not meet the specific demands given by the personnel.

The 70 who got the message that they have to leave the department,

have been able to leave suggestions on what they would like to do instead.

"When the 50 who are included in PIRAT are being educated, the ones

who were not chosen get to take a major part in the manufacturing responsibility," says Lars-Åke Eriksson. Obviously there will be friction in such a situation.

Previously, Lars-Åke worked full time as project manager. However, he and the others who took the initiative to start the project, will take a step backward until June next year, when the changes will have taken place.

"We will not make the changes, it will be done by those who work in the workshop, but we will support them," says Pauli Liimatainen.

Text: Helena Lidén
Photo: Lars Åström

"Drudgery" removed in section 55

atrineholm



Anne Laitila still thinks the manual work was more fun. To work at a machine is quite boring. But it will improve, she says, when more responsibility is distributed to those on the floor.

New working routines are tempting

"It sure was tough in the beginning when we found out who was going to stay and who had to leave", says Håkan Hallqvist, one of the 50 who will stay.

"But we knew already from the beginning that not everyone could stay," says Håkan, who is foreman in department 55. He believes in PIRAT, even though they are in

the middle of the implementation phase and it is hard to know how it will end.

"The hardest thing is to learn how to manage the responsibility. Beside manufacturing pin-devices, the flow groups will also order and deliver, everything with the aid of a personal computer."

"Naturally it is more fun having a job with responsibility and where one gets the overall picture. To get away from monotonous tasks that cause working injuries is also important."

Anna Laitila is not quite as positive toward the changes this far. She thought it was more fun working manually. Today she works at one of the newly bought machines.

"It gets so monotonous," she says. However, she also points out that it will probably get better in the future when new working routines turn up.

"I can really notice that responsibility is distributed further out," says Rickard Romander.

Several investments in new machines have been made in department 55. The purpose is to increase the overall level of technology and not only where it is financially justifiable. Eric Barbara is one of the operators in the PIRAT project.

manufacturing manager. But the advantages are so great that it is worth rationalizing yourself away, he laughs.

"The employees become more conscious about the overall picture and responsibility, and that is always profitable in the long run."

Every week production goals are set up for the different groups. It becomes like a contest to reach the goals.

"There will probably be a contest between the flow groups when they also get started," he says. "I think it is healthy. It works as a stimulator for the employees."

Total flex
The company has today 15 different types of flexitime on the manufacturing side.

"With the new way of working we have to find additional types," says Pauli Liimatainen.

"We need some type of 'total flex.' We have observed different flex types at 120 different companies and have not as yet found something that suits us." "What we are looking for is, for example, a flex-time where one can sometimes work days and sometimes evenings. The personnel turnover on the evening shift is by far the highest."

"If we are going to keep the youngsters, we must change the evening shift. They have spare time hobbies in the evenings and we have to adjust to that."

The form of wages also has to be adjusted to the new working organization. There will be no differences between white- and blue-collar staff.

"We have to be aware that we are now trying to put an end to 70 years of Taylorism, the hierarchic organization based on the assembly line. To change this is not done overnight," Pauli concludes.

A chance for youth

During the fall, the usual workforce at ERE in Mölndal will be boosted with ten students doing their practicals. They come from Gothenburg and its surroundings and they all have their four-year technical undergraduate education, in tele technology, behind them.

From the point of view of school and job market, it is a step in the so-called IMU project, investment against youth unemployment. On Ericsson's side it is a way of taking on its responsibility toward society at the same time as gaining goodwill. From the company's point of view, these young people are potential employees, even if no firm commitment of a job results after the practicals.

In the spring, instructors at the Katrineholm secondary school in Gothenburg got in touch with some Gothenburg companies, which, from a youth perspective, were interesting. There is no abundance of suitable high-tech companies, and of the limited choice there were only two that could seize this initiative, Ericsson and Televerket.

Job training

As a result of this, now in October ten students at ERE and six at Televerket began a term's on the job training toward their engineer's exam. They spend two days a week in school and three days in the company. Over a few days of introduction they got information about the company, basic training in design economics and learned a lot about ERE's quality concept.

"Cost consciousness is very important in this business," says

Annika Orvarson, who together with Thomas Rydberg runs the project for ERE.

Recession and the unusually large graduation classes have created a need this year for measures to minimize risk for unemployment among the young. IMU is a project to meet this head-on. There were 60 applicants for the 16 places in this job training program. The basic requirement was that they were unemployed and then came their qualifications.

"We wanted to have students with good grades," says Thomas Rydberg, and Annika Orvarson adds:

"We make demands. This is not just accommodating."

The students are treated as newly employed undergraduate engineers and have to cope with the same demands. They differ from those employed only in that they work under supervision.

The 10 supervisors at ERE have decided what the practicals mean for the students. Ongoing contact with the instructor from the start of the school term determines what course the training would take. All the divisions in ERE back the program and the range of commitment runs from "this is fun" and "this is a useful experience" to "I guess I'll have to do it" and "I suppose it's my turn."

"Despite everything, many feel that it could be nice sharing their knowledge and experience," says Annika Orvarson.

Professional competence

As mere undergraduate engineers the youths are not too well off in today's economic situation, but with this training it is a good step on the way to professional competence.

"They will be well equipped to get a job," says Thomas Rydberg. If satisfaction and a vacancy exists, ERE could be their first employer."

Gunilla Bergman

From Kontakten No. 1, 1948



"I got so mad with this telephone. I have been sitting here talking to myself for ten minutes now."

World opens up for Mobitex

American businesses create company for mobile data communications

BellSouth and RAM Mobile Data are creating a joint venture for mobile data communications. Digital and Ericsson are collaborating in mobile data communications. Two decisions that have profound meaning for work on Mobitex.

"The market has opened up and Mobitex is now a stable and profitable operation." So says a very glad Anders Torstensson, who is responsible for the mobile data area at Ericsson Mobile Data Communications AB.

The collaboration between BellSouth and RAM has major significance for Mobitex on markets in the States and in Britain.

Expansion of the networks are envisioned and will be a major task over the next three years. The new joint venture company will invest in equipment for more than 1.4 billion kronor.

"That is a much larger expansion than we were hoping for," says Anders.

Base stations for Mobitex are made by the Ericsson company Radio System AB. They now have a running production of base stations.

Portable modem

In the U.S. there is a tremendous need for using portable terminals in the Mobitex network. This means that the development of a radio modem, that has been going on since the end of 1989, is now about to bear fruit. This is especially fun news for the some 40 technicians who are involved in this development work.

The radio modem is manufactured at Ericsson's factory in Kumla, but despite the bright future outlook it does not alter the manpower reductions at the factory.

The radio modem has little job content and production is very automated.

Test with taxi

In November last year, considerable testing of Mobitex was done in Stockholm. Equipment was mounted in 50 taxis and during an entire day they drove around and provided certain test information.

"We made a total assessment of Mobitex, and since the 50 taxis were using the Mobitex system all the time it corresponded to 6,000 subscribers of normal use," says Anders. The taxi test has been a very important point of reference.

Largest in U.S.A.

BellSouth itself has recently made an assessment of Mobitex. Among other things, it compared it with Motorola's system for mobile data communications, Ardis.

It was a comparison in favor of the Mobitex system. Up to now Ardis has been the largest system in the U.S. for mobile data communications.

BellSouth's and RAM's decision for expanding Mobitex means that this will now be the

largest in the States. This facilitates selling Ericsson's terminals for mobile data communications.

"The combination of this expansion and the collaboration agreement with Digital is perfect. Mobitex now has a shining future," Anders concludes.

Gunilla Tamm



Brief facts on Mobitex

Mobitex is a system for mobile data communications for national and regional networks. The system, which is optimized for data and text transmission, has an open standard. This means that subscribers can freely choose terminals. Typical users of Mobitex are transport and installation companies, rescue services, taxis, the police and service companies.



Per Stein and Anders Torstensson with a small portable terminal for mobile data communications. Photo: Björn Seger

Collaboration accord with Digital Broadens market for Mobitex

During the huge Telecom 91 fair in Geneva, it was announced that Ericsson and Digital had concluded an agreement in mobile data communications.

"The collaboration involves two areas. One is distribution and the other is to introduce tools for software development as well as products for data communications with Mobitex. The agreement is of strategic importance and gives Mobitex "a lift" while at the same time opening up new markets," says Per Stein, who works with business development for mobile data at ERA.

Digital, the third-largest American computer manufacturer, has sales and services throughout the world. This means that the distribution channels for Ericsson mobile terminals for data communications will be more and broader. At the same time Digital is in countries where Mobitex networks are not present today and this can open up new markets for the system.

At Digital, they want to offer

customers the possibility of using their own computer system in a mobile way, that is beyond the walls of the office. In other words, they want to extend the computer, cordless. This will be done by offering customers complete applications for the Mobitex system.

Part of the agreement between Ericsson and Digital concerns collaboration to introduce software development tools and data communication products for Mobitex.

"These tools are important for direct selling as for devising different applications that will be used in Mobitex," says Per. He draws a comparison with a word processor and a word processing program. Without the program one has no use for the word processor. It is the same with Mobitex. You can't have applications without the programming tools.

These tools are important for "system integrators," that is system designers who devise applications for Mobitex. Large companies with their own computer departments often develop the applications they need

themselves. Other companies want to buy finished solutions and it is these that "system integrators" sell. Digital will be offering its customers these services.

The concept "system integrator" is well known in the U.S.

Portable computers

Customers' application of Mobitex differs from country to country. Here in Sweden almost all applications refer to computer equipment that is fixed mounted in vehicles. In the U.S., where computer use has come much further, more than half of all terminals will be portable.

This applies to laptops, notebooks and other similar terminals. Through a portable or built-in radio modem, the Mobitex network will become reachable for the user.

"At Ericsson we are good at cordless communication but we lack knowledge and experience in software development. Now we will have this through collaboration with a company like Digital," says Per.

Gunilla Tamm



Some 40 technicians at Ericsson Mobile Communications work on development of radio modems for Mobitex. Gathered around Peter Bauyay are, from left, Per Vollmer, Sören Karlsson, Heléne Rutström, Lars Bratsberg, Bo Lindell, Robert Paél and Stefan Ulveland. Photo: Björn Seger.

On his way to Toronto



"We look forward to our 'new' life and are sure we will be happy in Toronto, says Bernt Högberg

"With the new building in Toronto, all the business units in EGC are assembled under one roof for the first time. Employees from GE in Canada and from Ericsson in Canada and Sweden will forge a good base together from which to work. It is stimulating to be part of all this," says Bernt Högberg, who was just named vice president for Ericsson GE Mobile Communications, Canada, EGC.

In the spring, there was a reorganization of Ericsson-GE operations in Canada. Lionel Hurtubise, president of LMC (Ericsson Communications Inc.) and EGC, previously had his offices in Montreal.

New building

All development of software for mobile telephony was done here. In Toronto, where they have just moved into the new building, were gathered the business units mobile telephone systems, mobile telephones, mobile data and land mobile radio.

A further change is that the mobile telephone system and LMR are now a single unit. (At EGC's premises in Toronto there are also people pager operations, which, however, is not part of the joint venture company).

"We are about 240 employees and of these some 20 came from Montreal to Toronto," says Bernt.

Bernt Högberg is a civil engineer and an economist and he worked for many years in large Swedish companies

like Electrolux and the Axel Johnson Group before coming to Ericsson Radar Electronics in Stockholm in 1987.

"There I worked with line systems for defense," he says, adding that he is a reserve officer in the Air Force. Last year, Bernt went over to Ericsson Radio Systems and the marketing department for mobile telephone systems.

There he was responsible for market coordination in the U.K. and Oceania. A job that entailed a lot of traveling, but not to Canada.

"I got an interesting job with EGC," he says. "We will forge something really good out of two different corporate cultures. Through goal-oriented activities, we should be able to have better economics."

"Before I came to Ericsson I worked with companies that went bad, so I know that one has to be strict and 'grind away.'" At the same time, we must be able to change to the direction we believe in."

Canada is country hit heavily by recession. In the last few months, there has been a real increase in the number of mobile phone subscribers in the country. Bernt hopes this could be a sign that they are now moving toward better times.

Now in the fall Bernt moved to Toronto and by Christmas the family will join him, that is his wife Eva, a sociologist, and the children Johan, 15, and Karin, 12.

"We look forward to our 'new' life and are sure we will be happy in Toronto. Unfortunately, we can't take the sailboat with us but on the other hand I hope we get a chance to get around and go skiing, something that the entire family loves," Bernt says.

Gunilla Tamm

Largest Mobitex campaign

Right now the largest Swedish campaign ever in Ericsson's mobile data system Mobitex is being carried out. With full-page ads in the press, brochures, direct mail and many other means, the market should be convinced of the advantages of "writing to you car instead of speaking." The campaign theme is "Now the traffic is silent."

"It is the Swedish market that we are aiming at in the first place, but later we plan to take the campaign into Finland and eventually also Norway," says Stefan Moberg, responsible for marketing communication for mobile data at ECS in Kista.

The target group is mainly the transport sector, but with some idea of widening the scope.

Road haulage firms, messenger services and traffic companies will receive direct mail information with contents relevant to

the various transport services. In the Swedish national press four different four-color ads will have full run on full pages.

And as the accompanying ads show, "with this car phone you know where your vehicles are" and "the traffic is silent now."

"The message in the ads is simple. Mobitex terminals should be seen as a refined mobile telephone, where writing possibilities makes it even more interesting and where tailor-made solutions can be offered according to the customer's needs," says Stefan.

Simple concept

Televerket began to sell subscriptions for Mobitex in 1986. But it was off to a slow start, mainly because it involved a high level of technology and because at the beginning there was not enough developed software.

But the situation is different today. Collaboration between Sweden's most successful software companies and Ericsson is beginning to bear fruit. Today, Mo-

Med den här biltelefonen
vet du var du har dina bilar.



Nu
tystnar
trafiken



ERICSSON

bitex can be sold with an entire range of communications solutions for mobile data communication. And the solutions can be sold with a simple concept:

"In the ads we refer to Mobitex as the writing mobile telephone. Everyone knows what a mobile phone is, and that it can write makes it all the more attractive."

"When the transport companies see the advantages of writing to the vehicles it is easier for us to take the next step and offer more complex solutions in order to further improve administration and increase profitability," says Stefan.

The campaign is running from mid-September to the start of spring 1992.

Helena Andersson

Record attendance at tele world Olympics

Telecom organization is often referred to as the tele world's Olympic games. Just like the sports Olympics, it takes place every four years and like that it ends up being more costly and more extensive. But it is a marvellous occasion for technology exchange and demonstrations, and for Ericsson the result at Telecom 91 was a record large number of registered visitors.

First of all it should be said that Telecom is more than just an exhibition; it is an advanced conference where the elite of the tele world meets. But of course it is the exhibition that gets the most exposure.

The organizers, the International Telecommunications Union, ITU, estimated that some 133,000 qualified people visited Telecom 91. Ericsson notes that 22,000 came to its stand (which is more than one expected) and that of these 5,000 were so interesting that they were worth registering. Several other visitors were already registered in advance.

Ericsson also received visits from 127 delegations representing different countries; they were ministers or managing directors of telecommunications companies. Each delegation consisted of 5-15 persons.

Among the ministers visiting was the new Swedish minister of communications, Mats Odell.

Nine days

October 7-15 all the world's telecom companies, tele administrations, computer companies and others concerned gathered in Geneva. There, from morning to night, they showed their products, technical solutions and even what

holds for the future. For example, Motorola demonstrated Iridium, the global mobile communications via satellite, which is expected to come into operation in 1997.

At Telecom 91, two types of exhibitors were present. The major companies like Ericsson, IBM, Siemens etc., and member nations of ITU. A total of 166, some of whom had their own stands.

This meant that Ericsson was found at no fewer than twelve places. Besides the main stand, Ericsson was represented at the Swedish, Danish and Norwegian parts of the Scandinavian pavillion, as well as at the Australian, Italian, American, English, and others. Ericsson was also there among collaboration partners such as the American BellSouth and IBM.

Observers

An event of this size, where in effect all the giants are assembled and want to show their best (competition is honed, even for the tele administrations in these deregulated times) is a golden opportunity for "espionage" among competitors.

Special observers go around, studying and committing to memory to report home later. Many times technical interest is cultivated so that espionage takes on a character more of exchange. Both are equally interested in knowing what the other is working with.

Telecom is also a good opportunity for the major companies to present news for the assembled world press. For example, Ericsson could announce two billion deals (Mobile Data and Personal Telephony), a major collaboration agreement (with IBM where IBM's private network will communicate over the public broadband networks) as well as a new digital pocket phone that is in the front line and that attracted immense visitor interest. In addition, there were other agreements.

Many records were set at Telecom 91. It was tight with space in the halls and



Hundreds of thousands visited Telecom 91 during nine hectic days in October.

the fact is that already by the end of Telecom 87 the space for 91 was already overbooked by a full 100 percent. That's why so many chose to expand upwards with higher stands.

Forecasts spoke about 300,000 visits (not visitors) during the nine days. Hotels in Geneva and the surroundings were booked four years back, and every hotel room within 50 kilometers was taken. Many visitors commuted by train, car or even by air. Shuttle flights from Paris and Zurich.

Selection

Ericsson worked very goal oriented. Its stand was specially designed by a Scottish consultant, Taybum, which received 20 pages from which to proceed.

An uncontrolled stream of visitors is not interesting. Instead, the strategy was to first capture visitors on the main floor, where stand personnel generally oriented themselves as to what the visitor was interested in and if indeed this interest was serious. If so, then the visitor was registered (among other reasons so that later he could be sent brochure material etc. In principle, there was no brochure material at the stand) and then was led one floor up where a specialist took over the demonstration.

A demonstration that was made via so-called interactive presentation (see separate article) where the visitor and specialist together oriented themselves through a pre-programmed picture archive.

"This interactive presentation technique was of tremendous help for those making presentations,"

USA in a solid grip

In the American stand's demo-hand, Ericsson's new digital pocket phone showed its worth. It goes on sale in the second half of 1992.



says Geo Douglas, responsible for Ericsson's participation at Telecom 91. "But it was also only a means of help; without personnel input it would have amounted to nothing."

On the upper floor of the Ericsson stand were presented:

- Broadband technology for video conferencing, multimedia and data communications.
- ETNA, with among other things Optical Cross Connect, which transfers optical video signals without converting them to electronic signals.
- Intelligent networks with SMAS, which permits rapid design of new tele services through a combination of design modules on a picture screen.
- TMOS concept.
- The new pan-European mobile telephone system GSM (see article on GSM car) and the first digital pocket telephone.
- Nationwide people pager systems and mobile data communication.
- Business switch MD110 and the

new cordless business phone for the CT3 system.

Ericsson's stand was noticeably free from physical demonstration objects. Of course, except for mobile phones. Like bees around honey, visitors swarmed around the Hot-Line phones. Especially the smaller new digital pocket phone.

What made the phone particularly interesting was that it was not made public the first day. On Wednesday, Ericsson first held its press conference.

But with the digital pocket phone and everyone could see that it was precisely as small as it should be and as competitors feared.

Alcatel also had a so-called GSM pocket phone but it was larger and above all it went into production later.

There is a lot to tell about the fair, but the balanced, knowing judgement about competitors etc. is best left to be told at a later time.

Lars Cederquist and Lars Åström



A brief lull at the Ericsson stand.

New technique for presenting the company

An entirely new presentation technique has come up in recent years in exhibition arenas worldwide: Interactive Presentations. Ericsson was one of several companies that used IP to explain its products and activities during Telecom 91.

"Interactive Presentations is a product between video and computer graphics," says Lynne Høwen, responsible for IP presentations in Geneva.

With help of a computer pictures are obtained, which are later shown on a TV screen.

"The difference between IP and video," Lynne continues, "is that with IP you can decide for yourself in which order and how rapidly you want to show. With video you just put in a cassette and play from beginning to end."

"When a customer comes up and asks for general information about Ericsson, we show pictures that describe Ericsson's activities in general. But if the customer says 'No, I would like to know more about TMOS' it is only for the operator to go over to that part of the program, etc."

To work with IP you need to know a bit about video, about computers, a lot of competence in graphics and a great deal of knowledge about Ericsson.

Stroke of luck

The first time Ericsson used the technique was during the CeBit fair in Hannover, and it was a stroke of luck. Before Telecom 91, there was a lot of discussion about how Ericsson should show customers what capacity its software had.

One can show products, but how do you show problem solutions and ideas in a simple and concrete way?



Interactive Presentations produce good contact with listeners.

Another reason for choosing IP was that it is a challenge to the customer to be more personal. A large video wall does not draw a customer into conversation with Ericsson personnel at a stand, while IP is a natural way of encouraging dialogue.

Right message

"Our mission is to capture the customer's attention, but after that it is the message that is important. When customers leave the stand

they should think 'Oh, how fantastic ETNA is' or 'Sure, the IP concept works great.' They shouldn't think 'Oh, wasn't that a heavy presentation.'"

Lynne recalls a previous exhibition when a large telecom company had covered an entire wall with 60 bits of 30-inch video screens.

Four years later people still remember the wall but nobody remembers the message.

Helena Lidén

HotLine maintain contact

"We would never have gotten through this event, maintaining contact with each other, having the right person in the right place at the right time etc. If we didn't

have Ericsson's HotLine mobile phone and Ericsson's people pager," says Geo Douglas, responsible for Ericsson participation at Telecom 91.

Mobile demonstration



Ericsson had a demo car for the new pan-European digital mobile telephone system GSM, where it demonstrated handover and international roaming, that is what happens when you cross national boundaries.

When Ericsson met visitors who were interested in mobile telephony in general and the new pan-European digital mobile telephone system GSM in particular it had a trump card in hand. A little tour around Geneva where visitors could see with their own eyes how the GSM system works.

That Ericsson's CME 20 system functioned together with Matra and Philips equipment.

See? With their own eyes? Precisely. See what can't be heard. In color, picture clear on a screen.

The vehicle was equipped with two screens where the phone call was shown graphically. On the one was monitored voice quality and

signal strength. With black and white curves, respectively.

On the other screen was shown handover. That is what happens when a mobile phone changes cell, when it is connected from a radio base station in one cell to a station in another.

With the changeover itself the background color went for example

from black to red. An additional finesse was that you could play up information anew and analyze how the call is being developed.

The demo system was run on a network from Ericsson, French Matra and Philips.

The vehicles were from Ericsson and Matra, the phones from Orbitel.



Size No.1

Those who visited Ericsson's stand and looked at the new digital pocket phone wanted to know first of all how large it was. After that what it cost, when it could be delivered and then thereafter talk time and other technical details.

The gap widens

In America more than every second person has a phone. 50 per 100. In Africa the number is under 2 per 100 and the gap is widening rather than shrinking.



Along for the sixth time

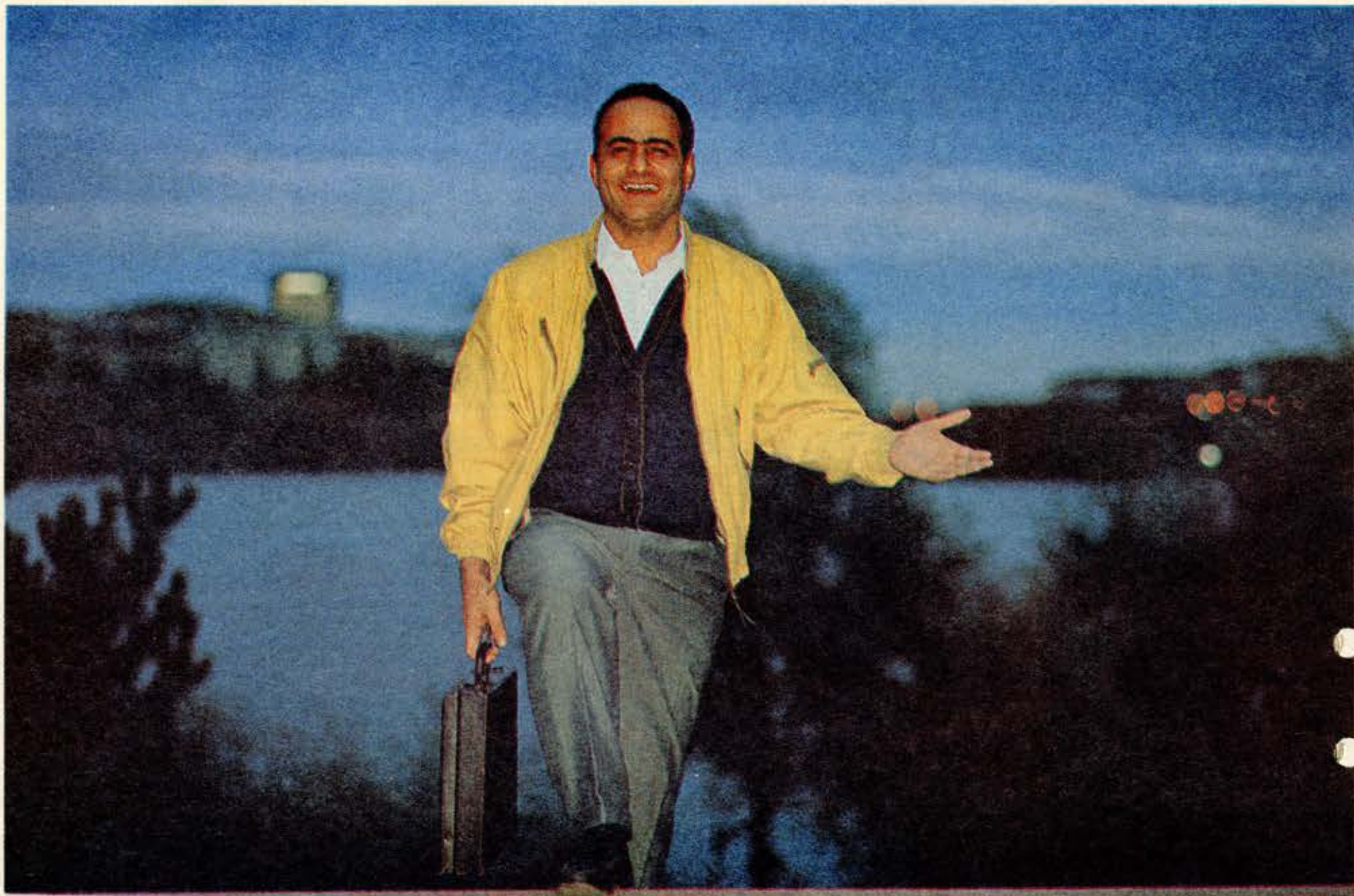
At the Ericsson stand we met with a veteran, Kjell Sandberg from ETX. He has been with all six Telecom events since its start in 1971. He has seen how Telecom has developed from a little "internal" exhibition, where Ericsson, among other things, very successfully marketed AXE, to today's gigantic fair.

"It was considerably easier in 1971. The stand was not larger than this (he points to about half the size of the coffee room) and we were at the auto show area in central Geneva. There we showed only a mechanical, empty stand. But that has gradually changed from raw design mechanics to more and more electronics.

"The entire telecom world was smaller. AT&T, Siemens, Ericsson. But no Japanese, no IBM, or others. Deregulation has led to greater competition and now the tele administrations are there too. The Americans are also looking for new geographical markets and business ideas, which means a lot of consulting companies, etc. The wheel is set in motion."

Kjell Sandberg seems a bit confused. In principle, Telecom has doubled on each occasion, that is every four years. Palexpo is no longer enough, hotels are too few. It is very difficult for Geneva to handle a bigger event.

"We live in a world of galloping technology."



Ali Abumuqadam left the seven hills of Amman for the beautiful Alvik Strand.

East meets West

Ali from Jordan works in Sweden on contract

It is not only Swedes who like to travel and work abroad. Sometimes one almost forgets everyone who comes to Sweden to experience something new! In exchange for every tenth Swede going abroad on contract there is one person coming to Sweden.

One of them is Ali Abumuqadam from Jordan, who arrived one year ago with his family. What is it like being hired on contract in Sweden, we wonder, we who have our origins here and feel at home with the Swedish system.

Ali's office is situated in Alvik Strand where he is a technical adviser in system testing in ETX's England-region. During this year, Ali has studied some Swedish. However, English is mostly spoken in England-region while working and some Swedish is spoken during the breaks.

"A foreigner could work for a hundred years with Ericsson in Sweden without ever having to learn Swedish," Ali bursts out. Everybody here in Sweden speaks English and all our documentation is in English. Well, perhaps there is some Swenglish occasionally...

Ali was born on the West Bank in Palestine. In 1967, the area was invaded by Israel and Ali escaped to Amman in Jordan with his parents, brothers and sisters.

"The Middle East is a hot spot,"

Ali says. Any minute it can start to bubble and boil over. That is what happened recently when war broke out in the Gulf.

"One of the reasons that I accepted the job offer in Sweden for two years, was my longing for a safe and calm place for my children to grow up in."

"I followed the war's development day by day. I watched TV; the Swedish evening news, CNN, SKY News; I listened to the radio and read all the papers I could get my hands on. I had continuous contact with my relatives down there in order to assure myself that everyone was fine."

"I visited my relatives and friends in Jordan this summer. They live under severe circumstances after the war, both financially and mentally. Inflation is high and all

financial aid, from the West and the more prosperous countries in the Gulf, has been withdrawn since Jordan supported Iraq during the war."

"The good thing about Sweden is one can feel safe here. The other side of the coin is the bad weather and the high prices. However, it is something that affects all of us equally."

"I don't like lingonberry jam and I don't eat pork since I'm a Muslim. Apart from that, the Swedish food is quite good. I'm especially fond of the fish. Here in Sweden one can easily find fresh and rather inexpensive fish. Where I come from we only have the Dead Sea," Ali says with a laugh.

Last year in August Ali moved to Stockholm with his whole family - his wife Rashida, the children Sally, Ayman, Suzanne and the youngest, Lamya. They went directly from Arlanda Airport to HF at Telefonplan where they picked up the keys to a newly constructed five room apartment. They rent the furnished apartment from Ericsson Housing, and it probably belongs to a Swede abroad on a contract with Ericsson.

Already four months before they arrived, Ericsson Guest Service had managed to find vacancies in a school and in a day care center for

the children. Ali's youngest daughter Lamya, soon two years old, goes to day care center. The oldest daughter Sally, 10 years old, goes to an English school in Tanto together with her brother and sister, Ayman, who is 8 years old and Suzanne who is 5 years old.

"I don't feel isolated at all here in Stockholm," says Ali. "I have Swedish friends, Arab friends and above all I have my family here with me. It takes time to get to know the Swedes, they have a reputation of being careful. But with some

patience one can get to know them well."

"If one compares the social network in Sweden with the ones in the Arab world, it really is not such a big difference in how much time one spends with friends. The big difference is that we Arabs live and socialize frequently with our relatives. Swedes don't do that to the same extent."

AXE as a red thread

"During the 13 years I have worked for Ericsson, I have always worked



"All our documentation is in English, Swedish is spoken during the breaks," Ali says.

with AXE in some way," Ali says. "In the Arab world, when we installed and tested AXE-equipment, I found myself face to face with Ericsson's customers all the time. One of the reasons that I accepted the job in Sweden was that I wanted to work with switching already in the designing stage."

Already in 1978, when he worked for a Saudi Arabian company who was a supplier to Ericsson, he was here for his education for nine months. Thereafter he went to Saudi Arabia to install and test AXE in Mecca, the holy city which is only open to Muslims.

"It was fun working with AXE in Saudi Arabia since it was the first one sold outside of Sweden. It was a huge order which gave Ericsson a good reputation in the Gulf countries, which also started to get interested in AXE."

"In 1984, Ericsson Telecom employed Ali. At that point, he had worked locally for Ericsson in Saudi Arabia for four years. For five months he visited Stockholm again in order to update his knowledge before he was sent to Dubai in the United Arab Emirates.

Person number

Guest Service is with their guests all the time and they explain and translate the rules of Swedish bureaucracy.

"As a foreigner in Sweden one has to get a person number, residence permit, working permit, demand note and birth certificate," Ali explains. "Things like a driver's license and a piece of identification are essential."

"In order to get a person number one has to be registered nationally and at the tax authorities. Birgitta André and Alicia Warfvinge helped us a lot, among other things to get the children into school and to get my driver's license translated. They really are there for us when we need them and when we feel unsure."

There are specific problems for those who live and work in Sweden who are not Swedish citizens

Therefore during the period of the tax statement, Guest Service



Sitting in Ali's lap is the youngest daughter Lamyia who is two years old and who goes to a day care center. Beside them stands brother Ayman who is eight years old and goes to an English school.

Guest Service – a good investment

One night at a hotel in Stockholm is what it costs the company to have a foreign visitor at Ericsson Guest Service for one month. In other words it is a good investment and assurance for those who come to Sweden that they will feel comfortable.

The ten employees at the Guest Service Center in Marievik are responsible for different things that concern guests – day care center and school, insurances, allowance for expenses, excursions etc. However, the guests are not assigned to one specific contact person. When one needs help, there is always someone at Guest Service who has the time to help.

At Guest Service they are concerned about the foreign guests not becoming bored and

isolated after working hours. They arrange excursions, evenings with music, meetings for wives and sightseeing tours without costs to the guests. It is possible to join trips to the Swedish mountains or to Finland, perhaps a well deserved vacation, at your own expense.

Every year Guest Service takes care of approximately 1,500 guests from about 70 countries. They like to talk about their miniature United Nations. Guest Service is a gathering place for foreign guests and contract employees. Here one meets old friends who one has worked with in other parts of the world. Like Ali Abumuqadam himself says:

"The world is so large, yet rather small for us at Ericsson."

arranged two meetings with experts on international tax issues for all foreigners employed by contract. For example, what to do in order to be spared from double taxation.

"Just to fill out your tax statement is very difficult, so when I tried by myself and couldn't figure out how to fill out the form, I finally went to Maria Barck-Holst at Guest Service. We sat down with all the papers, forms and a calculator and in a matter of seconds it was done."

"Living in Sweden becomes so much easier when we can get help from Guest Service. They do a very good job and put down a lot of work on making life easier for us in all aspects."

Ali came into contact with Ericsson Guest Service already during his first time in Sweden. He then met Maria Barck-Holst, who is head of the department today.

"It is so much fun to meet Ali again," says Maria. "One gets sad when our guests go back home again. It is so nice when they come back and one can meet the children and the family, who have grown since one last met them."

Ali studied to become a computer engineer in the Soviet Union. He went to Leningrad with a scholarship and had actually planned on becoming a doctor.

"To be a doctor in the Arab world is very fine, it gives respect and prestige, a doctor is good and helps people when they are ill."

However, after the first preparatory year at the University of Leningrad, Ali was more tempted by mathematics and technology. This meant that Ali had to move to Ukraine and studied there at the Institute of Technology for six years.

"Before I started at Ericsson I was a bachelor, computer engineer and had only seen East Europe and the Middle East. Today I'm married, I have four children, I'm an engineer in both computer science and telecommunication and I live in West Europe. I can definitely say that Ericsson has had a certain influence on my life."

Text: Pernilla Åström
Photo: Lars Åström



The family is gathered around the dinner table in a typical Swedish kitchen, but with traditional Arabic dishes like Baba Ghanusj (Arabic mayonnaise with eggplant purée), Fareekah (a kind of a couscous soup) and Fatayer Lahmah (pastry stuffed with minced meat). The family Abumuqadam from the left Suzanne, Ayman, Lamyia, Ali, Rashida and Sally.

Collaboration in focus at international technical symposium

Every other year a technical symposium is arranged for technical and production people from units in the cable sections of Business Area Cable and Network. The foremost aim of the symposium is to permit participants to inform each other about ongoing research and development work in the branch. The symposium is held alternately in Sweden or at one of the foreign cable companies associated with the business area. This year it was Sweden's turn to be host for the symposium, with Ericsson Cables AB as the organizer.



Dag Bergström was the spider in the symposium's web.

At this year's seminar which was held between August 26-30 there were participants from seven countries apart from Sweden. Altogether, 30 persons participated. One of the biggest delegations was from Colombia, with six men.

Lars Normark and Bo Rasmusson, organized this year's symposium. "For my part I have also had invaluable help from Kristina Sjöberg, staff secretary in Sundbyberg."

During the five conference days, participants visited, apart from Sundbyberg, the Telecable division in Hudiksvall and the Power Cable division in Falun. A long line of lectures, with follow-up questions, was part of the program. By far the most of them were concentrated around product, process and material development. "Workshops,"

group work and factory visits were another part. The social side was not lacking either. Among other things, there was a lake trip on Mälaren to Gripsholm castle. Exotic dances were also part of the program.

Only for cable

Why not a symposium with participants from the technical and production areas in the entire business area, including the network construction side? The question goes up to Dag Bergström.

"The issue has come for discussion but resulted in no firm decision. Against the background that the areas concerned are so separate, I think that it will sooner become a case of two parallel symposiums with certain parts of the program common to both sides," says Dag.

This year's symposium could in some way be said to have made a step in the direction of this new order. For the first time representatives for the business area's largest network company - the Italian Ericsson Sielte (SEI) and the Swedish Ericsson Network Engineering (ENS) - were invited as lecturers. The Indian Vindhya Telelinks, which has a knowhow agreement with Ericsson Cables, also sent a representative.

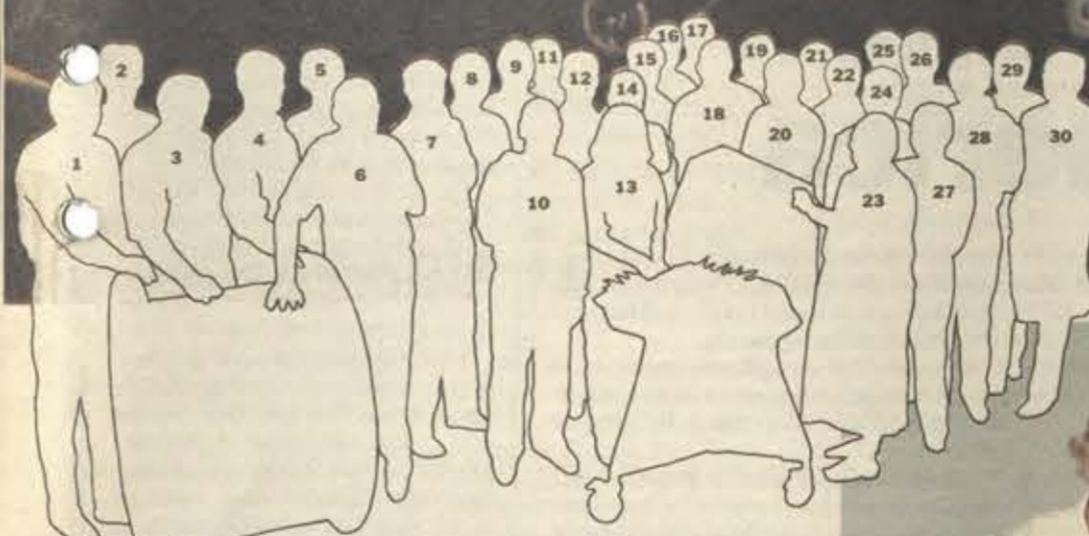
Learn from one another

One does not have to go into the program in depth to affirm that the aim of this symposium is for delegates to get information about ongoing research and development work in the business area's different cable companies and in this way to learn from one another.

Above all, from the lectures but also "live" on the factory floor. Since the normal contacts between the people concerned here consist of fact-filled fax, telex or phone calls, the symposium also naturally provides a valuable opportunity



Symposium participants assembled at the Hudiksvall plant at the unit for final testing of conventional telephone cable with Sievematic equipment. Cable drums in the background contain hybrid cable with both opto fiber and copper ready for shipment to Saudi Arabia.



for colleagues from different countries to get to know each other a bit closer up.

As to the question of what was most important during these days, Dag Bergström says:

"Group work which we had in Hudiksvall, where we discussed issues around common players."

"Previously, each cable factory has been more or less unto itself. Now we discuss, among other things, common approach to markets, where for example we strive after the same level of quality in each product. We can achieve this when all our units reach the standard that is demanded by international quality norm ISO 9001. This applies in the first place to the cable side," Dag points out.

"The general trend is that all units want to have an even more intensive exchange of technical information." Is it enough then with seminars every other year?

"Yes," says Dag. "In this form that covers products, processes and material, it is enough to have seminars every other year. Later there could be reason also to have mini seminars such as those proposed by Lars Berg in his closing speech."

"We already see several needs, for example for manufacture of ribbon cable. Before the end of the year we should have held a mini seminar on this topic."

Colombia next?

Where will the 1993 seminar be held?

"Facomec in Colombia has never been an organizer and so would very much like to have its turn," says Dag, emphasizing at the same time that no final decision has been made.

Thord Andersson
Photos: P-O Lindquist
and Pär K Olsson

- 1 Octaviano Aguirre (LCM). 2 Carl-Gustaf Ekroth (HL/ECA).
- 3 Bruno Torstensson (FAC). 4 Parviz Hourfar (SET). 5 Bo Rasmusson (FN/ECA). 6 Ernesto Facchini (FAC). 7 Eduardo Michalski (FCB).
- 8 Lars Elfrimsson (FN/ECA). 9 Mario Lang (FCB). 10 Guillermo Acevedo (FAC). 11 Dag Bergström (SG/BN).
- 12 Mário Daniel Teixeira (FCB). 13 Jannica Larsson, operator HL/ECA. 14 Rafael Mejia (FAC). 15 Horjes Sahun (FOE).
- 16 Anders Larsson (HL/ECA). 17 Tomas Westerlund (HL/ECA). 18 Jorge Garriga (FOE). 19 Hans Olofsson (HL/ECA). 20 Roger Runesson (HL/ECA).
- 21 Leif Stensland (SG/BN). 22 R.S. Shekawat (Vindhya Telelinks). 23 Tarja Voutilinen (HL/ECA).
- 24 Berndt Eriksson (HL/ECA). 25 Alf Karlsson (HL/ECA). 26 Lars Renström (HL/ECA). 27 Hector Calvo (LCM). 28 Emiro Velasquez (FAC). 29 Bengt Carlström (SG/BN). 30 Arvid Jauring (FAC).

FAC = Facomec S.A., Colombia
FCB = Fios e Cabos Plásticos do Brasil S.A., Brasilien
FOE = Fibroco S.A., Spanien
LCM = Conductores Latincasa S.A. de C.V., Mexico
SET = Simco Ericsson Ltd, Iran
Vindhya Telelinks Ltd, Indien
SG/BN = Ericsson Kabel och Nät, Sundbyberg
HL/ECA = Ericsson Cables AB, Telekabeldivisionen, Hudiksvall
FN/ECA = Ericsson Cables AB, Kraftkabeldivisionen, Falun



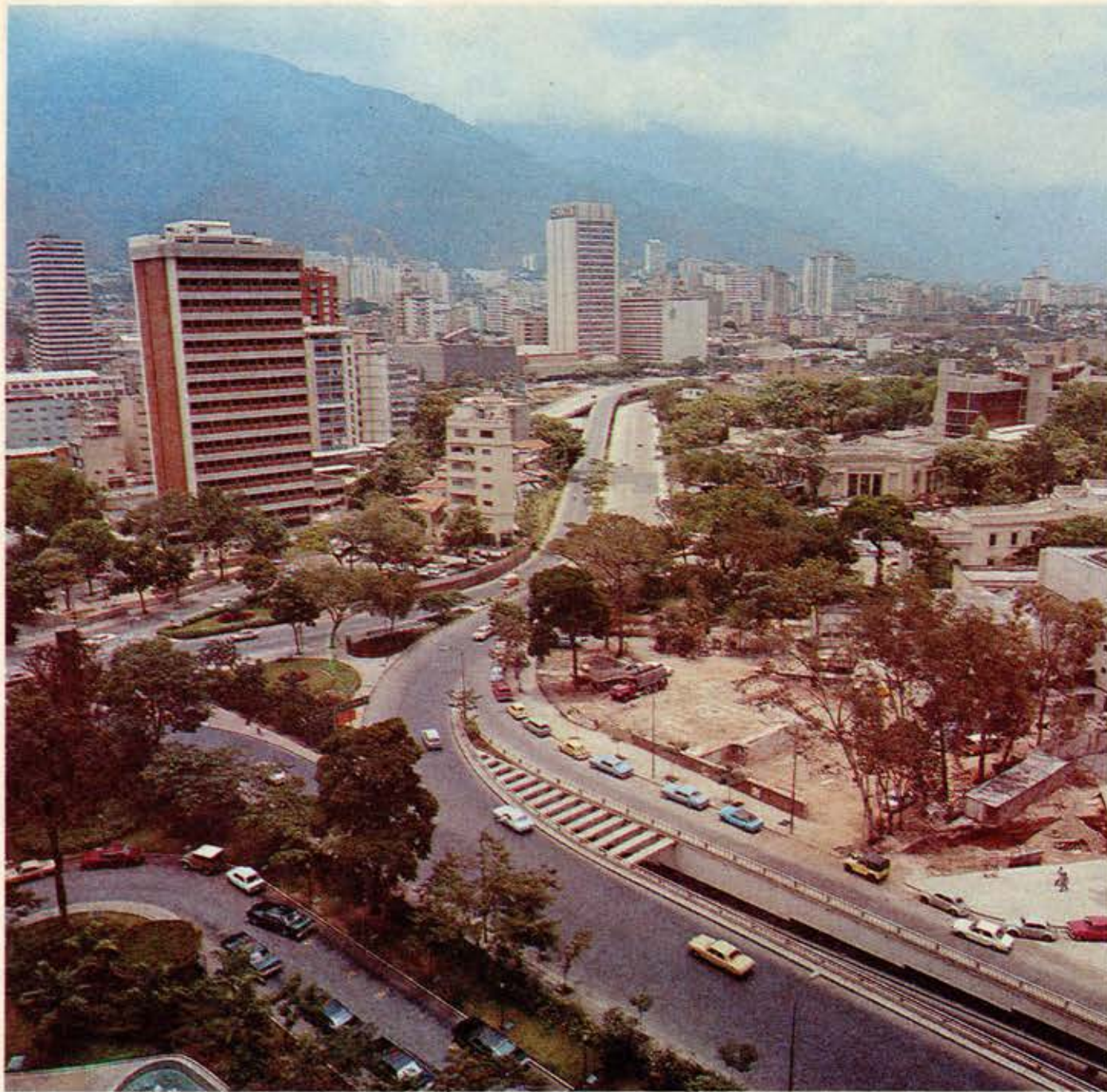
Alf Karlsson, responsible for process and industrial engineering, presented newly developed fiber and copper cable manufacturing processes.



Newly graduated Doctor in technology, Tarja Voutilinen, lectures on her new method for measuring fibers' warp sensitivity in an opto cable.



In Falun attendants visited production units for installation leads. Here, all kinds of cable are made for building production.



Caracas, the capital of Venezuela, has more than 3 million inhabitants. Like the rest of Latin America, the city has a South European character, but with major influences from the U.S.A. There are large contrasts here, with severe poverty, but also large modern companies in need of sophisticated communication equipment. Photo: PER-OLLE STACKMAN/TIOFOTO

EBC at 'road show' in Latin America

For about a hundred years Latin America has been an important market for Ericsson. In the business communication area, Ericsson is a leading supplier in for example Brazil, Mexico and Venezuela. In order to secure and strengthen this position, a group from Ericsson Business Communication's management is going on a "road show" in these countries.

Ericsson is a well-known name in Latin America. The company has played and still plays a leading role in the development of telephony on the continent. In some of the countries the concern has large manufacturing companies.

In 1990 Latin America accounted for eight percent of the sales within the business area Business Communications. The same year Mexico was the eighth largest market.

All this, even though the financial situation is still severe in the area after the very troublesome 80s.

"Presently, a stabilization of the financial situation is foreseen, especially in Brazil, Mexico and Venezuela," says Åke Mårtensson who is responsible for the region within EBC. Inflation has decreased and companies have started to invest.

It is these three countries that Åke will visit in less than a month together with the division managers Rolf Eriksson, Lars Boman and Göran Wågström along with Jaap van der Berj from Ericsson Business Mobile Networks in Holland.

Contacts

During the trip the group will meet important present customers, potential customers and the press.

"The installed customer base is very large, also of older Ericsson switches," says Åke. For example, in Brazil we estimate that there are almost one million Ericsson lines in use.

"We have some large customers that we have had a long cooperation with," he continues and gives as an example the largest bank in Mexico, Banamex. At this time they have a private net consisting of approximately 20,000 lines MD110. Another example is the state-owned company for the oil industry in Venezuela, Petroleos de Venezuela SA, where MD110 accounts for 20,000 lines of the companies private network, which consists of 60,000 lines in total."

This gives a hint about which customer segment Ericsson is strongest in in the area, the banking and the finance world along with the oil industry. Venezuela and Mexico are both on the list of the world's top ten oil producers. The two countries get about 80 percent of their export income from oil.

The most important products on the market

are MD110 BusinessPhone 150 and BusinessPhone 24. ERIPAX, which has had tremendous success in Mexico, will be launched in Brazil during the trip.

Because of the strong border protection it has been impossible until now to introduce ERIPAX in Brazil. The rules are being eased now.

"These countries are computerized and there is a need for a system of computer communications," says Åke, who sees huge opportunities for success also for computer networks in the banking and finance sector.

It is only natural also to launch the Business Network concept officially during the Latin American trip, since all systems on which it is based and in the ERIPAX introduction are found on the market.

Innovation No. 3

The third innovation that the group would have with them in their baggage is the CT-3 system DCT 900 for cordless telephony. It is the first time that the system would be demonstrated in Latin America.

"It is important for us to show where we stand today and where we are headed," says Åke.

Competition on the market is tough, mainly from Siemens, Alcatel, Northern Telecom and NEC. There are many others besides Ericsson who see Latin America as an interesting market for the future.

Maria Rudell

Expertise at SPIE in San Diego

Every year SPIE, an international association for optical engineering science, organizes a technical symposium in combination with an exhibition. Traditionally events take place in San Diego in sunny California. As the only Swedish company, Ericsson Radar Electronics, ERE, participated in the section on "airborne reconnaissance."

The reason for "airborne reconnaissance" falling into the area of optical systems lies in the fact that tomorrow's reconnaissance systems contains different types of electronic sensors – as opposed to today's film-based camera system in for example the SF37 Vigen.

The system of the future is totally digital and the images are registered on advanced digital tape recorders. To have some order in the information and to facilitate assessment there has to be computer power between the sensors and the recorder. This is where L division at ERE comes into the picture, with its trade designated RMS (Reconnaissance Management System). RMS is the brain of the system.

Unique qualities

For some years now L division has been working on development of an advanced RMS and is currently assessing offers for a complete reconnaissance system for the JAS 39 Gripen. The system consists of a capsule which contains sensors (cameras), RMS and recorder.

"Our RMS has several unique qualities and it was an accounting of these that was our goal at the symposium/exhibition," says marketing manager Lars Olsson, who attended with Bo Johansson and Micael Johansson from the development department.

The week's highpoint was the half-hour presentation that Micael gave on RMS and the technical solutions that have been produced. The collective expertise, manufacturer and user, showed keen interest.

What particularly aroused listeners' interest was the entirely unique image compressing. One problem with the new generation sensors is that they provide a tremendous amount of information and that calls for a lot of storage, in this case on the recorder. But, in contrast with many others, Ericsson foresaw that there would be a problem storing all that information and invested in image compressing retaining information content and quality. A decision that now seems to have been on target.

A recorder of this type could be very costly – between three and four million kronor each. Thanks to image compressing we achieved one recorder in the capsule, as different from the American system ATARS which needs two in its British-manufactured RMS.

After SPIE-91 in San Diego there is no doubt that Ericsson's RMS is a significant entry on the world market. A new generation of digital tactical reconnaissance systems is what most countries are waiting for now.

Experiences in the Gulf war speak a very clear language.

Liss Knudsen

ON THE MOVE

INGVAR ANDERSSON, VP, Ericsson Network Engineering AB

Ingvar Andersson was named vice president Ericsson Network Engineering AB. He will be responsible for the Swedish operative activities. Ingvar comes most recently from being head of the plant and marketing sector at Nobel Tech Systems AB.

Ing-Britt Johansson at the same time will serve as secretary to Ingvar Andersson.

WILLIAM TIDWELL VP, Ericsson Network Systems in USA

Ericsson Network Systems in the U.S. has appointed William Tidwell vice president for the newly established Central Region. William will be responsible for development of Ericsson's business with Amertech, BellSouth, Bell Atlantic, Pacific Bell, MCI and other operators. He will also be responsible for Ericsson's power products in the U.S.



BENGT FORSSBERG head of South East Asia and Pacific-region in corporate function Marketing

Bengt Forsberg, currently head of Cellular Systems and Special Networks Division at Ericsson Ltd. in Britain, will return to Sweden in January 1992. Bengt will succeed Olof Morander as head of the region South East Asia and Pacific in the corporate function Marketing.

He will be succeeded in Britain by Jan Edhäll, who is currently responsible for Land Mobile Radio in Ericsson GE.



Tønnes von Zweibergk and Lars Dahlberg with four new weather radars on the order books.

Weather radar team takes it all

The last week in September was one of joy for the weather radar team in Mölndal, Kista and Borås. The reason: orders for four new weather radars, among them one from New Zealand and one from Denmark.

And with that the forecast for 1991 was met.

"We needed this so as not to lose motivation," says a happy Lars Dahlberg. "What is best about the order is that we got them without going through the regular bidding procedure."

"This is New Zealand's third weather radar, and it will be placed in Christchurch on the south island,

which will get its first radar with this," adds Tønnes von Zweibergk, marketing manager. "We are now waiting for an additional two from there. One more for the north island and one for Dunedin 46 degrees south. Then New Zealand will be covered."

No maintenance

Ericsson's knowhow in radar has really come into its own in New Zealand. Equipment is sent to the other end of the world. With help from Mölndal, Ericsson in New Zealand is responsible for installation and operation.

Sometimes, one has to work in very inaccessible places that can only be reached by helicopter. The radar not only functions but just as well it needs no maintenance.

"That is an enormous plus," says

Lars Dahlberg, and it is very encouraging.

The Danish weather radar is placed north of the island of Sylt. It would function in collaboration with other Danish weather radars as well as the Swedish one in Jonsö. This will give coverage for all of Denmark.

Eventually, all of Scandinavia will be covered with weather radars. Sweden will have nine, Denmark four and Norway four. Right now an offer is pending with Finland for three.

"Yes," say Lars and Tønnes. "But when you look at the Finnish economy you can't tell how things will go. Norway is also moving slowly."

"But there is a market for weather radars. But it varies very much from year to year. From this perspective

it is hard to make predictions that hold."

"Until now we have manufactured on forecasts and sometimes it has been off. On the other hand it takes a year starting from zero to produce a weather radar. That is too long. We must find a valid middle road," says Lars.

New countries

That the stopper is removed, both Lars and Tønnes agree. They see in particular activity at the international exhibitions that ERE participates in with its weather radars. And when the opportunity arises on the Nordic home market with Finland, then one can expect countries on the other side of the Baltic to come in - Estonia, Latvia and Lithuania.

Maud Umaerus

Wallenberg stipends for 1991

This year's stipends have been announced by the Marcus Wallenberg Fund for scientific research and training.

Of the 58 incoming applications, eight were chosen. The total amount awarded to these eight for scientific training was 1,250,000 kronor. These are the year's winners and their line of study:

Anders Birkedal, ERE, Sweden: MBA graduate (business administration), Berkeley University, U.S.A.

Lena Jansson, Krigstad, ETX, Sweden: Master's degree in management of technology, Brighton Polytechnic, England.

Winnie Olsson, ETX, Sweden: MBA graduate, IMD, Lausanne, Switzerland.

Christer Ahrlind, ETX, Sweden: MBA graduate, Aichi Gakusen University, Tokyo, Japan.

Niclas Walter, ERA, Sweden: MBA graduate, IMD, Lausanne, Sweden.

Peter Funk, EUA, Sweden: Studies in computer science and artificial intelligence, Edinburgh University, Scotland.

Juha Silvennoinen, LMF, Finland: Research and information systems, Stanford University, U.S.A.

Victor H. Sandoval, EXU, U.S.A.: Master's degree in electrical engineering, Massachusetts Institute of Technology, Boston, U.S.A.

Rewarding delivery

Outside Y division's VIP room in Mölndal a plaque was placed a little more than a month ago from the U.S. Air Force Systems Command. It was an attestation from a very satisfied customer, which got its goods delivered in October, GIRAFFE 75 US.

At a project meeting before shipment of the GIRAFFE, the American project leader Nat Talpis presented a plaque and expressed his satisfaction with the product as well as with ERE as a company. The delivery, which made a mark for project GIRAFFE 75 US on this occasion, got without any doubt an extra touch of excellence.

"With customer contact it is often the case that one concentrates on problems. So and so does not work," says ERE project leader Kent Dreifeldt. Such a positive reaction like this is therefore a welcome change."

Gunilla Bergmann

Answer when it rings!

365 people a day get no answer

Telephone answering morale at Ericsson must improve. Today, answering frequency is as low as 70 percent. Therefore many divisions, of their own initiative, have set up a course in telephone reasoning. The aim is that nine out of ten callers to Ericsson should get a direct answer. It is only then that one can say that there is a good telephone culture in the company.

A couple of years ago there were opportunities for getting advice and direction in reasoning and telephone etiquette. At the beginning of October it was Business Communications chance to do so. Over a three-week period all employees were given a well-needed updating of telephone use.

"At Ericsson we lose an average of 365 calls a day, that amounts to close to 90,000 a year. We have to change that," says Marie-Louise Jansson, pointing determinedly at a red paper. There were the most common message codes. For that is what counts. To press the right button at the right time.

Marie-Louise is normally at the switchboard at HF. But she is also working on informing about telephone culture that matters – and that should matter.

"It is important that we at the

switchboard can leave a message about where people are. At times it can be a prospective customer calling, at times the call can be something important affecting private lives. It has happened more than once that a child has been hurt at day-care and we have had a difficult time tracking down the parent.

Phone marauder

During the hours that information is being imparted a video film is shown with a real telephone marauder. The marauder is played by Sven Melander and he elicits one or two recognized giggles from the public.

"This film is critical, but we have made it to show how really simple it is to code your phone so that the switchboard can give a sensible message to those who call."

The most common argument for not coding your phone is surely that "everybody knows quite well that it is lunchtime between 12 and 1" and "if it is so important they can call back."

The girls at the switchboard know that this is not the case. An uncoded phone during lunchtime means many irritated calls and questions on how personnel at Ericsson can afford to take three-hour lunches.

Another excuse for people not coding their phones when they leave their office is of course that they do not know how to do so. That can be a very sensitive story about a technology company...

"No one should be ashamed to



"No one should be ashamed to call the switchboard and ask for help," says Marie-Louise Jansson (at right) from the switchboard at HF.

call the switchboard and ask for help," says Marie-Louise. "Sometimes I get the feeling that one must know "everything" simply because one works at Ericsson and must be computer oriented. That is obviously not so. We at the switchboard are professionals in the use of the phone. Others are professionals in other areas. But we know our job and we are there ready to help. If there is some instruction that appears complicated just call the switchboard and ask."

The aim is that nine out of ten

should get an answer when they call. By answer we mean that besides the called party himself answering also if the switchboard can leave a correct message when he is expected back, or if a colleague could take the call for him.

"Yes, one has to take a lot of shouting," says Britta Jansson, a telephonist at EBC. "Sometimes we are lucky and the party concerned comes in just when things are getting worse. I usually ask the person to stop shouting a while and do so with the person concerned.

The fact is that it usually leads to a dead silence in the receiver."

After a conclusive telephone culture campaign the response frequency shoots up.

"Yes, it reaches as high as 95 percent," Marie-Louise confirms. "And that is an extraordinary figure, but it is worth hanging on to. If everyone pitches in we can soon have a telephone culture in Ericsson that we can justly be proud about."

Text: Anette Bodinger
Photo: Lars Åström

'Your call is placed in line'

New functions revolutionize sales of business switches

"Europeans have a lot to learn when it comes to telephone use," says Britt-Inger Eriksson, applications manager in Ericsson Business Communications. But the winds of change are blowing from the west. Soon companies in the Old World too will see what profits there are to be gained from efficient communications solutions.

"Your call is placed in line, we will assist you as soon as possible." Hit your personnel code and square. "Leave a message after the tone." Have you noticed how phrases like these are becoming more common while at the same time busy signals are fewer when you call companies and organizations?

Already in daily life one can note that the ways of looking at business communications are going through huge changes, above all in Europe.

"It is becoming more and more common for our customers to demand communications solutions with more advanced end user functions than what we now have in a business switch.

"For example, there is queue handling and call distribution, voice handling systems with, among other things, voice mailbox, and

the possibility of hooking up computers and business switches," says Britt-Inger Eriksson.

There are also demands on suppliers to offer a finished, functioning packet with integrated systems of this type. Suppliers, for their part, must offer something more than a switch to maintain profitability on the very hard-pressed market for business communications.

A total solution has a higher value for the customer than what a business switch alone has.

U.S.A. first

On the long-time monopoly-free North American market this insight came much earlier. There you have cutting-edge competition between companies in all branches and it means raising the service level and

reducing costs in order to survive. In this, efficient communications solutions are an important aspect.

"One can follow market trends in the U.S. and transfer them to Europe," says Britt-Inger. "Normally the curves are the same, with a few years' delay."

This means that sales of total solutions during the coming years will increase strongly in Europe, which is Ericsson's biggest market in the area of business communications. Europe, too, will get accustomed to messaging via telephone, assisted by an automatic voice.

Specially adapted

This is the background behind EBC creating the department Applications.

Here, Britt-Inger is working with some 15 persons on developing applications – added functions – for the communications system MD110 and business switches in the BusinessPhone family so that Ericsson can offer finished communications solutions, adapted to each customer's specific needs.

"We are working with a mix of own developed and purchased systems," says Britt-Inger. Production managers in the department monitor market demands from companies and customers, follow trends and determine in every case how we can meet those demands. Economy and time are crucial factors, since demands change fast."

The majority of applications are free-standing. Building them all into business switches would, in practice, be impossible, since product development would be too heavy and slow and the switches far too expensive.

Knowledge and fantasy

Selling total solutions makes new demands on salesmen.

"We need to build up competence in the company's sales organization," says Britt-Inger.

"This is a new way of thinking," she notes. "Salesmen must have a knowledge of the customer's operations to be able to present a solution that supports it, obtain for the customer the most efficient and for us the most profitable solution. The room for creativity is immense. It is

only fantasy that sets limits for which solutions can be obtained, since the different external applications are like building blocks that are placed in the switches. They are based on software, which from the very beginning is designed so that the system can be easily adapted.

Easy to prove

Happily for the salesmen, application products are easy to explain for the customer. It is easy to show how quickly the customer can profit from an investment in total solutions. The customer increases his efficiency, raises his service level without increasing costs.

"For example, the company can be accessible all day without increasing manpower," Britt-Inger points out.

It is not only Ericsson that sees the need for total solutions.

"All our competitors to MD110 are also here," says Britt-Inger, who feels that Northern Telecom is the supplier that is investing especially big in this area. Ericsson is well placed in this competition.

Maria Rudell

Legal bugging in Ahmedabad

Philip Odland is a veteran traveler among those Ericsson colleagues who, among other things, have spent many years in India. Philip has collected his travel memoirs in several interesting volumes with old "Ericssoniana." Here he recounts an example of teleservice for which there is no longer any need.

"Your husband is saying..." I heard a loud-voiced, almost shouting telephone technician say into the hand-held mike telephone that he had hooked up at a monitoring desk for long, linked-through connections.

This happened in 1935 in the Indian city of Ahmedabad, where I had just gotten involved with installation of a carrier frequency system. I couldn't avoid hearing the shouting technician.

Expression of triumph

After his first "Your husband" there was a pause, but then he repeated the same phrase equally loudly.

There was new pause and then I realized that the call had gone through, a slightly lower tone on the part of the technician.

When he completed the call and saw me questioningly looking at him, he came forward with an expression of triumph on his face. He explained that he had just been doing some "humanitarian cheating," a kind of "legal bugging," to use a more modern expression. And he recounted:

The technician was working with routine supervision when he came in on a call in progress between London and India. He heard a female voice, in almost hysterical sobbing.

Sobbing

After a little while she was back again, even more perturbed and moaning, with even more desperate sobbing.

It appeared that the call should be between a couple, where the husband was in London and his wife was somewhere in India, outside of Ahmedabad.

Apparently, the call was somewhat important.

One can well understand the woman's reaction when, perhaps after a long nervous wait, she expectantly put the receiver to her ear and instead of hearing her husband's usual "Hello dear, it's me" she met with a remote, unintelligible croaking. That was more than the woman could take, and so the tears began.

Voice in the unknown

The technician was a fast thinker, for he hooked in his microphone and in a loud voice said "Your husband is saying..."

First, when he repeated it for the second time in an even louder voice, the woman began to understand that there was a humane, male and



even understanding voice out there in the unknown, which she could listen to.

Without technicians

Yes, thus "the call" came through. In the opposite direction, to London, the connection worked without any help from technicians.

The bad quality to India was the result of a malfunctioning radio connection between London and India, it was later shown.

The technician, who with some difficulty could hear and helpfully understand the husband, repeated him word for word as long as he

was able to receive him. When the technician ran into a time problem he uttered the phrase "Your husband is saying..." and transmitted directly what the husband had to say.

The wife apparently did not notice the difference, happy that the call finally got through.

The question is whether she somehow understood that it was the timely intercession of a telephone technician in Ahmedabad that helped her in this critical situation.

Philip Odland

Global telecommunications



ERICSSON

New brochure presents the Group

At Telecom 91 in Geneva Ericsson gave a new presentation of the Group. It is written in English and is called "Global Telecommunications." In it are described Ericsson's special strengths as a global telecommunications company, both in the geographical sense and in the range of Ericsson's systems and products.

The brochure also reflects Ericsson's future directions. It describes in brief the Group's system platforms and its directions for research and development. The thinking is that "Global Telecommunications" should serve as an overall presentation of Ericsson, to be used in internal and external presentations, for distribution to customers, etc. The brochure may be ordered from the printing house in Karlstad, KS/ETX/TS/DFK. Tel. +46 54 19 30 00.

UNDER COVER AT TELECOM 91

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Grand Duke Jean of Luxembourg and his wife, Josephine, intently study an optic fiber through a microscope. Here, they could compare the size of the fiber with the size of a laser and a matchstick. Per Andersson from Ericsson demonstrated the technology for the royal couple.

Grand Duke of Luxembourg visits Ericsson

The Grand Duke of Luxembourg and his wife were guests together with the Swedish royal couple at Ericsson in mid-October. It was the Grand Duke himself – an avid fan of technology – who expressed a desire to visit us during his three-day state visit.

Lars Ramqvist and Björn Svedberg officially welcomed the royal guests to Ericsson. A group of 50 journalists followed the state visit and one could count no fewer than 15 black limousines with police escort parked outside the head office at Telefonplan. The two-hour presentation of the company was held in the film auditorium, after which the noted guests went on to the information hall where the very latest Ericsson technology was displayed.

Son on the phone

Per Andersson from Ericsson showed the Grand Duchess Josephine how tiny fiber is by placing a matchstick alongside under microscope. The printed board for a Digital Cross Connect went from the royal hands to others.

The world's smallest cordless phone, which is still not released for sale to the general public – a DCT900 Business Cordless – was placed in the hand of Grand Duke Jean. Colin



In his hand the king holds a box with three optical switches, which are not yet on the market.

Buckingham from Ericsson had arranged it so that the Grand Duke's son at home in Luxembourg was at the other end.

"Allo, c'est moi," the Grand Duke began. "I am calling from the world's smallest telephone which – well, it does not actually exist as yet."

He had no problem whatsoever with the line. He continued:

"So the children are fine. A mass of photo-



Someone at Ericsson arranged for the Grand Duke to speak with his son, Henri, at home in Luxembourg via Business Cordless telephone.

"Allo, c'est moi. I am calling from the world's smallest telephone which – well, it doesn't actually exist as yet."

graphers are flashing away at me now. Silvia and Carl Gustaf send their greetings. Would you like to speak with Mom?"

Photo reportage: Lars Åström

Learn from the young!

In recent days a very interesting publication has come out from corporate Personnel and Organization. It is a paper that shows the results of something called "Youth Group Dialogues," a series of meetings between young Ericsson employees and managers during management training.

"The Younger Generation" is the name of the exciting magazine that has been issued. It lets readers how young people feel about life in general and about life at Ericsson in particular. It is enlightening reading for those who feel that youth does not have too much in the way of knowledge to offer. Here, there are tons of ideas and suggestions

STOP PRESS
BY LARS-GÖRAN HEDIN



for how the company can better take care of its young employees so that they stay and develop in Ericsson instead of going elsewhere for advancement.

A recurrent theme in the message of youth is the need for better communication between employees and their supervisors and between younger and older people. Actually, there is a generation gap in Ericsson which, in the very first place, is real and troubling for young people. "The Younger Generation" should be seen as an attempt, from the young people's side, to engage in dialogue between young and old extending throughout the entire company.

I cannot see this as anything but extremely important and beneficial. A "social" development is needed in relations within Ericsson, which should run side by side with the technical development of the company's products and systems.

It is said that our company has a rather unique age distribution. Ericsson has a much larger proportion of younger people than the average company. This is one of the company's greatest assets from the point of view of competition. All around us there is talk about problems with well-trained young manpower. But in Ericsson the young work force is there.

"The Younger Generation" provides tons of tips on how to achieve a better administration of this unique human capital, if you are still uncertain about what could be done to establish better contact with younger employees. This goes for those who belong to the older half of Ericsson's team formation.

Those in the lower age group should read the interesting comments so that you know that there are others who think and feel precisely as you yourselves do. I hope that the fact that the company has now issued this publication is a sign that Ericsson is really listening and pondering what young people have to say. The dialogue must continue. "The Younger Generation" should not be a final report.