

Contact

ERICSSON 

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C.W. Ros, Lars Ramqvist and Jan Stenberg meet the press to explain Ericsson's earnings decline.

Ericsson posts a loss for third quarter

"Necessity knows no law. In the deteriorating market situation we must trim back costs and lay off a number of people. So far this year Ericsson has laid off a total of 2,000 people in Sweden and abroad. It may be necessary to lay off a further 2,000 before the end of the year," Lars Ramqvist explained at a press conference held in conjunction with the release of the interim earnings report.

During a press conference at which the nine-month earnings report was made public, Ericsson's Executive Committee – Lars Ramqvist, C.W. Ros and Jan Stenberg – gave

media representatives a detailed report on the background for the sharp decline in earnings. It is the heavy investment cutbacks on Ericsson's principal markets and the postponed orders that are now hitting the company.

"Telefónica in Spain, for example, has recently informed us that it plans to radically cut back tele expansion," said Jan Stenberg. For Ericsson this means a reduction from 860,000 lines in 1991 to fewer than a third – 240,000 lines – next year.

In Italy, where no specific downturn has been noted in the market, Ericsson reckons with participating in tele expansion as before, but so far no orders have been received.

"Our Italian customer, who is normally late, is now later than usual," Jan Stenberg confirmed.

Lars Ramqvist underlined that it is not only Ericsson that is hit by the recessionary downturn and customers' change in investments. The entire

branch is feeling it, and many competitors are reporting negative results and heavy cutbacks.

"We have not lost any market shares this year," he said. "On the contrary, on the mobile side we have strengthened our position on the market."

It is also to be able to maintain its position in the future that Ericsson continues to invest heavily in technology development. During 1991, close to 10 billion kronor will be spent on this.

"The toughening competition demands that Ericsson also in future have good products to compete with," Lars Ramqvist emphasized.

The earnings report and Lars Ramqvist's comments, Pages 4-5.

INSIDE:

Married in SPACE

As of next year Ericsson Radar Electronics' space division and Saab Space will form a new company, Saab Ericsson Space AB.

Swedish space operations will meet the increasingly tough competition with a joint investment.

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Our man in BRUSSELS

In the EC Commission they are working frantically with lots of issues that in many ways affect Ericsson.

Hundreds of reports are written every year on current issues. Pelle Åkerberg gathers all the information that relates to Ericsson's own activities.

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IN BRISTOL networkers mobilize

Now Ericsson is well on its way as a network builder for British Telecom. Networkers from Ericsson Network Engineering Ltd. in Bristol have just a huge project off the ground.

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German market OPENED

Germany has previously been a blank spot on Ericsson's map of Europe. But now Ericsson's biggest mobile telephone project is going on there. Moreover, through mobile telephony the German market has also opened up for Ericsson AXE switches.

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Ready for CT3 in the Far East...

Ericsson is on the verge of starting of its products for digital cordless business communications in the Asia-Pacific Rim area. As of now, Hong Kong, New Zealand, Thailand and Malaysia have allocated radio frequencies for this technology.

The first product to be launched is DCT900, a system for cordless telephony via business switches. The system could eventually serve 50 percent of the market. Sales and deliveries will start in 1992.

"We are ready, and the market is ready," says Colin Buckingham, president of Ericsson Business Mobile Networks. "The only hind-

rance to using cordless technology in business switches was the allocation of frequencies. Now that this hindrance has been removed, we can move on with the launching of our products. DCT900 was developed by Ericsson to meet the demands of large networks with high density in offices and business centers. The system offers the same functions as a traditional business switch.

... and in Brazil

Ericsson's system for personal telephony, CT3, has now received the go-ahead for an additional market, now that Brazil has approved frequencies in the area 862-866 MHz for the system. The approval means that Ericsson can begin to market its CT3 technology for business switches in the country.

With this decision Brazil became the first country in Latin America to approve frequencies for digital cordless telephony.

Previously, the CT3 system has been installed in 12 coun-

tries, among them the U.S., Holland, Canada, Australia and Germany. In Spain, the CT3 system with 150 superlight pocket phones will be used with the summer Olympics in Barcelona.

Ericsson sells unit in Korea

Ericsson has signed an agreement to sell its shares in Oriental Telecommunications Company (OTELCO). The buyer is Ericsson's partner in the company, Oriental Precision Company, OPC. The agreement will be approved by the appropriate governments.

OTELCO began in 1983 as a joint venture where Ericsson and OPC owned 50 percent each. The company dealt with sales, manufacture and installation of AXE 10 switches for the Korean countryside.

So far, 1.7 million lines have been delivered to Korea Telecom.

OTELCO has taken part in the development of a system of public telephone switches for Korea. Today, more than 80 percent of the company's activities are tied to the locally developed system.

It is a natural step in OTELCO's development that Ericsson is now handing over leadership responsibility and ownership to its Korean partner. OTELCO will continue to maintain and upgrade the AXE system in Korea, with technical support from Ericsson.

The base for Ericsson's future activities in Korea is the company's wholly owned subsidiary Ericsson Korea Ltd. (EKK), which continues to be active in the quest for new business opportunities that Korea can offer in the future.

World's best in mobile telephony

On October 16 Ericsson was awarded a prize "Best in the World" at a ceremony at IVA, Sweden's engineering sciences academy.

The prize can be seen as a distinction that shows Ericsson to be the world's best in mobile telephony,

but was also in appreciation for Ericsson involvement in research on the world's most productive company. A survey where in specific branches the best Swedish companies were compared with the best foreign companies.

Components sharpens organization

The road to faster, more efficient operations

Microelectronics changes rapidly in the tough competition on the world market. Ericsson Components is organizing its microelectronics activities and is streamlining operations for the future. The new organization came into force as of October 1.

Microelectronics Production Division

All present production in microelectronics will be combined in a production division for Microelectronics. Purchasing of goods and services will be combined in this unit. Torbjörn Folkebrandt is division manager.

A steering group has been formed as support for microelectronics production. In the group are Hans-Erik Carlsson, working chairman, president Bert Jeppson, Lars Rydberg, Kurt-Ingvar Engde, Bo Holmstedter, Stefan Börjesson from ETX purchasing and Leif Johansson from ETX Ingelsta.

Division for Line Circuits and Modules

Strategic business development, product management, design and other functions for line circuits and line modules will form a division to more efficiently oversee the needs of the Ericsson Group and other customers for these products. Product responsibility for related products also falls under this section. Alf Levy is division manager.

Division Technology

This division was created so as to build up a platform for technical knowhow in Ericsson Components



and the Ericsson Group. This applies to design and test systems, CAE, design methods and processes. Collaboration with other Group units in the technology area will be intensified. The division manager is Christian Jungsand, who takes on this task in addition to his previous position as head of ETX base technology.

The divisions Power, Opto and Microwave electronics and Standard Components remain unchanged.

Sales components and modules

Sales organizations Nordic, Europe and the U.S. remain as before, with the addition of the Far East. Coordinator for sales of components and modules for all of Ericsson Components is Bo Holmstedter, who also now has responsibility for microelectronic sales to Ericsson.

Khalid Oureshi is manager for

the Nordic Region and reports to Bo Holmstedter, Gilles Pichon is manager for Region Europe and John Davison for Region U.S.A. The manager for the Far East will be announced later.

Industry products

A department for Industry Products has been formed. It will develop a business plan for products and customers outside the telecom area and in Sweden and its geographic proximities.

In addition it will include product responsibility for industry and terminal circuits. Lars-Göran Lundblad is manager.

Minifab Project

A project has been set up that will determine a plan for a minifab with submy-performance. The result of the project will be of great significance for the future of Ericsson and Ericsson Components. Kurt-Ingvar Engde is project manager.

EDITORIAL

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Switches and computers can now be connected

Ericsson Business Communications has signed an agreement with IBM on technical collaboration to link together business switches and computers.

The new interface MD110 Application Link will make it possible to connect MD110 with IBM's computers via CallPath Services Architecture.

Collaboration between Ericsson and IBM

By using the new possibility of connecting its business switch with computer equipment a company can coordinate information in data bases with telephone calls from customers.

Thanks to this the company can give its customers faster, more personal service.

Advantages

All companies that have, for example, customer service centers, telemarketing, order receiving and other customer dealings can benefit from the new technology. Some examples of such companies are travel agencies, universities, mail order companies, municipal authorities and insurance companies.



Ericsson's powerful operation and network monitoring system NM400 has been equipped with yet an additional function. Thanks to a new link, NM400/NVG, NM400 can exchange information with IBM's corresponding NetView.

MD110 Application Link, Ericsson's new interface for linking MD110 to computers, is based on CSTA (Computer Supported Telecommunications Applications). This is the standard that ECMA (European Computer Manufacturers' Association) proposed for connecting business switches and computers for computer supported telephony applications.

Ericsson is one of the first companies in the telecommunications branch to support CSTA.

Ericsson and IBM have in mind to offer solutions that will satisfy customers' needs in voice and computer applications for a number of computer milieus.

Too early to say

When these solutions will be ac-

cessible on the market, it is however still too early to say. MD110 Application Link can already today be used to connect MD110 to Digital Equipment Corporation's VAX and Risc computers via DEC CITT 3.0. The new product will later be made compatible with computers from other major suppliers.

Maria Rudell

Televerket number nine

In almost every country in the world, the state tele administration is among the largest companies. Sweden is no exception. Swedish Televerket is not only one of Sweden's largest companies but also one of the world's ten largest tele administrations.

With a turnover of 5.3 billion dollars, Televerket ranks number nine in a list published by The Economist.

This is how they ranked:

1. NTT, Japan (44 billion dollars)
2. AT&T, U.S.A., (37.3)
3. Deutsche Bundespost (25.1)
4. British Telecom (24.3)
5. France Telecom (18.9)
6. SIP, Italy (14)
7. Telefónica, Spain (8.4)
8. Telecom Australia (6.8)
9. Televerket, Sweden (5.3)

Since telecommunications was deregulated in most of the countries, the open field among the world's giant companies has been marked by considerably more competition, but it will be a while before any one private operator can really threaten the large administrations' position on the ranking list.

Ericsson forms company with Swiss Ascom

Ericsson has joined with the Swiss company Ascom to form a common company in the area of tele transmission. The new company is owned 40 percent by Ericsson and 60 percent by Ascom, which will also manage operations.

Ascom will transfer activities in its division for transmission systems to the new company, while Ericsson will place its new switching technology SDH (Synchronous Digital Hierarchy) at the company's disposal.

Starts in 1992

The joint company is expected to begin operations at the beginning of 1992. The head office will be located in Berne in Switzerland. Initially, some 400 persons will be involved in development, design,

sales, service and installation of transmission systems for tele administrations, railroads and other network operators, in Switzerland as well as in other countries.

Stronger network system

The company will have two principal activities. For the Swiss market, the company will adapt, market and support Ascom's and Ericsson's entire range of transmission equipment and related services.

The company's international activities will include, among others, an international product responsibility for a wide assortment of transmission products.

These products will be developed and manufactured by the company and sold throughout the world by Ascom's and Ericsson's distribution channels.

The joint company is seen as a considerable reinforcement of Ericsson's network system, where

transmission technology will play an ever more significant role. For Ascom the collaboration with Ericsson means an opportunity to further expand into the transmission area and a continued internationalization.

Collaboration since 1984

Ericsson and Ascom have since 1984 enjoyed a successful collaboration with planning, development and supply of public tele switches in Switzerland.

Ascom has a solid standing in Switzerland in matters of teletypes and equipment for public networks. Internationally, Ascom is one of the leading companies in, among other things, business communications and mobile radio.

The company's turnover in 1990 reached about 2 billion U.S. dollars (12 billion kronor). Ascom has more than 18,000 employees in more than 20 countries.

NEWS IN TELECOM

AT&T will lay off 14,000 employees

The American tele giant AT&T, American Telephone & Telegraph, will reduce its work force by about 14,000 persons in the next 27 months. The reduction is part of a general restructuring that AT&T is carrying out.

The company expects to save 4 billion dollars with this restructuring. This involves costs for AT&T's purchase of the computer company NCR a few months ago and for rationalization of AT&T's activities in telecommunications. These costs mean that AT&T's results for the third quarter will reflect a loss of 1.8 billion dollars, including results in NCR. For the same period last year both companies reported combined profits of more than 800 million dollars.

AT&T feels the loss stems from the downturn in the international computer market and that the stronger dollar is responsible for a currency loss. If costs for restructuring and NCR's losses are deducted, AT&T will show a profit of 808 million dollars for the period, which is 100 million more than last year. The reason for this improvement is increased revenue from AT&T's activities as a tele operator.

The divisions in AT&T where personnel will be laid off are mainly those that work with business communications, computers and small systems.

(Financial Times)

AEG sells cable operations to Alcatel

German AEG has agreed with French Alcatel on the sale of AEG's cable operations to the French company. The sale is part of AEG's strategy to concentrate on the company's core area. The sale does not include AEG's manufacture of cable to the auto industry.

Operations in AEG Cable have 5,000 employees in three factories. Annual turnover is about 6 billion kronor. According to AEG, the sale came about since it would have needed far too heavy investments to come up to a competitive level strong enough on the European market. To date AEG has 15 percent of the German market but only 5 percent of the West European. Among competitors on the European market there are notably Siemens, BICC from Britain and the Italian Pirelli.

With the purchase Alcatel increases its share of the German cable market to 25 percent. Alcatel Cable has a turnover of about 25 billion SEK. Earlier this year Alcatel bought two other German cable companies, one in Turkey and one in Canada.

(Financial Times)



More signs of worse to come

The market for investments in the telecommunications area continues to retreat. We are into the grip of a recession that is both deeper and more drawn out than we expected. This applies to all our principal markets, where negotiations have been lately suspended and pressure from competitors has increased. During the year this picture has been further reinforced and Ericsson has been affected even more.

The result is somewhat reduced invoicing and clearly lower order bookings than for the corresponding period last year. However, I expect a stronger trend of order bookings during the rest of the year. We have already received significant individual orders since the close of the present accounting period. However, we do not see this as the result of any general improvement in the recession.

Order bookings have fallen most in public telecommunications. It is on markets that were previously stable that the retreat is most noticeable – in Spain and Britain, among others. However, we received significant sub-orders from mainly North and South America during the third quarter.

Sales of MD110 have been better than last year, which is very heartening. During the third quarter we have also moved further with sales of cordless telephone systems based on MD110 for business and organizations.

Our powerful investments in technology development have continued during the period. This has led to significant market successes, but at the same time these development costs have deeply hit results. As a result of the recessionary situation the volume of invoicing could not be increased at a corresponding level. Still, we see that the technology investments we have made so far have been necessary for our future, and we intend to follow through with ongoing development projects.

The market downturn means we must continue to reduce our costs in 1992. This can also entail a certain reduction in development costs, but this can be done without Ericsson losing its market position. During 1991 we were ready with several of the more major system developments for our customers.

The comprehensive program of measures that we instituted already with the second quarter this year has regrettably meant a reduction in staff. So far this year Ericsson has laid off 2,000 employees, and there is every indication that there will be more before the end of the year.

Nevertheless, we will retain our strategy, long-term investments in product and systems development. I am convinced that this is absolutely on track in light of the hardening market situation. Powerful development in combination with cost effectiveness will give us the chance to maintain and strengthen our international market shares.

Lars Ramqvist



C.W. Ros explained that positive results are expected for the fourth quarter but that these, like the full-year results, will be significantly lower than last year's.

Third quarter posts a loss

The earnings report for the third quarter of 1991 reflected minus figures for the first time in a long while. The quarterly results showed a loss of 268 billion kronor. With this, earnings for the first nine months of the year were halved, from 3.2 billion kronor in 1990 to 1.5 billion this year.

Behind this sharp downturn are the deep recession and Ericsson's continued heavy investments in research and development.

Ericsson's consolidated net sales for the first nine months of 1991 amounted to SEK 32,038 million (SEK 32,811m. for the corresponding period in 1990), and order bookings totaled SEK 30,880m. (38,387), a decrease of 2 and 20 percent respectively. Consolidated pre-tax income for the period declined 53 percent to 1,507m. (3,235). Pre-tax income included SEK 173m. (75) in net capital gains, after deductions for minority interests. Income per share after actual taxes and full conversion was SEK 4.18 (9.10). After actual taxes and estimated deferred taxes after full conversion, income per share was SEK 5.20 (8.65).

Lower investment volume

The decline in net sales is due to Defense Systems' divestment of the Italian FIAR Group and to a reduction in investment volume by customers in key markets as a result of the depressed business climate. This is deeper and more drawn out than had previously been expected, which has also led to intensified competition.

It is the reduced invoicing and at the same time the increased investments in new technology that together account for the lower earnings. During the first nine months of the year the company's total

technology costs amounted to SEK 1,762 m (37 percent).

Brighter yearend

During the course of the fourth quarter – in conjunction with Telecom 91 in Geneva – Ericsson received a number of significant orders, among them a couple of billion kronor orders for Mobitex systems and personal telephony. Further large orders are expected before the end of the year. Hence, better developments are expected regarding order bookings during this quarter.

A positive result is expected for the fourth quarter, but it, and the results for the full year, will be considerably lower than for the preceding year.

Heavy technology investments

The three business areas dealing with telecommunications systems – Public Telecommunications, Radio Communications and Business Communications – reflected reduced results. This is attributable to lower invoicing and continued heavy technology investments.

Business Areas Cable and Network and Defense Systems have on the other hand improved results, and Business Area Components could be happy about an increase in invoicing and order bookings.

Public Telecommunications reported a 5 percent decrease in sales, attributable in part to its power operations being transferred to Components and to major customers reducing or postponing their investment programs. This also explains the 27 percent decline in the Business Area's order bookings. However, a certain recovery is expected in this area before the end of the year.

Radio Communications posted a 5 percent increase in net sales, while order bookings declined by 16 percent. An improvement in the order bookings situa-

tion is anticipated during the fourth quarter, partly as a result of billion-kronor orders for Mobitex and personal communications network systems.

Business Communications noted a happy development for its flagship business switch MD110. Increased sales MD but also the business area's data network systems helped net sales increase 4 percent and order bookings 3 percent.

Cable and Network reported a 3 percent increase in net sales for the period. Order bookings declined 1 percent, but for comparable units order bookings increased 8 percent. The business area's extensive operations in Sweden were adversely affected by the downturn in the economy, while the network business outside Sweden continued to develop favorably.

Components reported increases in net sales and order bookings of 10 and 9 percent, respectively, primarily due to the business area taking over the power operations in Spain and Mexico from Public Telecommunications.

Defense Systems reported declines in net sales and order bookings of 32 and 45 percent, respectively. These heavy declines were attributed to the business area's sale of the Italian FIAR group.

Successful investments

Ericsson's net financial items improved markedly, despite a negative cash flow. The gain is attributable to favorable exchange-rate differences combined with successful investments. The equity ratio remains strong at 38 percent.

Investments in property, plant and equipment amounted to SEK 2,590m. (2,242), of which expenditures in Sweden totaled SEK 1,224 m. (SEK 875m. in 1990).

Why have Ericsson earnings declined, Lars Ramqvist

"It is a direct result of the recession that is hurting 8 of our 10 largest markets. Let me just take one drastic example: Telefónica in Spain, which only slightly more than a week ago informed us that it will be cutting back its investment program for AXE lines from 1.2 million in 1990 to 240,000 in 1992. A drastic reduction, where we are not actually losing market share but where all suppliers are being equally affected."

• **Couldn't this development be foreseen earlier?**

"Of course we could not predict such a drastic downturn as we now see on the Spanish market. But already a year ago, in the nine-month earnings report, I indicated that a recession was on the way. As a result of this continued worsening, we took action at the first sign, as is well known, earlier in the year with regard to the radio factory in Gävle and the cable factory in Kungsbacka. We have also made some cutbacks abroad."

• **Now a program of comprehensive measures has been implemented. What is the principal step?**

"Yes, the program that I began together with the heads of the major local companies, business areas and corporate departments constitute four principal areas, namely the following:

"First and foremost, a thorough revision of our market situation to locate new business and to further try to increase our market shares. It is crucial that we do not lose market shares.

"The next area concerns our costs. Here, management and I are in total agreement that we do everything to make corporate functions and general administration fully effective. For example, when it comes to travel costs and conferences, the goal is to reduce that by 30 percent, and naturally only our own premises will be used when we hold conferences.

We are now approaching Christmas, and let me mention a small detail like Christmas cards. Clearly, we should not be sending them internally and rather we should try to save in both small and large.

"The third area is the important technology development. Here we must have precise prioritizing and determine which development projects we must continue with in order to retain competitive strength. I am very satisfied with the excellent results that our personnel have achieved regarding advanced project and system development, especially in the current year. Naturally, it costs a lot of money, almost 10 billion kronor in 1991. But we have also supplied a lot of system novelties to our customers. I am thinking particularly of the new digital mobile telephone system. Even if we must watch our development costs, it is important that we also continue to maintain powerful product development.

"The last major area that we must consider is production, and how it is affected by technology development. Developments in micro-electronics imply significantly less job content in our products, and hence fewer people are needed in production. At the same time, deregulation and privatization in many countries have led to a need to cease local production. Production can be concentrated in certain product factories, which individually and collectively can serve several countries. This coordination



means that we reckon with halving the number of factories by 1995. A drastic development indeed, but necessary if we must retain our competitive strength.

• **What does this program of measures mean for the individual employee?**

"I am the first to regret that these measures also mean layoffs. So far this year we have already laid off 2,000 people in Sweden and abroad, and the same number could be laid off in addition before the end of the year.

• **How will all this really work in practice? Which are the ones that will be laid off?**

"I have now drawn up an overall corporate program and clearly it must be analyzed according to each individual company's situation. This analysis is now being conducted locally. Changes will be determined later in consultation with management, personnel and trade union representatives. In Sweden, it will be carried out through normal MBL negotiations in the event that it has not already been resolved.

• **What would you like to say to employees at this point?**

"It is in the difficult hours that our common values – professionalism, respect and perseverance – should guide us in our dealings. I take it that each and every one of you is ready to contribute to the change that must now take place so that we can adapt to the realities of the marketplace. I am convinced that if we all do our best, 1992 will be the year when we can turn around our results for the better.

"Thanks for your support."

Opto-cable for 160 million to Iran

Ericsson has received an order from the Iranian railways that is worth 160 million kronor. The order concerns a fiber optic long-distance network. The contract was signed between the Iranian railways and Ericsson's Turkish subsidiary, Ericsson Telekomünikasyon A.S. in Istanbul.

The project, which concerns the stretch Ghazvin-Razi in northwest Iran, involves 860 kilometers 12-fiber opto-cable and seven digital business switches of the MD110 type hooked up together in a network with 6,500 extensions. The order also includes transmission equipment and planning as well as project overseeing.

"By taking home this order,

we have established our position more steadfastly on the very expansive Iranian market," says Johan Bruce, head of Ericsson Telekomünikasyon. "Iran is currently investing a lot in developing its infrastructure, and we see tremendous opportunities for several new transactions in the country," he continues. "Soon we will be opening a branch office in Teheran."

End in sight for System X?

GPT – Britain's only manufacturer of public tele switches – is drastically cutting back operations. Some 3,000 people have been told of layoffs, of whom 1,100 are in GPT's tele activities.

Behind the layoffs on the tele side is the fact that GPT failed to sell its digital tele switches, System X, outside of Britain. Now when three-quarters of the tele network in Britain is already digitalized, orders are also drying up from British Telecom, where GPT sold System X for more than 20 billion SEK so far. A further 13 million lines are to be delivered, but if GPT does not receive significant overseas orders before 1995, production of System X could conceivably be discontinued.

It has already been announced that GPT in future will run its development activities on the switching side with the company's German owner, Siemens. In England, there is marked concern that GPT will become a retailer of Siemens tele products in Britain. (Electronics Weekly)

Radio order from Canada

Saskatchewan in Canada has decided to build up a mobile radio system that, together with the fixed tele network, will cover the entire province.

FleetNet 800, as the new communications network is called, is operated and administered by SaskTel, one of Canada's largest tele operators. FleetNet 800 will be expanded in line with the increasing demand for these type of services. It can eventually cover an area of more than 800,000 square kilometers, with a population of more than 1 million. The project, which involves 150 radio base stations, is estimated to cost between 30 and 40 million U.S. dollars (185 to 248 MSEK).

Anticipated customers in the new radio network are the police,

construction and oil industries, transport companies etc. FleetNet 800 will offer a range of services that differ from cellular mobile telephony and paging systems, with a concentration on customers who need a mobile radio system with high function level. In the range of services are included alarm communications and uninterrupted group calls.

The technology behind all this Ericsson GE Mobile Communications digital radio system E-DACS, which with its high capacity scored an immense success on the world market. It is the system's ability to cover large land areas that was key in SaskTel's decision to choose Ericsson GE Communications as a supplier.

New space company: Threat or opportunity?

We have done a survey among those at Ericsson Radar's antenna division which will be affected by the newly created company when Saab and Ericsson merge space operations together. These responses were given to the question: How do you see the future?



Hans Wilhelmson, R/AEMC - Basically, this European investment is good, but there is a risk that we here in Mölndal will only be a sideline of the new company.



Per Ingvarsson, R/AEC - Surely we begin to wonder a bit whether we will feel as part of the new company here in Mölndal. But it is a positive move that offers new business opportunities in the area of space.



Per Hermansson, R/AEF - The question is will we get to know those from Saab Space in the new company. Sometimes it's a long way just getting to that stage here, and to Kalleback it's a kilometer.

A heavenly Swedish twin-up

Saab and Ericsson put their space package together and create Saab Ericsson Space AB

There is a definite appearance of twinning about them, even if not hatched of a single egg.

Both deal with electronics at a very high level. In double sense. Both are in the immediate vicinity of Gothenburg. Both have strong historical links to the military and to flight. Both have old Swedish roots and very similar corporate cultures and both want to be part of the growing European space market. Jointly, they are better off doing so than individually. Nothing is more natural than that the two should become one. From the old ERE's space division and Saab Space AB was born the new Saab Ericsson Space AB.

Out in Europe the two have already been seen as one. Two large well-known global companies from a small country like Sweden among a heavily limited elite in a small specialized area like space exploration should merge easily together.

Now it is a fait accompli starting in January next year that is warmly welcomed on the continent. "Recently, while I was attending an EC meeting for European industrial leaders in Brussels on future space policy, this decision was applauded," says Ivan Öfverholm, president of the new company. It was seen as testimony of Swedish comprehension and Swedish efficiency at its best.

Increased investment

The creation of the new company means increased investment for Swedish participation in space, and the companies Saab and Ericsson will be seen more in the world.

In the last few years both companies have been more and more subcontractors to the large European space projects. The new company can now return and compete on solid ground for contracts as partners.

The year's invoicing for the present Saab Space is 180 million kronor and for Ericsson Radar's space division it is 80 million. Together, the two companies reckon that they would invoice somewhat more, 300 million kronor. The number of

employees will remain unchanged at 360 (270 for Saab and 90 for Ericsson). The new company will be owned 60 percent by Saab-Scania Combitech AB and 40 percent by Ericsson Radar Electronics AB.

Same stock

The thinking behind the natural emergence of this twinning came up again and again over the course of the year. Analysis in every direction led to the same result: both companies are small, they both work with advanced technology and they complement each other well.

Moreover, they are both born of the same stock, well anchored through personal contact in their different boards. But not before now have external circumstances supported to the full what has long been around.

In space branch

The attitude to Europe and to space exploration is only now seen as positive in Sweden, and hence the move to compete. With well explored channels, the deal can develop later into something very strong.

Ivan Öfverholm from Saab Space and Ulf Berg from Ericsson Radar, who will be vice president in Saab Ericsson Space AB, have both been in the space branch since the mid-'80s. They have, as they express it, competed under friendly



Kalleback will be the center for Swedish space operations when the new company Saab Ericsson Space AB is formed. The newly constructed building has nature all around it, excellent communications and a parent cooperative day-care center.

circumstances and with mutual respect.

Ivan has had a spell at Ericsson. At the end of the '60s and at the beginning of the '70s he spent five years on what was then the embryo of the present ETX. Both have Chalmers behind them, with a decade's interval between them in Saab Ericsson Space AB, have both been in the space branch since the mid-'80s. They have, as they express it, competed under friendly

Both companies recognize that they have entered a good agreement. Neither of them had to compromise; rather, both of them profited. It is a solid new company that in common would confront the toughening European competition. With a background of immense similarities and huge common gains, the two executives are convinced that would quickly arrive at a "we" feeling and be one company.

Gunilla Bergman

Space Ever since the mid-'60s, Saab Scania, like Ericsson, has been dealing with space electronics. Up to 1983, it was in the flight division, but this year Saab established Saab Space AB as one of fifteen independent companies within the Combitech group. Only a few months ago, the operations moved from Gamlestan in Gothenburg to a brand new building at Delsjömotet in Kalleback.

The company has 270 employees and annual invoicing for 180 million kronor. In the last five years Saab Space has grown strongly in its four product areas: on-board computers for satellites and rockets, computer processing systems for satellites, satellite separation systems for booster rockets and guidance systems for probe rockets.

ERS-2 and Eutelsat II

Saab Space will build the central computer, which guides ordained functions in the satellite during its



Every successful launch for the Ariane space rocket was celebrated with a party in Kalleback. Saab Space supplied the separation system, the two steel binders that hold the satellite together with the rocket during the launch. "The separation calls for high precision," says Rolf Hammarling, information director at Saab Space. The timing is high technology to the very highest degree.

lifetime, for ESA's (the European Space Agency) ground observation satellite ERS-2, which will be orbited in 1994. It is a copy of ERS-1 (European Remote Sensing Satellite), which was launched in the spring with an Ariane rocket with, among other things, radar equipment from Ericsson Radar Electronics aboard.

The last five years were growth for Saab Space

For the European telecommunications satellite Eutelsat II, whose third satellite was sent up with antennas and receiver/frequency converter from Ericsson Radar aboard, the new joint partner Saab Space will supply computer processing systems.

Hermes and Columbus

During the '90s Europe will develop and build an infrastructure for manned space flights.

The system consists of a booster rocket Ariane 5, space ship Hermes and a space lab Columbus, where research and experiments will be conducted in astronomy, biosciences, material sciences and earth observation.

Saab Space has a mission from ESA to design on-board computers for Ariane 5 and Hermes, as well as computer monitors on board Columbus.

New space company: Threat or opportunity?



Anders Lagerstedt R/AEM - That's fine, perhaps even necessary, for space exploration in the future that Saab and Ericsson team together. In the long run, I see a separation for the antenna people.



Johan Sjöblom, R/AEM - Like all change, this presents both threat and opportunity. We here in the material group have our aims on space, but the ideal for retaining competence is to work toward more users.

Ahem...(sigh)...well...



This screen belongs to a mainframe application at Ericsson. In order to find all the information, I have to switch screens back and fourth before I can sum the values and present a result. Then I put down the figures on a piece of paper and log out to send a MEMO to Mr Arvidsson who wanted this information.

-YES, IT'S EASY !!



This is from the same system. Let's see now, I click on this button, that's it, and now I've got the information, I click the printer symbol and it gets printed at Mr Arvidsson's printer. FINISHED!

Give the right Information a chance, Present it with a Graphical User Interface !

Man has a certain ability to receive information. Making information easy to understand with a Graphical User Interface is an art, doing the same with text screens requires a masterpiece. Can you afford a masterpiece today ?

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For the information to be correct in a system, all parameters have to be correct from the start. An easy-to-grasp dialogue with an instant presentation of results, with instantaneous help when you need it, can easily be created with a Graphical User Interface.

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News about shares and convertibles



"Worse than expected..." was a repeated comment in the press since Ericsson released its nine-month earnings report. In a survey before publication of the results stock market analysts' guesses varied from 90 to 400 MSEK in profits. Instead, there was a drop of 426 MSEK - if you separate the figures from capital gains.

Even though the Stockholm bourse has already had a negative fall, where Ericsson shares also seesawed in value, the market's reaction to the results was firm. B-free shares fell 13 kronor to a low for the year of 123 kronor. When Contact went to press, Friday November 15, the sharp fall went further with an added ten kronor.

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
1991-11-14	243	61,7	60	41,9

Share prices on November 14 are based on a day trading of 123 kronor and a convertible rate of 232 percent.

How do analysts see Ericsson's future now? Short-term, the company's message about recession and technology costs has made its point. Looking a bit further, in the same way the message too about successes the company has had despite

everything in digital mobile telephony has had some influence. That's why there are still those who see Ericsson as an interesting long-term investment. But it could take quite some time before the desire to buy Ericsson shares takes off on the stock market.

Ericsson's housekeeping - 12 billion kronor a year

Every day each and every one of us is a purchaser of sorts. We shop for food and other household articles so that our lives would function. Sometimes we do a big shopping, for example, buying a car, or even a house. We compare, we judge, we deal and we bargain in order to get as good a product at as good a price as possible. In the same way, Ericsson purchasers go after goods that are necessary for the life of the company to function. The difference is that Ericsson's household budget is 12 billion kronor a year.

The Ericsson employee who has not heard of savings costs presumably has not been in the company in recent months. These are cutback times, not just for Ericsson, and wherever money can be saved that's what has to be done.

Purchasers in the company have the chance to save a great deal. As an example, it can be pointed out that the 70 people who work for Ericsson Telecom's purchasing department succeeded in sinking prices for purchases for the product division by more than 100 million kronor in the course of a year. A fantastic result, especially when it is seen as a net gain.

One way of making sure that Ericsson has a good deal with a supplier is to coordinate purchases throughout the entire world. This was the theme for the annual purchasing conference that was held at Twin Tower Hotel in Stockholm at the end of September and the beginning of October.

There were purchasers from all the business areas and large local companies, so-called Major Local Companies, around the world.

The conference is held every year, but for the first time all the companies and all the business areas were represented. The fact that CEO Lars Ramqvist was among the speakers underlines the importance of the gathering and the saving.

Up front

"Ericsson is well ahead of Swedish companies when it comes to organizing purchases," says Stefan Börjesson, head of the purchasing department at Ericsson Telecom. "Very few major manufacturing companies in Sweden have a so-well organized purchasing operation as Ericsson, and that's a tremendous asset for us."

"Thanks to our organization it is often a matter of huge volumes, which means that it is easier to get a good departure point in negotiations and hence a better price and conditions.

Losing Ericsson as a customer

can be catastrophe for many suppliers. In order to select the suppliers who give us the best conditions there is a process every year known as "Volume Purchasing Agreement." Purchasers from every company get together and leave information on what they will buy in the coming year. Information about products, volumes and suppliers are handled by Ericsson Telecom's purchasing department, which then draws up a procedure for the year's negotiations.

After negotiations, which go on from May to September, a decision is made on what different products shall cost. No company then has to pay more than that later. This way one is assured that he does not have to face overpricing and that the company can draw on suppliers in good faith in countries other than his own.

"The majority of suppliers that we use are found outside of Sweden," says Stefan. "Moreover, we often purchase from large companies that are represented in most countries around the world."

New suppliers who want to sell to Ericsson - and there are many - must meet certain requirements.

An assessment of the technical quality of the product, the company's financial and commercial standing has to be done before it is approved.

When a new supplier enters, an old one usually leaves. The idea is to have as few suppliers as possible.

One company

A further advantage with this collective approach is what is known as One Company Approach. Up to now there has been a lot of talk about Ericsson being seen as one company by the customer. The same thing also applies in the case of suppliers.

"When we contact a supplier we must do so as the company Ericsson and nothing else," says Stefan. To achieve this one must have a collective approach.



We are all purchasers in one way or another. For the American sculptor Duane Anderson the typical American housewife looks like this, with her loaded shopping cart. Purchasers at Ericsson appear both different and have a larger shopping budget - 12 billion kronor a year. Photo: Lars Astrom

In today's austere situation, with among other things the increasing number of bankruptcies, an assessment of the supplier is of crucial importance.

Ericsson's strategy is to have a first and second supplier for each product. This is called second sourcing. If a company cannot deliver, another company, or some

unit within Ericsson, can deliver the product instead. The company that is sole supplier is an exclusive company that also has a collaboration agreement with Ericsson, a so-called partner or strategic supplier.

In order for Ericsson to choose the right supplier from the start, the purchasing department is involved all large development projects and

can thus influence the price of the product from the very beginning.

"The value of this involvement in the project is difficult to measure but the gains are significant since about 70 percent of the price is already determined at the project stage," Stefan concludes.

Helena Lidén

Mobile tele numbers auctioned in China

In the port city of Dalian in northwest China an auction was recently held where fifty selected telephone numbers for mobile telephony were sold. The sale brought in about 300,000 SEK for the authorities. Most of the buyers were private trading companies or foreign companies with ope-

rations in China. The high price for these telephone numbers were not only tied to the fact that they could be put into memory. It also had to do with the fact that the numbers, according to Chinese folklore, are supposed to bring good luck...

(China Daily)

Northern Telecom looks toward Europe

Northern Telecom, the Canadian tele company, could be opening factories and development centers in Europe and Mexico. In any case, such developments are part of NT's global ambitions. Last year NT bought up STC, the English telecommunications company. Encouraged by its

success with that purchase, NT is now casting its gaze toward France and Germany. In order to get access to these markets, NT reckons on investing in collaboration in the form of joint ventures, company buyouts or licensed arrangements.

(Financial Times)

Televerket sells Cordless

First commercial contract ready

During Telecom 91, the director general of Televerket, Tony Hagström, and Ericsson's chief executive officer, Lars Ramqvist, signed a sales agreement. Thus, Televerket became the first distributor of DCT900, Ericsson's CT3-based digital cordless communications system for office use. The system can be connected to all types of business switches.

Ingemar Billström, responsible for cordless systems at Televerket's division for Tele Services, says there is keen awareness on the market when it comes to cordless communications systems.

"It is said that in two years' time expectations on the market will be great," he confirms.

Televerket will market the system as a complementary function to its business switches, Ericsson's MD110 and Northern Telecom's Meridian.

Long process

Although the sales agreement is signed it will not be before next year before sales actually begin.

Ericsson's final testing of DCT900 will be completed by the end of the year.

"After internal tests at us the system will be test installed at a number of customers in the Malmö area in the spring," says Ingemar. "If the results are positive and we get

our supplies from Ericsson, we should be able to deliver starting in September."

"Interest should conceivably be very great but since the decision process involved in systems like this could take a long time, we think sales will grow normally," he adds, noting that recession does not help the cause.

More in future

At the moment, Ericsson's system is the only one of its kind. In a few years, the situation would be different, according to Ingemar.

"In time, I think we will see a number of products on the market. DCT900 would then be an alternative for companies with big systems and with higher demands.

But we also reckon that the system would be more cost effective so that we can get closer to the mass market."

In April it is expected that DECT, the European standard for cordless telephony, will be ready. According to Ingemar, Televerket looks forward to DECT-based products with great anticipation.

"We reckon Ericsson will have a DECT system," says Ingemar, with a smile.

He sees no problem with having both CT3 and DECT on the market. Customers that have a CT3 system will be able to choose whether they want to complement it or expand their setup with either CT3 or DECT. The Swedish company Ericsson



Paging Systems AB will sell DCT900 parallel with Televerket. "We will not be competitors to Televerket, rather we will

complement each other," says Lennart Nilsson, president of the Ericsson company.

Maria Rudell

Electronic war fair in Washington

In October, the annual exhibition organized by AOC - Association of Old Crows - took place at the Sheraton in the summer's beautiful Washington on America's East Coast. AOC is an exhibition for manufacturers of electronic warfare equipment, which is held in conjunction with an international conference in the field. For the fourth year in a row, Ericsson Radar Electronics was present, together with the American countermeasure company Rodale.

AOC is an annual exhibition held every other year in Washington and the other years in different places around the United States. As in previous years, L division was present, together with its American collaboration partner Rodale, a manufacturer of countermeasure equipment.

The common task for Ericsson and Rodale at AOC was above all to market the ECM (electronic countermeasure) training jamming pod ERIJAMMER A100. This, together with L division's unique business idea REWTS, Responsive

Electronic Warfare Training System, was shown in tough competition with hundreds of other exhibitors.

Besides the A100, at the stand there was also Rodale's jamming capsule ALQ-167, which today is mounted on, among others, the A-6 Intruder and the F-14 Tomcat. Also shown was the internally mounted training jamming pod 8100, which is currently used in Learjet, "Smart Crow." The third capsule in the stand was Rodale's own developed radar simulator DARTS (Digital Airborne Radar Threat Simulator) which will soon be delivered to Flight International in the U.S.

Moreover, there is a control panel with simulated signals from the A100, where one could show in practice the various functions in the system.

Good contacts

The exhibition, which complements the annual conference on electronic warfare, offers an opportunity for invaluable contacts since decision-makers from many countries are in attendance.

"For us who work with countermeasures, this is an important exhibition. We establish contact with many important decision-makers and at the same time we get a chance to see what our com-

petitors have," says Tommy Kahlin, who is responsible for countermeasure marketing.

Both Tommy and John Clement, who is president of Rodale Electronics, agree that many valuable contacts were established at this year's exhibition and that there is immense interest in the ERIJAMMER A100.

But just as it useful to establish new contacts it is equally important to maintain earlier ones. Among visitors to the stand there were some who were already "sold" on the A100.

Representatives from Canada, the U.S. and Britain, who had tested or evaluated the system, were

so enthusiastic that they could just as well have been promoters at the stand - in long discussions they did everything to convince the uninitiated about the system's superiority.

A welded team

That AOC is a relatively inexpensive exhibition does not necessarily mean it is bad. Under the leadership of Holger Andersson, responsible for the stand, a small solidly welded team worked



Ericsson's and Rodale's joint stand at this year's AOC exhibition in Washington where once again the unique ECM training jamming pod ERIJAMMER A100 aroused considerable interest among visitors.

together in putting up and later dismantling the stand. In the intervening days, they changed from jeans to suits and they all worked energetically to market the companies and the products.

"Association of Old Crows" is actually an exclusive club for those in the defense industry and authorities that are active in the area of electronic warfare. AOC was founded in 1964 and to date it has more than 25,000 members in more than 50 countries around the world.

To be a member in the club is an absolute necessity if one wants to get in on the tough market. This year's exhibition, which is the 28th in a row, is only one part of a comprehensive program with seminars and lectures under the theme "Electronic warfare meets new demands."

And there is no doubt that experiences in the Gulf war have also played a significant role.

Liss Knudsen

Ericsson – a sound voice in Brussels



Photo: Lars Åström

The EC is Ericsson's most important private market. The company has more than 40 percent of its invoicing and more than 18,000 employees in the EC countries. With head offices in a country that is still outside of the EC, Ericsson needs its own representation and interests monitor in the EC's "capital."

Pelle Åkerberg is Ericsson's man in Brussels. He monitors where the EC is heading for in telecommunications and other important areas for us. At the same time he is a guide for those in the company who in various missions need to meet with EC officials.

The EC Commission's "green paper" on telecommunications in 1987 was something of an awakener for Ericsson. The huge importance that the community attached to tele issues demanded more commitment from the company. Although Ericsson is already well established with production in several EC member countries there is a need for someone to monitor our interests in Brussels, the Belgian capital that also serves as the seat of the EC Commission.

The task of building up Ericsson's offices in Brussels was given to Vincent Daley, board chairman for Ericsson's company in the EC

member state of Ireland. Over a few years he has built up a contact network in the EC Commission that has become even more developed this year.

Since spring Vincent has been replaced by a Swede, Pelle Åkerberg, from LME. Contacts with the EC deal a lot with technical matters, which will demand an even broader contact network in Sweden. That's why it was a natural step when Pelle took over the office in Brussels.

Welcome views

Pelle Åkerberg came to Brussels in March. His first task was to

quickly take over and further develop contacts that were already established between Ericsson and officials in the EC Commission.

"I was a bit confused over how it would be to come from a non-EC country and try to establish contact with the Commission people. But it turned out to be easier than expected. There is a general openness and wide interest for the views of Ericsson and other companies among Commission members.

"Since Ericsson is a very international company, we have experiences to share in what is being discussed in upper circles of the EC."

One instance is the U.S. market. The EC and the U.S. are involved in what can be seen as a trade war in agricultural products and this has raised doubts about U.S. intentions in the telecommunications area among tele companies in the EC. Those responsible in the EC Commission turn to Ericsson's Brussels

office to get information from a company that not only has actual experience in the U.S. but that is also very successful there.

"We can considerably soften the argument for trade restrictions by pointing to our own experiences. This is an example of the positive exchange of information and experiences that takes place all the time between Ericsson and the EC."

Pelle Åkerberg protects our interests in EC

Interpretations

Pelle Åkerberg's mission deals a lot with his own meetings with EC folk, but also with arranging meetings and establishing contacts between EC Commission officials and the right people in Ericsson. Another important task is being the company's eyes and ears at EC headquarters.

In the EC Commission they work at a frenetic pace with tons of issues that in many ways affect Ericsson as a major international company and as a supplier of tele equipment.

Hundreds of reports are written each year on current issues and it is important to gather all the information that affects Ericsson's own activities.

Pelle Åkerberg gets help from companies that collect information and from various reports put out by the Commission in order to sift out the facts and ideas that need to be distributed further within Ericsson. It is a job that entails analysing a number of interpretations. Many times what's written in a report or even an EC directive can have consequences far beyond what the written word itself implies.

A slow process

"It's a long way from Brussels to Paris, was what someone once said about an EC directive." Pelle Åkerberg's comment clarifies a relationship that a lot of EC officials are also worried about: A directive from the EC Commission is binding, but there is often still a big difference between different EC member countries' desire to carry it out.

"When a directive is handed down and should later be carried out, there is often intensive politicking behind

the scenes. That is a major reason that so many companies are represented in Brussels. They are there both to play in the game through various high levels of influencing the decision and at the same time to follow events from up close and to interpret the consequences."

Common interests

The EC Commission occasionally invites the public to open discussions about ongoing work. In the context of telecommunications, it is very often suppliers as well as operators and tele administrations that participate. Such meetings also provide opportunities for important meetings with competitors.

"Here in Brussels, the various tele companies have as a rule common interests to preserve. Hence, the spirit among companies is more often one of collaboration rather than competition," says Pelle.

European tele companies' representative organization, ECTEL, is a forum where Ericsson is playing an ever more significant role. In the company, there is a general awareness to move our positions in ECTEL's various subdepartments to the national level.

"ECTEL is quite naturally a very widely clearing organization for the EC Commission in matters concerning telecommunications. That's why Ericsson's strong standing in

the organization is vitally important."

"Another important forum for us is the International Chamber of Commerce, ICC, where Ericsson is active through Björn Svedberg and other Ericsson executives. Björn Svedberg is chairman of the ICC commission for data and telecommunications.

Door is open

The representative office is on Avenue Tervuren, just about a kilometer from the EC headquarters. Here, Ericsson is leasing from Electrolux, which also has an EC representative. Pelle Åkerberg shares a secretary with Electrolux and apart from his own office he has a conference room and two working offices for visiting Ericsson staff.

"Our Brussels office must be a common resource for the entire company," says Pelle. "Here, all those needing it can turn for help with EC matters and can set up meetings with EC officials or with colleagues from other countries."

Contact got a good example of how the office functions in its visit to Brussels. This morning, P.G. Andemo from Ericsson Radio had a meeting with a colleague from Philips to prepare a presentation on a RACE project before an EC representative later that day.

Lars-Göran Hedin



Pelle Åkerberg's route to EC headquarters takes him by the freedom monument and through one of the city's finest parks. Photo: Lars-Göran Hedin

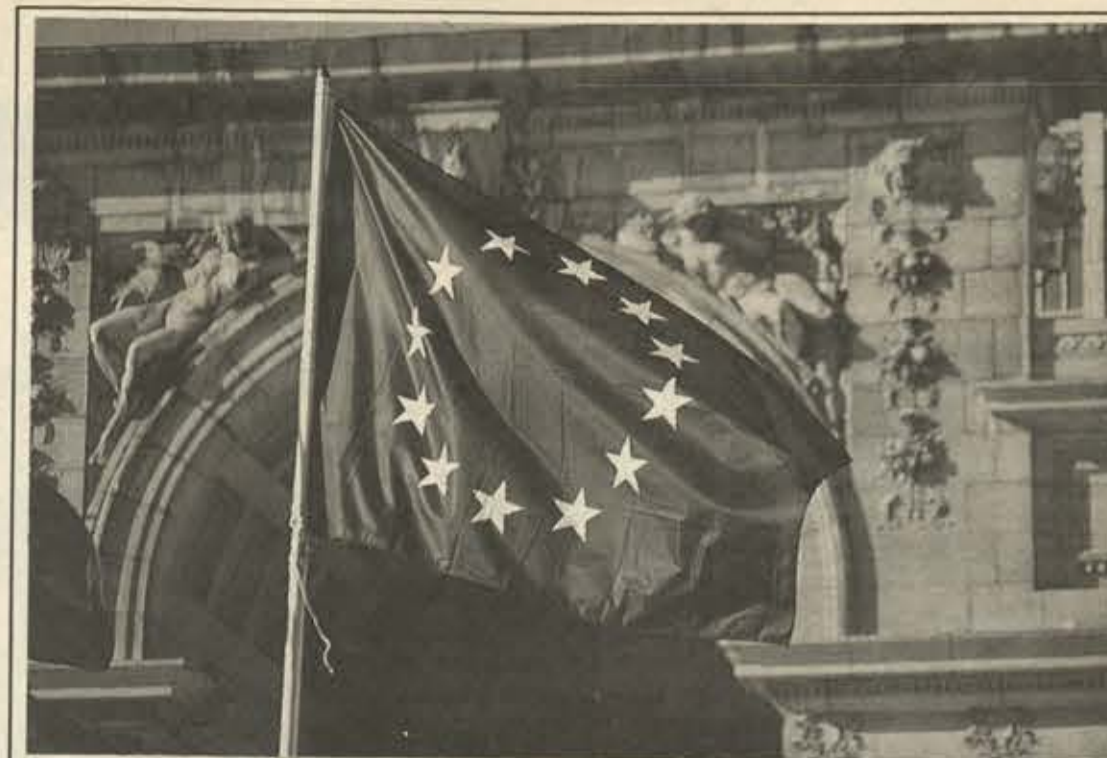


Photo: Lars Åström

We are well prepared

The day Sweden becomes a member of the EC, Ericsson will be well prepared. The company is active in several EC countries. Over the past year, we have participated intensely in the European work with standards and policies for telecommunications. Sweden does not differ particularly much from the EC in tele matters.

Already a few years back Ericsson's leadership saw the importance of building up an organization for monitoring EC issues. Over the years, this has gradually developed as Sweden's relationship with the Community changed. Already a year ago the work was concentrated in a steering committee for EC matters, Ericsson EC Steering Committee.

The committee was headed by Ericsson's marketing director, Bo Landin, with support from Lars A. Stålberg and Olle Wikström from Corporate Marketing. Other members of the steering committee are representatives of the corporate legal department, the business

areas and some of the Major Local Companies. The committee meets two or three times a year to discuss how new issues should be resolved. An urgent task is to draw up position papers, documents that define Ericsson's stand on specific issues.

Common message

"It is vitally important that Ericsson representatives in, for example, the various national branch organizations, talk one and the same language, so that a single common Ericsson message is conveyed," says Lars A. Stålberg. The need for a common voice is clear indeed. The company is represented in many of the different reference groups and joint committees at both the national and international levels.

Responsibility of all

The steering committee coordinates Ericsson's activities toward the EC. In order for this to run smoothly, there is a need for information about what's going on in Brussels and in other places. Ericsson's representative office in Brussels is responsible for much of the information that the steering committee needs. But a lot of

responsibility also lies with the business areas and local companies.

A key role is also played by the so-called "issue owners," who look after various subject matters. These persons have as their mission to be always informed on the latest trade developments in their respective areas. They have to draw up situation reports and take part in national and international coordination meetings, etc.

Strong ties

The steering committee's main task regarding the EC is to develop a network of contacts in EC institutions and to spread information about Ericsson's position on various issues. The committee also works with Ericsson's companies, especially those within the EC, so that they have a good position in their different markets.

"We must quite simply work to strengthen ties between Ericsson and the EC," says Olle Wikström. It also has to do with continuing work so that Sweden becomes a full member of the EC. The EES agreement is a part of the way, but the final goal for Ericsson is full participation in the European Community.

Deregulation EC's goal

In 1987, the EC Commission issued a so-called "green paper" on telecommunications. This is of major significance for tele developments in Europe. The overall theme of the document is deregulation, harmonizing and open negotiations.

Publication of the EC's "green paper" on telecommunications started an intensive discussion on telecommunications in EC countries. The goal of the discussions was to establish a framework for how the tele market will be regulated in the future EC.

These discussions were followed in June by a resolution from the EC Council of Ministers on how marketing tele services and

tele equipment should be developed up to 1992. The resolution concluded that responsible ministers gave the green light for the main aspects of the EC Commission's "green paper."

Open market

The market for terminal equipment would be entirely open to free competition.

- The market for tele services should to a considerable degree be open to competition, except in the matter of some basic services that are considered necessary to maintain good services to the public.
- Continued exclusive rights for tele administrations to oversee and run public networks.
- Clearly defined rules for which demands tele administrations would retain rights with regard to those who want to use the tele networks for competing services.

- Tele administrations' ruling functions should be limited from their other activities.

- Strong standardization process.
- Telecommunications should be used as a means to speed up development in lesser equipped regions in the European Community.

Standardization

An important step in the realization of the EC's ideas in the telecom area was the establishment of a common institute for standardization issues. ETSI, the European Telecommunications Standards Institute, has in short become a very important instrument toward achieving common standards within the EC.

GSM for mobile telephony and DECT for cordless personal telephony are two good examples of such standards that ETSI has been and continues to be involved with.

Network builders mobilize in Bristol

"I am confident that we'll get what we want from Ericsson."

The words are spoken by John Thomson, Cable Contracts Manager (External Cable Installations), at British Telecom's telephone exchange, Keynsham, near Bristol. We met him there at the head office for tele network construction in the AVON area in southwest England. He explains that 10 network builders work for BT in the Bristol area and that Ericsson is now the largest. The intention is to further concentrate the number of suppliers. It is Ericsson's aim to be one of the retained main suppliers.

Text and photos:
Thord Andersson

It is a rainy day at the beginning of October. We are on site, following mobilization in Bristol, that is how Ericsson Network Engineering Ltd. (ENE) is starting operations at one of the sites included in the recent framework agreement worth up to 250 million kronor. The agreement calls for local network construction to expand BT's tele network in several tele areas in Britain.

Bristol is an old industrial and shipping town on the estuary of the river Avon. In the harbor lies the

colleague, Danny Reynolds. They discuss what has to be done in the northern part of the Avon area. It is one of the best built tele areas in Britain, with full capacity for long-distance traffic via fiber optic cables.

"Safety first," says Ted Plenty when I ask him what is most important in the collaboration with Ericsson. He means both quality in the work and safety of the personnel who work and for the public that is affected by the road work in the towns and villages. Here Ericsson is a model.

Many applicants

Behind his desk at his office sits John Rourke, one of the project leaders, talking on his phone. It is almost impossible to get a word through to him in this situation. Call after call follows. Still, he manages to go through some 50 position applications with the personnel manager, Oksana Heanes. She is newly employed and has her office in Leicester, from where she has just come to help decide on eight new job applicants. Even if there are a lot of applicants, it is not all that easy to get the right ones. They are looking for both cable splicers and cable runners.

Oksana Heanes, who is now into her third work week, wants to go out and observe a splicing team so as to learn and experience the true working ambience. Danny Reynolds, supervisor in the northern district (all of the Avon area is divided into three districts), is just on his way to control and make measurements for a job in Gloucester, a harbor town right on the estuary of the Severn river. It is remarkably suited as an example for study.

Father and son

In the historic city, famous for its cathedral, cheese and shipping, we pass the national maritime museum and arrive at a typical ENE workplace. There we meet the cable-splicing Wilson family. The team consists of father Peter and his son Steve. More than 20 years have made Peter an expert in his job. Right now it is he who is down there in the deep manhole, working with a 600 pair cable, while his son Steve is up on the street level monitoring the situation.

"All I know I learned from my father," he says proudly. "I have now been working three years as a cable splicer and am very happy in the Ericsson team."

Oksana Heanes puts on an overall and with plucky steps she descends into the deep manhole. It is cramped and the steps are slippery, but strong arms help her to steady herself.

"I want to know what it's like in real life," she says. "This is the first time that I have visited a workplace like this."

She spends a lot of time and goes through all the work stages that Peter Wilson carries out down there in the dark. The job in Gloucester will take a few weeks, then the team will move on to another site in the district.

It is time for lunch. The area where we are is known for its good cider, which for the most part comes from the Cotswolds, a very beautiful area with small hamlets and old houses, where cider bubbles in every cellar.

We take a quick lunch – a so-called "ploughman's meal" – at a pub and we wash it down with cider. One glass is more than enough. English cider is certainly stronger than Swedish beer.

Along the cheese line

The route leads now towards the southeast, together with Jim Maxwell, who is from Scotland.

He is a very experienced "network builder" with long experience both with BT and Ericsson, like most of his colleagues. Among other places, Jim has been in Libya, Oman and Southeast Asia. Now he is very happy to be working in his homeland.

The goal of our trip is the famous cheese area Cheddar, where we have people on site to lay cable and expand the network. In the small idyllic setting there was traffic chaos as we approached. The street was dug up, it was broken up into a



A cable running team in full action in the "cheese metropolis" Cheddar. Here they are laying 530 meters 200 pair cable.



BT's new image is reflected in London's telephone booths.

canalisation pattern where cable was to be laid.

The job is delayed half a day and the pipe has to be changed, which however BT has to pay. One of our white Ericsson vans comes pelting down the small village streets and parks at a manhole.

Now the actual cable laying can begin. First, a line is run through the pipe, then the cable is drawn carefully with the help of a wench on the vehicle. It goes quickly and smoothly, and despite the delay with the damaged pipe the timetable deadline is met.

It begins to get dark and the workday is drawing to a close. We return to the office in Yate.

John Rourke has decided on which new employees he will hire. It is Thursday evening. By Friday, all the new employees will be notified and on Monday the

following week they will begin a two-week training session. ENE is growing so much and so fast that it is creaking.

Now, for the next step – mobilization in Manchester, which will begin some time in December.



Supervisor Jim Maxwell holds the reins for all work in southwest Avon.

Perseverance brings results

It is no exaggeration to say that successes for Ericsson Network Engineering Ltd. (ENE) is a good example of the application of our common values.

"Without professionalism, respect and perseverance we would not be where we are today," says Kaj Nielsen, head of the company for more than a year now.

Just about four years ago ENE was definitely not on the English map for external network construction. Ericsson Network Engineering Ltd. was a, certainly important but little company in London. The company had come into the market for office networks but in order to justify its existence it needed to grow. Today, ENE has some 100 employees and its activities extend all over Britain.

It all began when Bertil Strid, the present president for Ericsson Network Engineering AB (ENS), came into contact with representatives from British Telecom who presented BT's need to rapidly expand local tele networks. He negotiated together with Gert Heden and brought home the first order from BT concerning a local network in the East Midlands. That was the fall of 1988.

In November 1988 ENE opened a local office in Leicester, with Bosse

Lindström as manager. It was a real headstart when he got operations on the way and built local tele networks for all one's worth in the city areas Derby/Nottingham, Leicester, Peterborough, and Northampton. In 1989 it was a year of very hard work, but gradually access to assignments grew less. It meant holding out, winning or disappearing from the market. Perseverance, in combination with the professional method of working with high quality in production and with observation of BT's tough demands for security brought results.

The break came in 1991. First came orders from Scotland concerning the cities of Edinburgh and Glasgow.

In the summer came the big orders regarding local network construction in the tele areas Bristol and Manchester. Recently, ENE was also approved by BT as a supplier on the fiber side. A first contract from Glasgow regarding fiber installation has already been brought home. The goal is that fiber installation will become a strongly increasing share of the operations.

Important 4 wheels

Kaj Nielsen talks willingly of the four wheels that support the operations: marketing, volume, efficiency and quality.

"We must be very active in the eyes of our customers and come up with new windows that we can work with on the marketing side," he says.

"That we can work through our own construction company is an immense asset, I believe. We must also be very sensitive when it comes to price development. If we want to compete effectively then we must have volume.

"We are now on the way to achieving a large volume, which is a condition for covering our fixed costs. Now, it is also a matter of increasing efficiency, so that we can compete with good profitability and still maintain the highest possible quality in our job.

"It is tied to risks to grow," says Kaj Nielsen, "but it is the only possibility to be able to win in the long run."



Personnel manager Oksana Heanes is curious about all aspects of work on the project.

Germany – a huge

In five years the number of mobile telephone subscribers in Germany could grow to five or six million. Today, there is only one system, which serves 400,000 users. Before the turn of the year, Mannesmann Mobilfunk's system, D2 Privat, will be put into commercial operation. It will be Europe's first GSM-network on a large scale. GSM is the pan-European digital mobile telephone system. For Ericsson, which delivers a large part of the equipment, there is a huge market opening up and not just in mobile phones.

In 1989, the German telecom market was deregulated and Deutsche Telekom lost its monopoly. Meanwhile, ten syndicates that were going to apply for a license to run the mobile telephone network in the country, were founded. The analog mobile telephone system C-Netz, run by Deutsche Telekom, is not up to the quality. The ten syndicates competed for obtaining a license for a private GSM-system. This will compete with the GSM-system, D1, which Deutsche Telekom is now installing.

"Ericsson supported several of these syndicates, but very soon it was clear that Mannesmann Mobilfunk had a good chance of being selected as operator and we put a lot of our resources into this syndicate. We supplied technical and commercial assistance to the license application." So says Klas Lundgren, ERA's marketing manager for Central Europe.

Giant project

On the fifth of May 1990, ERA, in cooperation with Siemens, received a very large order from Mannesmann Mobilfunk on a complete GSM-system for the private D2-network. Behind the order there lay an enormous amount of work on the offer, which took up 21 A4-binders. It is ERA's largest mobile telephony project yet in Europe. It concerns tens of thousands of channels.

Several of the major competitors like Motorola, Alcatel and Nokia have also competed for the order.

According to the contract, a certain number of radio base stations were supposed to be installed and operating by the first of July this year. This was also accomplished.

"The assignment in Germany is our most important reference concerning GSM," says Klas Lundgren. "Above all it shows that we can handle a very large commitment, when it comes to both the development and installation of base stations in an extremely short time span."

Before, Germany was just a blank spot on the map of Europe for Ericsson. Now the situation has changed.

"Through the mobile telephony project to Mannesmann and the letter of intent from Deutsche Telekom that we recently received, Ericsson has established a firm position in Germany. This letter of intent, which concerns mobile telephony equipment to Eastern Germany, is strategically important. Included are AXE-switches, and it is the first time now that Deutsche Telekom is ordering AXE from Ericsson," Klas says.

Competition and capacity factors make interest for PCN in Germany very keen. PCN stands for Personal Communications Network. It is the



The project in Germany is Ericsson's most important reference when it comes to GSM," says Klas Lundgren, ERA's marketing manager for Central Europe.

telecommunication net of the next generation, which is based on digital mobile telephony in the 1800 MHz band. Earlier this fall Ericsson (UK) Ltd. received a billion order for PCN in England.

Next year it might be of interest for Germany to select a third operator. In order to increase the mobile telephony capacity, PCN might be an appropriate choice.

The German market has in a little more than a year's time developed at an unprecedented pace. Klas Lundgren does not think it is an exaggeration to say that this is a market approaching explosive development.

Gunilla Tamm

Several queues for the D2 net

Already before Mannesmann Mobilfunk put their mobile telephone system, the D2 net, into commercial operation, there is a list of more than 10,000 "advance subscribers." The D2-license has also recently been expanded to Eastern Germany. This implies that the company has a very expansive future on one of the largest markets in Europe.

Mannesmann Mobilfunk, which is a company within the Mannesmann group, started operations on the first of January in 1990. At that time they were ten employees; today they have grown and are more than 950 people. Out of these there are approximately 350 at the head office in Düsseldorf and the others are in the eight regional offices. Several service-centers are also being built around Germany.



Karin Mundhenke is PR manager at Mannesmann Mobilfunk, which has its head office in Düsseldorf.

Fifty-one percent of the company is owned by Mannesmann, 26 percent by Pacific Telesis Group (PacTel) and five percent by Cable and Wireless. Among the other owners there are a German and a French Bank. In the introduction phase, about 60 mobile telephony experts from PacTel have participated in the work with the D2 net.

"The employees come from different parts of the Mannesmann

group and other companies, but nobody has a lot of experience in mobile telephony. Simultaneously while acquiring this knowledge, we will create our own business culture," says Karin Mundhenke, PR manager at Mannesmann Mobilfunk.

Today the D2 net is installed in 15 major economic districts in Germany and tests have been performed since the end of June. Exactly when the system will be put into commercial operation is not official as yet, but it will be before the turn of the year.

"All major highways between the economic regions will be covered by the D2 net. At the end of next year approximately 80 percent of the population will live in areas covered by our mobile telephone system," says Karin Mundhenke. In a couple more years, in 1994, the D2 network will cover 85 percent of Germany.

Anxious waiting

The analog mobile telephone network in Germany today is of bad quality and subscription is

very expensive. Consequently, a lot of people are waiting until one of the two new systems get started before getting a mobile telephone.

Mannesmann Mobilfunk call its system "D2 Privat." The very fact of being a private operator is stressed in the, until now very limited, advertising.

Even though the company has held a very low profile in the marketing of the D2 network, there is a list of more than 10,000 "advance subscribers." To say that there is a mature mobile telephone market just waiting is not an exaggeration.

Karin Mundhenke also mentions that as many as seven million West Germans employed within the private sector have mobile jobs.

They would be helped by having mobile telephones. If the federal states in Eastern Germany develop in the same manner, the market will increase with another two million subscribers.

Gunilla Tamm

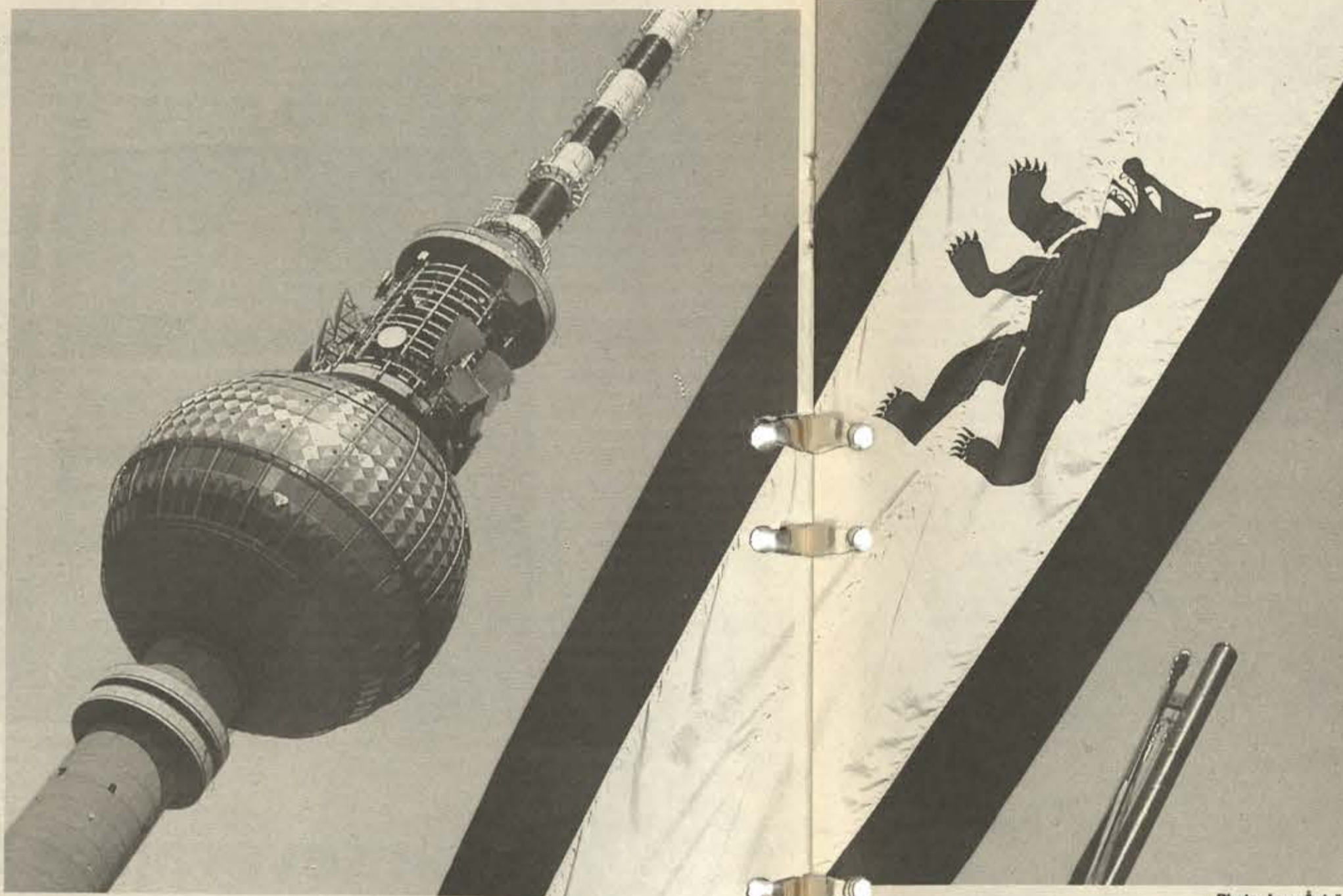


Photo: Lars Åström

market just waiting

Ericsson Mobilfunk in the spotlight

On Wertstrasse 16, ten minutes away from the center of Düsseldorf, stands Ericsson Mobilfunk. The company, which is a little bit more than a year old, has approximately 260 employees. Everybody works with one and the same project – the German mobile telephony order according to the GSM-standard. Right now it is Ericsson's largest and most important mobile telephony project in Europe.

"I almost think we have had a world record in growth. To build up a complete organization, including regional offices, in less than five months is indeed a unique accomplishment. Today, we are altogether 260 persons, of whom 205 are locally employed," says Hans Uhlemann, president at Ericsson Mobilfunk. He has a lot of experience with Ericsson, most recently from Korea, where he was vice president for three years, in a joint venture company in the Public Telecommunications (BX) Business Area.

The fast growth at Ericsson Mobilfunk is now over and in sight is an "overlapping period" of one to one and a half years, when more and more tasks will be taken over by German personnel.

According to the contract with Mannesmann Mobilfunk about a hundred radio base stations were



Hans Uhlemann is president of Ericsson Mobilfunk, which has 260 employees.

meant to be delivered, installed and ready to operate by the first of July.

"It was a very time-pressing assignment and there were probably those who doubted that we would make it. Thanks to an almost super-human work effort keeping us busy seven days a week, it turned out well. It has given us a very good reputation at Mannesmann", says Hans. His opinion is that Mannesmann made a tough decision in choosing the rather unknown in Germany Ericsson as supplier.

There was competition from Motorola among others. To operate mobile telephone networks is a totally new business idea for Mannesmann and it requires a lot of education and support from Ericsson.

Even if the first of July was an important milestone for the German mobile telephony project, it does not mean that the intense working pace is over.

"We have an equally tough challenge in front of us. Now the system will be upgraded. This will be done at the beginning of 1992. We have to work within the network, when it is operating, but at the same time we cannot disturb the traffic. The whole procedure from construction, documentation, production and logistics to installation has to function," Hans emphasizes. This means that this upgrading is an important assignment not only for Ericsson Mobilfunk but also for personnel in Sweden.

Minilink

"Having a mobile telephone is very prestigious in Germany. Now when there will be another two networks besides the present C-Netz, subscribers will stream to us," says Tor Marklund, marketing manager at Ericsson Mobilfunk.

Until now there has been a lack of GSM telephones and the work with type approval has not been started as yet. A real boom in the market will occur the day GSM telephones are available, and this should not take too long.

"A short while ago we got a letter of intent on microwave equipment to Mannesmann Mobilfunk," Tor says. It concerns Minilink from Ericsson Radar Electronics. The radio links will be used for the transmission between radio base stations and switch units.

This letter of intent is the result of Mannesmann Mobilfunk receiving the German authority's permission to build its own transmission net instead of renting cables from Deutsche Telekom.

TMOS, which stands for Telecommunications Management and Operations Support, is a new operational support system from Ericsson Telecom. In connection with the Mannesmann assignment, TMOS is being used within mobile telephony for the first time. Therefore the operation in Germany is important from a reference point of view.

Internationally

Ericsson Mobilfunk is a very international company. Even though most of the employees are Germans, there are several Scandinavians besides Swedes. Torben Caroc, who is responsible for the six regional offices, is Danish. The manager for "Field Support," Dag Ribskog, comes from Norway, and responsible for training of customers is the Irish Roger Fitzpatrick. Many of the employees have ERA as home base while others come from ETX.

ERA or ETX, for the Düsseldorf crew it does not matter. There it is Ericsson that matters, just like it is for Mannesmann Mobilfunk.

Gunilla Tamm

AXE switches via mobile telephony

Deutsche Bundespost Telekom has in a letter of intent ordered mobile telephony equipment from Ericsson. The equipment will be used in Eastern Germany in order to quickly improve telecommunications there.

The order is of strategic importance since it is the first time Deutsche Bundespost Telekom orders AXE switches from Ericsson.

It is Ericsson's German subsidiary Ericsson Telekom GmbH, Frankfurt, that received this letter of intent.

"The delivery is a part of the so-called DAL project, where DAL stands for Drahtlose Anschluss Leitungen," says Bo Carlsson at Ericsson Radio Systems. Bosse is marketing manager for this project. DAL is the major program to improve the telecommunications in Eastern Germany, which the Deutsche Bundespost Telekom has started. Competing with Motorola and Siemens, the order went to Nokia and Ericsson.

By using mobile telephony the number of connections to the public network in Eastern Germany increases quickly since work with cable laying is not needed.

work until it is time to put the key in the lock," says Bosse.

The delivery time is very short. It is only five months until the first delivery and nine months till final delivery. During the first half of the year Ericsson will be responsible for the operation support.

AXE switches

The delivery involves AXE switches, radio base stations and radio connections to the districts Erfurt, Gera, Suhl, Halle, Magdeburg, Jena, Dessau, Merseburg and probably also Schwerin.

The order is of major strategic importance since it is the first time that Deutsche Bundespost Telekom is ordering AXE switches from



By connecting the ordinary telephone or fax to a radio unit, mobile telephones can be used to quickly provide telephone connections for business companies. Photo: Björn Seger

Ericsson. So this is an important breakthrough in the German market.

"Other countries in Eastern Europe and the Third World have also shown interest to quickly increase their telephone density with the help of mobile telephony," Bosse concludes.

Gunilla Tamm

Something ventured, contract gained

ERE wins bidding war on Eutelsat II with a daring solution

High above our heads spins the third satellite in the Eutelsat II series. Just as before, the space division at Ericsson Radar Electronics, ERE, is participating with contributions from its core area antennas and electronics. This time it showed that daring definitely pays off in competition for a contract.

The receiver/frequency converter is an extra advanced design, where ERE for once revealed little of the tested and in return won in performance to the dismay of competitors. All the participants in the bidding war knew how crucial it is to compress size and weight and thus win in efficiency use, but only ERE dared to take the leap.

There are those, both at home and among competitors, who thought that it was more than daring, not to say foolhardy, recalls Anders Lind, from marketing in the space division.

Reaping rewards

"We had a lot of problems at the beginning, but we solved them, and now we have technical advantages over the others and have reaped ample rewards for our input."

In November, it was time for satellite number three in the second generation of Eutelsat to be orbited in space with an Atlas rocket from Cape Canaveral in Florida,



ERE's space division contributes two small specialized antennas and a receiver/frequency converter to the telecommunications satellite Eutelsat II.

U.S.A. On board were two small specialized antennas supplied by ERE in Mölndal. They are vital ingredients in the satellite's communications with mission control on the ground.

Via the antennas the satellite receives instructions so it maintains its orbital path position and does not go off course.

Moreover, they also relay information about temperature on board.

Equipped all satellites

Besides the two antennas ERE has also equipped the satellite with a receiver/frequency converter, which sees to it that signals are converted to usable frequencies.

During a 20-year period ERE has equipped just about all the European satellites with these two specialities and has shown yet once again that old is best and that knowhow acquired in the domain of military microwave electronics is still applicable today in modern telecommunications.

Eutelsat III

To date, six satellites have been ordered in the Eutelsat II project. The first was launched more than a year ago, in August '90, and the other in February this year.

The fourth satellite in the series is expected to be launched with an Ariane rocket from Korou in South America in February next year.

"Right now negotiations are being held on a seventh satellite," says Anders Lind. "Since there are plans to incorporate Eastern Europe in the project, there is an obvious need for expansion."

Telephone and telecommunications via satellite are widely linked to ground-based stations both for rapid geographic coverage and low cost. East Europe, with its deficient infrastructure, is now in crying need of rapid telephone services.

In a couple of years Eutelsat III will be in place. And naturally ERE is already thinking of being there to offer its core area products.

"But there are other electronics in which we feel we are strongly competitive and that we can offer," says Anders Lind.

Gunilla Bergman

Franchising chain started in Australia

Ericsson Business Center, that is the name of the new chain of exclusive dealers of Ericsson products on the Australian market. In the same way that, for example, McDonald's is based on franchising.

At the beginning of November the first two Ericsson Business Centers were opened in Australia, one in Melbourne and the other in Sydney.

In Australia, as in all large markets, the local company works

with building up a chain of dealerships for smaller products, above all for the BusinessPhone family of smaller business switches.

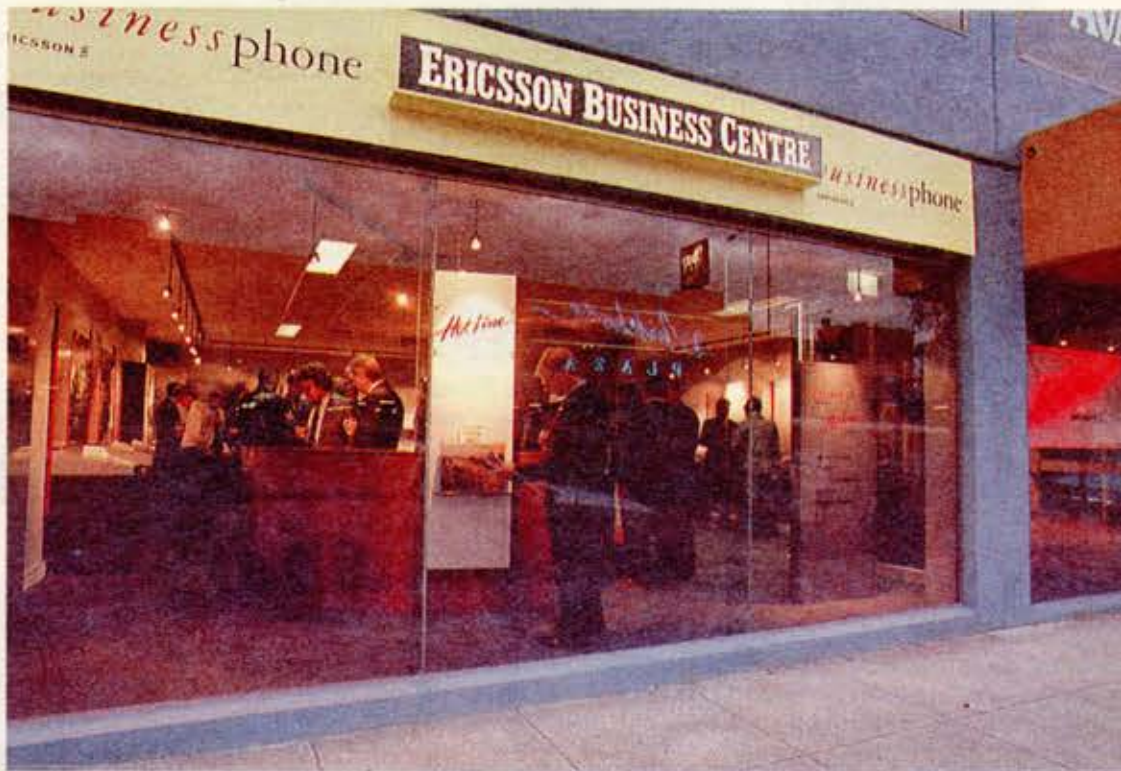
What distinguishes the Australian chain from the others is that it is based on franchising.

"Franchising gives us better control over activities than if the dealer is totally free," says Lars Svensson, responsible for sales development in the division for small systems in Ericsson Business Communications. "We can maintain Ericsson's image, which is very impressive in Australia."

One can say that dealers buy the right to call themselves Ericsson Business Center, sell Ericsson products and receive support from EPA, Ericsson's Australian company. At the same time the franchisee undertakes to meet certain obligations, among them to sell only Ericsson products and to follow the graphic profile that is developed for the chain. Dealers are responsible for risk capital and resources.

Ericsson Business Center has been given its own logo. The Ericsson logo that is on the door shows that the customer has come to an approved Ericsson dealer.

David Gorr was the first in Australia to buy a HotLine. Here it was introduced in connection with the inauguration of Ericsson Business Center.



If attempts with the first Ericsson Business Center go well, dealerships along the same lines will be set up in all the major cities in Australia.

"EPA has received special dispensation from the company's profile program to use the Ericsson name in Ericsson Business Center," says Jon Brännström, marketing communicator in the same division as Lars.

One-stop shopping

Ericsson Business Center aims at small and medium-sized companies. In the offerings there are BusinessPhone and HotLine, volume products with their own trade mark identity.

"We reckon that the BusinessPhone family will account for 60 percent of sales and HotLine for 30 percent," says Lars.

Ericsson people pagers, as well as faxes, telephone answering

machines and traditional cordless telephones from approved suppliers will account for the remaining 10 percent.

"The thinking is that customers should be able to find all telecommunications equipment they need in one and the same place," says Lars.

However, Ericsson Business Center will not function as a boutique in the end.

Sales staff of the respective centers will seek out customers in their district, and it is at the customers that most transactions will be made.

The center is principally a showroom, a place where different products can be demonstrated, even if some of the products, for example faxes and telephone answering

machines can be sold directly on site.

Since franchising is entirely new within the company, operations will be run on a trial basis in the initial months.

"The first two Ericsson Business Centers will be evaluated at the end of the year. If this proves it to be worthy, the chain will be expanded with additional franchisees," says Lars. The goal is for the chain to consist of 20 centers throughout Australia by the end of 1993.

The other local companies are very interested in the new operations, so interested in fact that EPA has been forced to limit the number of test visits.

Text: Maria Rudell
Photo: John Palermo





A storm - an enormous massing of energy and one of the earth's forces.

A powerful effort

Energy conversion or power for telephone exchanges is an ever more integrated part of telephony. When we get fiber to our home power and telephony will be found in a small drawer near our home.

Energy - that is the driving force behind everything. Energy is needed for growth, for cars and for telecommunications. Energy for telecommunications go through the ordinary electric current, an outlet in the wall, but it must be converted to be used in a telephone exchange and not cause network disruption. How it works must be adapted to a customer's specific needs.

Current supply for telephone exchanges or power to telephone exchanges today is a sophisticated science. Power in Lars Magnus days meant at the beginning a battery in every telephone. It worked fine for very short distances but when there was need to call grandma in Luleå it became necessary to resort to central power.

In a central power system there are batteries, rectifiers and distribution units. Rectifiers are themselves the very core - it is they that provide the current supply. Batteries were then open acid baths,

rectifiers were large and noisy. Power was not seen as "room clean" and it was placed in the cellar far away from telephony.

That's the way it was until the '80s when new technology helped produce power that was smaller and also quiet. It was high-frequency technology. New types of batteries made it possible to have power equipment in ordinary places.

A leap

Today, power has made many strides in its development. Power has become an ever more integrated part of telecommunications. It has become silent and odor-free and can now be placed in the same room as telephony.

Power is no longer just power but rather a part of telephony. Developments in components technology make it so that power and telephony are shrunk to share the same physical space in the same box. Power systems are built up of modules, installation ready from the factory and have just to be inserted in the same cabinet as the telephone switch or in an adjacent cabinet.

There are intelligent functions in every rectifier, distribution part, with the possibility of computer controlling power functions. In the

event of a network disruption the computers switch on to reserve power. All functions can be monitored on a computer screen.

The tendency in development is toward even greater integration of power in the telephony system. The third generation high frequency power now makes it possible to further reduce size with, among other things, the help of IC circuits, which guide the entire rectifier. Power in modules which convert battery voltage from central power to electronic voltage (DC/DC converters) can in practice be integrated into the line board or transmission board itself.

The power conference INTELEC, International Telecommunications Energy Conference, is held every year and it assembles all the world's power expertise in telecommunications. This year's INTELEC conference has just ended in Kyoto in Japan. Ericsson's influence is broad.

Ericsson power

Ericsson Components Power Division in Kungens Kurva has specialized knowledge within the group. Power supply does not relate only to telephone exchanges and AXE switches and radio base stations for mobile telephony from Ericsson Ra-



Current supply for telephone exchanges is becoming a more and more sophisticated affair. Power and telephony go hand in hand and work in close harmony. Expertise in power supply exists at Ericsson Components Power division in Kungens Kurva. In the picture Fernando Ruiz and Mats.

dio Systems. Power, DC/DC converters, are also developed in the huge group project DXC, with an intelligent transmission switch. The Ericsson Group is Ericsson Components biggest customer.

But even Ericsson's competitors buy power from Ericsson. Ericsson power feeds telephone switches from NEC and Fujitsu among

others in Hong Kong. In Spain, it feeds AT&T and Alcatel switches and recently the division got a first order from Deutsche Telekom.

When we get fiber to our home there is a pronounced tendency that power and telephony will be found in very small units close to subscribers.

**Text: Inger Bengtsson
Photo: Lars Åström**

Kjell Sörme: President of Ericsson Australia

"In three years we will have open competition in Australia"

Deregulation in Australia is moving at a rapid pace. By 1993, free market forces will come into all segments of telecommunications. Ericsson Australia, EPA, will meet its competitors with a new organization. One of the biggest changes is the creation of a mobile division, the so-called R-division.

The Australian government has chosen to deregulate rapidly and radically. In the course of three years, 1990-93, the market for public and mobile telecommunications will be open to competitors.

"Normally, deregulation is carried out in stages," says Kjell Sörme, president of EPA. "Here, they have chosen to increase competition in public and mobile telecommunications simultaneously."

Unchanged volumes

This means that Australia Telecom will lose its long-standing monopoly. EPA, which has been the sole supplier to Telecom for close to 30 years, is in a delicate situation.

"In the long run, I feel that deregulation will produce positive results," says Kjell. "The overall market will presumably increase. This means, in turn, that Ericsson's business volume should remain the same, while the company's market share risks being diminished."

Customer orientation

When Kjell became president last year, there was an obvious need for change.

"The new competitive situation calls for customer-oriented activities, with fast and efficient production. As a first step, we set up divisions with the task of dealing with private customers, so-called Customer Divisions."

The next move consists of

streamlining EPA's production. Personnel are being urged to work in a team.

Several people working together will cover a larger network of knowledge and can therefore produce better results, says Kjell.

The telecommunications market is becoming more and more complex every year. Naturally, this makes greater demands on our knowledge.

Mobile division

In line with the restructuring, a new division is also being formed that will deal only with mobile telephony, the so-called R division. Expert help from Sweden will be provided as on-site support.

Ericsson delivered a AMPS system in 1985. After a slow start, the number of mobile phone subscribers in Australia has increased steadily. Today, one can reckon with a monthly growth of about 9,000 subscribers. The total number is just over 320,000.

Ericsson will be delivering a test system for digital mobile telephony, a so-called GSM system, at the beginning of next year. In the future it is also a matter of holding our own against Alcatel.

French competitor

Telecom has chosen to take in a second supplier in line with the generation switch from analog to digital. The apportioning will be geographical. Ericsson will supply a GSM system to southern Australia while Alcatel will supply another for the east coast.

"At present, Telecom has an Ericsson system that functions excellently," Kjell says. "I do not believe the generation switch will occur overnight. The subscribers today are hardly likely to cast off their mobile phones because they have suddenly become outdated. There is time for us to operate."

Report to Head Office

In order to facilitate contact between Sweden and Australia,



"Here in Australia they have chosen to deregulate rapidly, and in three years both public and mobile telecommunications will be open to competition," says Kjell Sörme, president of Ericsson Australia.

EPA was designated a Major Local Company in January 1991.

Executives in Melbourne now report directly to Head Office in Stockholm.

"We are responsible for Eric-

son interests in Australia and have a direct contact with the leadership in Sweden. It makes the job easier. As a next step we will be installing a studio in Melbourne where videoconferences will be con-

ducted with Head Office in Stockholm.

"The time difference is tough, but on the whole it works well," says Kjell.

Carola Eklundh

About countrywide paging systems...

Just in time for Telecom 91, a new "paper" saw the light of day. WAP Journal, which tells all about Wide Area Paging, that is countrywide people paging systems.

This was developed by Ericsson's subsidiary Magnetic, which markets and sells the system. The paper has a run of 5,000 copies and has the same format as Cellular, which deals with mobile telephony and which caters to the same customer category.

The aim of the paper is to spread knowledge about the product. Interested parties can order copies from Lieselotte Claydon at Magnetic.



Kuwait buys new people pager system

Kuwait negotiated in the summer of 1990 with Ericsson about a new countrywide people pager system. Then came the Gulf war. Now, more than a year later, the deal is a fact and the system already has 14,000 subscribers.

In Kuwait, MTSC (Mobile Telephone Systems Co.) needs to upgrade and modify its existing paging system and has now chosen a countrywide system from Ericsson.

The system is similar to the Ericsson system in Taiwan, which can be said to be the world's largest countrywide paging system. The

system was put into operation in Kuwait City in August and it now has more than 14,000 subscribers. At the turn of the year it will cover the entire country.

Only Ericsson

Ericsson is responsible for construction and operation of the project. ERM, the subsidiary

Magnetic, is supplying base stations, antennas and installation material. ESU, Spectrum, is supplying Paging/Voice mail control terminals.

The system is built on POCSAG code with 512 or 1200 bits/second. There will be tone only, numerical and alphanumeric services.

The system operates on two VHF channels, with a back-up channel. Voice mailbox is integrated in the system. In order to maintain high security MTSC has chosen to duplicate all the main functions.

Lieselotte Claydon

Benvenuti a SMAU



Welcome to SMAU, greets Nadia Trevisol, one of the hostesses at the Ericsson Sielte stand at the office and telecommunications fair that took place in Milan October 3-7.

SMAU (Salone Internazionale per l'Ufficio) is Italy's answer to CeBit in Hannover.

This year SMAU was held in the shadow of Telecom 91 in Geneva, which did not prevent a record attendance, with somewhat more than 200,000 visitors.

In the telecom section there

were all the important competitors on the market. The close to 1,000 square meter Ericsson stand was the largest in the tele branch and had the widest range of products and services.

Through the two largest Italian subsidiaries, Ericsson Fatme and Ericsson Sielte, all the Ericsson business areas were represented at SMAU.

Among other things, visitors could see the latest AXE switches and TMOS applications (Telecommunications Management and Operations Support), new models of PBX switches and computer network products from the ZAT program.

For the first time HotLine mobile telephones were presented at SMAU. HotLine also turned out to be one of the major public attractions.

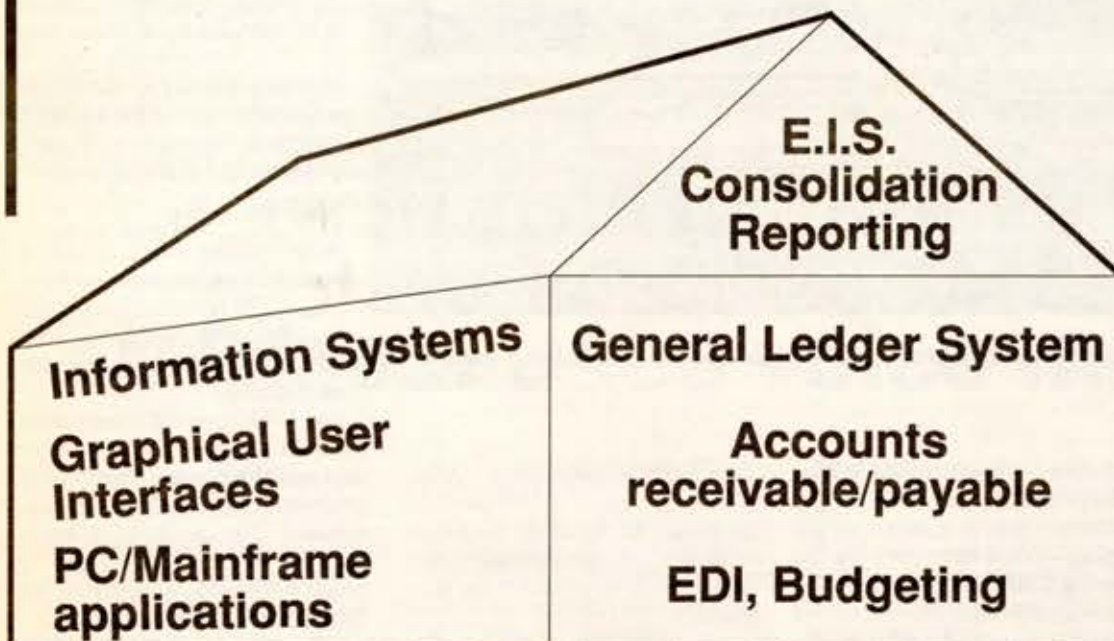
Text and photo: Thord Andrewsson

Ericsson Sielte is a major seller of computer network products that are included in the ZAT program. The Italian salesmen Paolo Galeazzi and Maurizio Auciello, second from right, discuss new models with Ulf Furbe and Anders Berghagen from Business Communications.



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L M ERICSSON DATA SERVICES AB
 S- 125 82 Stockholm, Sweden

Countrywide paging system is growing rapidly

Wide Area Paging (WAP), that is country-wide people paging systems, is growing rapidly in the "shadow" of mobile telephony. WAP is reckoned to have a total of 80 million subscribers by the year 2000, that is four times as many as at the turn of 1990-91. The huge increase will come when private individuals too get people pagers.

People pagers and mobile telephones could be seen as competitors that do battle with different weapons. People pagers are much cheaper than mobile phones and weigh almost nothing and moreover consume little battery power. But it has its limits. One cannot speak into it and it only has one-way communication. That is to say one can receive messages, but cannot send. Etc.

Nevertheless, everything indicates that both mobile systems complement each other instead of competing with each other. For example, the subscriber could choose to have a telephone disconnected to save on battery power and instead take the call on a pager. Then call up later, if there is a need to do so.

Moreover, there are situations where quite simply it is impossible to use a mobile phone. For example, in an extremely noisy setting or during an ongoing meeting.

Cheap

"For operators too a people paging system is a cheap network, which is quickly built up and is rapidly profitable," says Lars Gandils, who is working with development of countrywide people paging systems at Ericsson.

From a technical point the system is also very economical and a radio channel is normally enough to serve about 100,000 subscribers, which can be compared with mobile telephony where a radio channel handles on average 22 subscribers per cell.

Like the mobile telephone system, the wide area system is hooked up to the public tele network. Messages can be left either automatically or relayed via an operator.

Europe system

People paging can be divided into two categories. Countrywide (Wide Area Paging) and local (On-Site paging) systems.

The local system functions within a limited area, for example a building. This could be a hospital, an industry, a company, etc. The



In the Far East, there is the largest density of people pagers, and in Taiwan Ericsson has built the world's largest countrywide people pager system.

countrywide naturally covers an entire country or a large region.

Together with the telecom authorities in Taiwan, Ericsson has built up the world's largest countrywide people paging system.

The system, which went into operation in March 1990, is expanding rapidly and at present has a capacity of 1.2 million subscribers, and more than 900,000 subscribers are already hooked up.

For countrywide systems,

moreover, a huge project is currently in progress in Europe. Namely a pan-European people paging system that goes by the name ERMES (European Radio Message System) and that can be seen as a parallel with the all-European mobile telephone system GSM, whereby one can roam freely all over Europe with one and the same receiver.

In December 1992, the system will go into test operation and one

year later in commercial operation with about a 30 percent coverage. In Sweden, the larger cities Stockholm, Gothenburg and Malmö will be served in the first instance.

Clear advantage

Some 28 operators in 17 countries have entered collaboration agreements and have committed themselves to have a network in operation during 1993.

The obvious advantage with the ERMES system is the so-called "roaming" in all of Europe, that is the capacity to move between countries without losing contact with the system. Another advantage is increased capacity compared with today's system. About five times higher transfer speed.

In addition, the system offers more services than today's POC-SAG system. For example, you can further connect your pager to another number, to another's pager. Or close off the number so that one can only get in with a code key.

In the future one can also send Memo or fax over the paging system. The people pager connected with a personal computer or a printer.

Densest in Far East

Europe has a relatively low people pager density, about one percent compared with Singapore's 15 percent or Hong Kong's 12.5 percent.

Taiwan (with the world's largest countrywide system) has about 5 percent, and the U.S.A. like Japan has 4 percent.

One explanation for the Far East's high penetration is a high cost awareness as well as the fact that people pagers by tradition are used there in a different manner from in Europe.

Overall doubling

In Sweden, 130,000 to 140,000 are tied in to one the two countrywide systems Minicall RDS. That corresponds to 1.5 percent. Forecasts for development through 1995 speak about an overall doubling of the number of subscribers.

For the United States this means 20 million compared with the current 10 million, for Europe 4 million instead of today's 2 million. In Asia one can reckon with about 20 million subscribers by 1995, which is more than a doubling of today's 7-8 million.

Calculations for the ERMES system in Europe refer to a penetration of 5-6 percent.

New horizons

People paging is on the brink of change. Until now pagers have principally been used for paging people, and being sought, being disturbed can sometimes be seen as irritating.

But for bearers of information the small pagers are ideal. For example, the subscriber could follow the day's stock market movements. He can receive more lengthy messages, subscribe to group news emissions, traffic information, weather reports, etc.

Moreover, the people pager, as we have said, is a remarkable complement to the mobile phone. Or one can say, an extension of the mobile telephone.

Lars Cederquist

Fund for needy gold medalists

There is a fund for Ericsson gold medalists that not too many seem to know about. It is known as the "Doctor of Technology Marcus Wallenberg Fund for Telefonaktiebolaget L.M. Ericsson's gold medalists." The fund offers aid to needy gold medalists and their spouses.

The aid can be used for home care or for convalescence following illness, as well as for recreational needs in connection with convalescence or illness. It can also be granted if someone has run into economic difficulties, especially if these stem from circumstances beyond the individual's control.

The aid can also be disbursed in humanitarian situations where this can spread joy and facilitate life for lonely, elderly people.

Gold medalists who want to cheer up another gold medalist who has been long ill or who has been convalescing or who may have other difficulties and needs consolation can also receive help from the fund. The allocation can go toward flowers, chocolates or similar presents up to a value of 150 kronor.

The fund can also fete gold medalists from their 75th birthday on, through applications from other gold medalists who of their own free will have chosen to pay them a visit on their birthday.

Applications to the fund can be made at any time of the year. There is a special application form that can be obtained through "Telefonaktiebolaget L.M. Ericsson, Personnel Support, HF/LME/LGF, 12625 Stockholm." You can also call Gunilla Furuhed on 08-719 92 52.

Former employees with the parent company can also obtain further information from Sven Blohm, HF/LME, telephone 08-646 86 48. The contact person for former employees in the subsidiaries is Isabelle Brandt, SG/SKV, telephone 08-28 66 72 or 013-711 28.

There is every reason to take advantage of this opportunity to cheer up old colleagues. The fund points out that in recent years applications have been very few and far between.



Furnished house near Stockholm available for 3 months. Well...that's not quite what the houses and apartments look like that are offered through Ericsson Bostäder.

Tenants sought!

A little hut down by the woods is about the best one can hope for on the Stockholm housing market. There are always shortcuts – expensive and illegal – but they very often end up in regrets. For us Ericsson employees, however, there is yet another way to get a roof over your head – for those who will be living here temporarily or for a longer time.

Ericsson Bostäder (Ericsson Housing) handles housing services in Stockholm for all Ericsson units. Personnel Support/Housing (LME/LB) is there to serve the company in Stockholm and it tries to save money by avoid many and costly hotel bills.

The vast majority of guests who turn to Ericsson Bostäder today come from Ericsson units and customers abroad. But the housing also suits visitors from Ericsson units in Sweden.

At present, LME/LB has at its disposal 330 apartments of various sizes. They are located in different

areas of the city and are of varying standards – from old to newly built – and the prices are based on that pattern.

All apartments are fully furnished with furniture, household appliances, cleaning gear, etc. Beds are made up on moving in.

There is TV and video in all apartments and 95 percent have access to cable TV.

Washing machines are installed where possible, otherwise there is always access to a laundry room.

Our aim is to achieve hotel standards in a home setting. The price level for 1991 is from 200 kronor

per person per day. That price is based on a renting period of at least one month, but shorter periods can be negotiated. Other offerings are:

Furnished room, with separate entry, WC and shower etc. from 1,300 kronor a month.

Furnished room (part of Ericsson apartment), housekeeping included, linens, TV and video, from 600 kronor a week.

Hotel room, central, including breakfast, for 395 kronor a day (1,975 a week).

We also have about 110 unfurnished apartments, villas and row houses in the suburbs.

Expanded services

If you are interested in housing in Stockholm, contact LME/LB, and so we can show you what we have and discuss the range of services and eventually draw up a special agreement.

As of September 1991, LME/

LB has extended housing services for employees. The services cover renting of, among other things, furnished rooms and apartments, in short to help employees find housing for shorter or longer periods. We announce on bulletin boards in the lunch rooms, we update the global mailbox LME/LMEBOST in the memo system, we supply application forms and give advice and help on renting and availability. The contact point is Vivianne Bassili. We welcome your inquiries.

Getting hotels

As of January 1992, hotel arrangements and bookings in Greater Stockholm will be handled by Ericsson Personnel Support/Bostäder (LME/LB).

By handling and coordinating all visits to Ericsson in Stockholm, we feel we can save both time and money. LME/LB today sells about 170,000 guest nights.

U. Mass. uses voice mail for admissions

Students at the University of Massachusetts do not use application forms to register for next term courses – they use their telephones.

Nancy Fitzpatrick, responsible for registrations, speaks of the new keyset-based registration system, the same as voice mail. The selec-

tion of courses is done with the help of the telephone's push-buttons. A taped voice gives the students instructions. In order for the system to function students must use a pushbutton with keyset. Moreover, the student needs a personal code to get into the system.

"We have expanded with 32 lines to handle preregistration," says Nancy. However, she warns students that they can still get a

busy signal when they call up the system. She advises them to call as early as possible during the registration period and to continue calling until they get through.

"The system is very efficient," says Matt Valade, who is studying mechanical engineering.

You can control that your choice is correctly registered. With the optically read forms one never knew if the courses were properly marked.

According to the department for course registration, the new system is the first step toward full automatization of the registration process.

The University of Massachusetts has an MD110 from Ericsson with 34,000 lines.

Rebecca Voight
(From the Massachusetts
Daily Collegian)

University of Massachusetts

In the summer of 1990 the world's largest installation of MD110 was put into operation at the University of Massachusetts in the U.S. It is certainly the world's largest private network. The university has 40,000 students. Every term, they choose four or five courses each. An enormous administration. Previously, course registration was handled through optically read forms. Now, students make their choice via telephone to a Voice Mail system.

From a Greek perspective

When Per Granqvist traded jobs in summer from product line manager for MD110 to head of Ericsson's company in Greece, he had a chance to see Ericsson from another perspective.

In July this year Per Granqvist took over as president of Ericsson Hellas, ETG, a small company with just about 30 employees.

Before that he worked in Bollmora, the last year as product line manager for MD110 and before that as sales manager for the same system. In all, Per has 25 years behind him in Ericsson.

There is a big difference working at head office in Stockholm and working in a local company. Per can confirm that after a few months in Greece, even though he has had very close contact with the subsidiary over the past 15 years.

"There are a whole lot of problems that I could not see from Stockholm, an entity with economy and personnel which appears there as a list of figures in an earnings report. One sees how bumpy the road to a customer order can be in a country like that."

Another difference is that there is a need for more general Ericsson knowledge in a local company.

"We are involved in expanding operations in ETG with, for example, increased activity around mobile telephony and transmission equipment," says Per, adding that he must learn a great deal more than he had to know in his job at EBC in Sweden.

Investments

At present there is no mobile telephony in Greece at all, but Per thinks this situation will change. In the next few years huge investments will be made to improve the obsolete and insufficient public telephone network in Greece. Interesting, since Ericsson, together with Siemens, has long been a supplier of public switches to the Greek telecom administration.

Greece will get economic aid from the EC to meet the necessary investments.

"The EC sees functioning telecommunications as a prerequisite for generating business in the country," says Per. Greece is a member of the EC and will be very heavily affected when the open European market comes into being next year.

He does not feel that the country will have a major economic upswing like, for example, Spain and Portugal, but the elements for growth will eventually be in place.

"If only the politicians would dare to make some unpleasant decisions and open up the country to free competition in several areas, then perhaps they could get the economy going at a decent pace."

The Greek economy is strained at present. One of the reasons for this is that important tourism has fallen off because of the recession in Western Europe, the repercussions of the Gulf war and the disturbances in Yugoslavia.

Hotel systems

Despite this, ETG's operations continue to grow steadily, exactly as it has been doing since its start.

"Right now we are in the process of building up a dealership network for BusinessPhone. There is a large market for hotel systems in the product family line, especially when the recession in the West turns around," says Per.

Many hotels have old systems, which they will change as soon as they are able to do so.

Banks, shippers and the country's large public sector are other important market segments for ETG. Here, too, Per sees an increased demand for equipment for business communications, in line with the easing of recession, as well as for equipment for the public network.

But it will be some years before

Greece becomes a market for the data communications system ERIPAX. In Greek offices the typewriter is still dominant and PC density is low.

His first days in Greece Per spent meeting with people in companies that are Ericsson customers. Personal contact is much more important in Greek business life than, say, in Sweden.

"Here, language is a problem," says Per. "Nevertheless, most of the Greek executives speak

English."

Still, he is doing his best to learn Greek and is working on the language's original alphabet.

It is not only in the manner of doing business and in the alphabet that Greece differs from Sweden. There is not least the climate too. And it is precisely this that prompted Per to rekindle his old plans for working abroad.

"Getting there was a tough job," Per says.

But it was worth the trouble. Together with his wife Margareta



Per Granqvist succeeded Willy Johansen in summer as head of Ericsson's company in Greece.

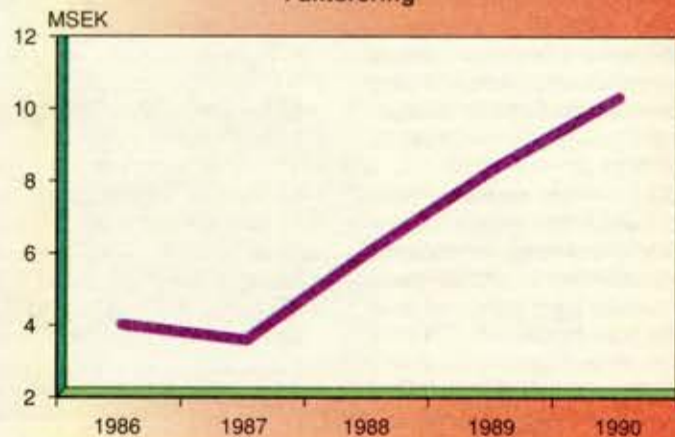
Ericsson Hellas has its own office, which is ideally located in Athens, midway between the city center and the airport.

Ericsson Hellas Telecommunications Equipment (BB)
Fördelning av fakturering 1990



ETG has increased its turnover over many years. A large part of the increase stems from growing sales of office switches in the BusinessPhone family.

Ericsson Hellas Telecommunications Equipment (BB)
Fakturering



and his 16-year-old daughter Petra he is quite at home now in his new homeland and in their house outside of Athens. Their son Klas, who is finishing his secondary education, remained back in Stockholm.

Initially, the contract extends over two years.

"If it turns out that both the company and I are satisfied after that time, then surely it could be prolonged."

However, Per has not totally left strategy and future work in Stockholm.

Right now he is part of a group working with Ericsson's products for 1995. What is being discussed at these meetings is in sharp contrast with daily realities in Greece, where it is still difficult to make a simple phone call.

Text: Maria Rudell

Ericsson's Greek history

Ericsson's activities in Greece go back to the '30s, when the company got the mission to supply and install a tele network in Athens.

However, the breakthrough for Ericsson's private switches did not come before the '60s, when the company swung a distributor agreement with pioneer Angelos Cotzias. This later became Ericsson's collaboration partner until the subsidiary Ericsson Hellas, ETG, was registered in 1976. The company's operations all the time developed according to plan and showed profit.

Activities in the public sector transferred in 1988 to the Greek company Intracom, Ericsson's licensee for AXE projects. Today, ETG is a company with strong orientation into the private market.

MD110 accounts, together with the smaller office switches in the BusinessPhone family, for the greater part of the company's turnover. Equipment for mobile telephony and defense products are sold from a project base from Sweden, with support from ETG.

Apropos Telecom 91...



This is how it looked at a "telecom" exhibition in Mexico City in 1925. Those were the days when a phone in Mexico was referred to as "Un Ericsson."

The wall phones that are hanging on the wall between the beautiful ornate Indian columns all have a local battery system, which also applies to the three switchboards in the foreground.

Not too long ago we donated a similar switchboard to a museum in Jakarta, Indonesia.

Above you can see how it looked in Mexico City's large telephone exchange Victoria. From here all transit traffic between North and South America was handled. The exchange was built at the turn of the century and was one of the world's largest manual interurban exchanges.

After the earthquake in Mexico City on September 19, 1985, all operations were shifted across the street to the San Juan exchange.



Full speed in Copenhagen

At LM Ericsson A/S in Denmark a lively discussion on driving has sprung ever since the company moved to new offices near the south harbor in Copenhagen. In Nauticon, as the new office complex is called, there is a sign that has caused the lively debate about cars and driving time to and from the office. The sign as it turns out indicates how much time it takes to get around by car to different places in Copenhagen. It was put up by the company that built the complex as a guideline for the people working there.

The debate arose because it was felt that the estimated times stated were not correct. In an extra edition of "Digitalt Nyt," the personnel publication of LM Ericsson A/S, however, an elaborate clarification of the driving time around Copenhagen was given:

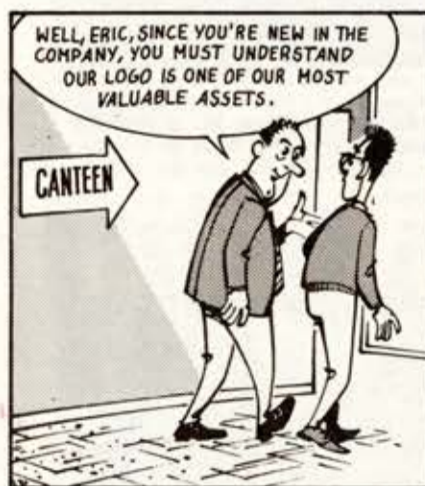
"It can now be determined that the stated driving times are correct under certain conditions:

- The driving must be done between 3 and 5 in the morning.
- You must drive a fast Ferrari, with a trained chauffeur.
- Traffic wardens must be attending a congress in Skagen.
- You must be lucky with traffic lights."

In any other situation, you should expect to spend 50 to 100 percent more than the stated time," the article concluded.

SAUSAGE CAPER

Text and illustration: Ulf Jansson





The proud ship s/y Victoria, midway out on a billowy "Pacific."

Eventful trip across the Atlantic

Henrik Moberg, project leader at Ericsson Telecom in Örnberg, did what many dream of, what some fail to do and what some even lost their lives in trying to do – he sailed to South America and made it around the perilous Cape Horn.

The voyage took eleven months, berthing at beaches in various interesting places of varying character, full of adventure, many-faceted experiences and impressions as well as solid camaraderie.

Just over a year ago Henrik took a leave from his technical projects and problem issues to take on wave, wind and water and sail around South America.

"Some friends and I have long contemplated taking on a long sailing trip like this, so when the opportunity to borrow a good boat presented itself, we took the chance and grabbed it.

The crew, all of whom knew each other before, varied between four and six men who all the time relieved each other throughout the trip. Henrik and his colleague Fredrik Wallgren were the only ones who were present through the entire time. The boat was a 40-foot Colin Archer, 12 meters long and 4.23 meters wide.

The route went from Sweden, via the Canary Islands, around Cape Horn, sailing in the Chile archipelago and back through the Panama Canal to Sweden.

"Being able in one and the same trip to swim among dolphins, sharks and killer whales, to walk among penguins and sea lions, as well as cruising among ice-floes and seeing breathtaking glaciers is a fan-

tastic experience. Discovering new places and other cultures is also unbelievably interesting.

"We were lucky with the weather and the wind, and the rounding itself of Cape Horn went well without any really unpleasant incidents."

Now Henrik is back in Sweden and at Ericsson.

"It is an unforgettable trip. I have lived a lot and learned new things and new ways of thinking, which I can now apply to my job and my life here at home."

There is no new long trip on the horizon;



It took just over 11 months to cover the 22,000 nautical miles from "Hundudden" in Sweden, around Cape Horn, through the Panama Canal, and back to Sweden.

instead, there will be sailing and new adventures in the summer and during vacation.

Joséphine Edwall



Adventure, many-faceted experiences and good camaraderie – that was what the crew of s/y Victoria gained during its maiden voyage around Cape Horn. (Henrik Moberg in the middle)

Racists should share our experiences

Modern society is a melting-pot where people of all nationalities and origins come together. The mixing of complexions and races is more widespread than ever in the history of mankind. Different cultures are in constant encounter, sharing their peculiarities with each other. This way, life has become all the more exciting for all of us to live.

I am saddened every time I see the other side of this new situation for mankind. Xenophobia, hatred of foreigners and racial outbreaks are spreading in our world. In many places

STOP PRESS
BY LARS-GÖRAN HEDIN



in Europe, the tramp of boots can be heard, which only a few short decades ago was on the way to leaving an entire world in ruins.

Why is it so hard for humanity to learn from its own experiences? We must all help to nip this rising racism in the bud.

We who work at Ericsson, like many others who work in large international companies, have important experiences to share with our friends in private life. In our company, we have the privilege of daily encounter with people of many different nationalities, complexions and origins.

Workmates in the workshop or colleagues at the other end of the phone are people with whom we share our day and the demands in our job. Regardless of whether his name is Christopoulos or her name is Nakamita, it is working colleagues that we are dealing with, even if we have never met them personally or even if it is only the first time that we are speaking with them.

It is fun working with people of different nationalities and I see precisely this as one of the greatest advantages to working for Ericsson.

Our company could never function without this globe-girdling collaboration across all human and geographical barriers. We know that.

That's why I feel that we who have this experience should share it in all situations where immigration, asylum, racism and other related issues are being discussed.

We should let others be aware that our company's success is possible thanks to our more than 100 years of common efforts of Russians, Argentinians, Chinese, Spaniards, Malaysians and many, many other nationalities. It is through collaboration across boundaries and between people of different origins that our company has grown so strong. In the same manner, our future society could be a better society to live in, if we as people make more of an effort to understand each other.