Our mission is to enable and inspire communication between people by developing communications services that create value and enrich and simplify life.
Financial information at www.telia.com

Financial information is available from our homepage www.telia.com, Investor Relations.

Interim reports and annual reports are posted on our homepage as soon as they are published and press releases are broadcast “live” via the Internet when reports are presented.

You can also follow Telia’s share price and view all press releases at www.telia.com.

New shareholders who are registered directly may choose to have published reports sent to home addresses.

Telia’s Operating and Strategic Review for 2000. This is a description of Telia’s strategic focus and initiatives during the year for realizing our goals and visions.

Telia’s Annual General Meeting will be held on Thursday, 10 May 2001 at 4:00 p.m. at the Globe Arena in Stockholm.

Right to participate in the Annual General Meeting

Shareholders who meet the following criteria are entitled to attend Telia’s AGM:

- entered on Telia’s register of shareholders as per Monday, 30 April 2001
- and having notified Telia of their intention to attend not later than 4:00 p.m. on Friday, 4 May 2001.

Registration procedure

Telia’s register of shareholders is maintained by VPC AB. Stock may be registered either in the shareholder’s name or in the name of a nominee.

To attend the meeting, shareholders whose stock has been registered in the names of nominees must arrange for their shares to be re-registered in their own names at VPC not later than Monday, 30 April 2001.

Nominees provide assistance with the registration, usually for a modest fee.

Notice of intention to attend

Notice can be given:

- by phone: +46 (0) 8-470 81 20
- by mail: Telia AB, Box 999, SE-171 74 Solna, Sweden
- on Telia’s website: www.telia.com/agm

In providing such notice, shareholders should state:

- name
- social security/corporate registration number
- telephone number
- number of accompanying persons

Payment of dividend

Tuesday, 15 May 2001 is proposed as the record date for the right to receive dividends. Dividends are expected to be distributed by VPC on Friday, 18 May 2001.

Telia’s financial reports are produced by Telia AB, Investor Relations.

Please direct questions regarding content to:

Telia AB, Investor Relations
SE-121 86 Farsta, Sweden
Tel. +46 (0) 8-713 10 00
Fax +46 (0) 8-713 30 47
Online at www.telia.com, Investor Relations.

Reports may be ordered via:

Tel. +46 (0) 8-713 71 43
Fax +46 (0) 8-624 54 72
Online at www.telia.com, Investor Relations.

Telia’s Annual General Meeting will be held on Thursday, 10 May 2001 at 4:00 p.m. at the Globe Arena in Stockholm.

Right to participate in the Annual General Meeting

Shareholders who meet the following criteria are entitled to attend Telia’s AGM:

- entered on Telia’s register of shareholders as per Monday, 30 April 2001
- and having notified Telia of their intention to attend not later than 4:00 p.m. on Friday, 4 May 2001.

Registration procedure

Telia’s register of shareholders is maintained by VPC AB. Stock may be registered either in the shareholder’s name or in the name of a nominee.

To attend the meeting, shareholders whose stock has been registered in the names of nominees must arrange for their shares to be re-registered in their own names at VPC not later than Monday, 30 April 2001.

Nominees provide assistance with the registration, usually for a modest fee.

Notice of intention to attend

Notice can be given:

- by phone: +46 (0) 8-470 81 20
- by mail: Telia AB, Box 999, SE-171 74 Solna, Sweden
- on Telia’s website: www.telia.com/agm

In providing such notice, shareholders should state:

- name
- social security/corporate registration number
- telephone number
- number of accompanying persons

Payment of dividend

Tuesday, 15 May 2001 is proposed as the record date for the right to receive dividends. Dividends are expected to be distributed by VPC on Friday, 18 May 2001.

Telia’s financial reports are produced by Telia AB, Investor Relations.

Please direct questions regarding content to:

Telia AB, Investor Relations
SE-121 86 Farsta, Sweden
Tel. +46 (0) 8-713 10 00
Fax +46 (0) 8-713 30 47
Online at www.telia.com, Investor Relations.

Reports may be ordered via:

Tel. +46 (0) 8-713 71 43
Fax +46 (0) 8-624 54 72
Online at www.telia.com, Investor Relations.
The Telia Group demonstrated unabated strong growth in its high-priority areas during 2000. The acquisition of the Norwegian mobile operator NetCom ASA and the strong sales growth in the mobile business in Sweden, Norway, Denmark and Finland bolstered Telia’s already strong position on the Nordic market. A Letter of Intent was signed during the year with Tele2 (NetCom AB) concerning joint construction of the Swedish UMTS network.

Despite deep price cuts and stiffer competition, profitability improved in the company’s traditional business, fixed services in Sweden. Price reductions during the year inhibited the Group’s total net sales, which increased by 4.5 percent for comparable units.

The international carrier network, the Viking Network, was further expanded during the year. Competitive prices and the high quality of the network resulted in sharp increases in traffic volumes.

Telia is now investing heavily in the future expansion of mobile communications, broadband, international carrier business and portals, which has affected earnings for 2000. During the year, underlying EBITDA totaled MSEK 13,087.

The directory company Eniro was listed on the stock exchange and some 15 businesses were divested as part of the Group’s refine and focus strategy. Telia signed a Letter of Intent in February 2001 for the sale of the Brazilian mobile operator Tess to Telecom Americas.

Consolidated operating income increased during the year from MSEK 5,946 to MSEK 12,006, including capital gains and other non-recurring items totaling MSEK 8,338.

Investments rose to MSEK 47,742, chiefly due to the acquisition of NetCom ASA and the expansion of the international carrier network.

During the year, the Group sharpened its focus on its core businesses and high-priority target areas. The Group also stepped up its rate of divestment of non-core business. A new Group structure, including five new business areas, is being introduced on 1 April 2001 in order to strengthen this focus and to promote internationalization while laying the ground for Telia to participate in the restructuring of the industry.
OUR MISSION
Our mission is to enable and inspire communication between people.

Our business concept is to develop communications services that create value and enrich and simplify life, liberating people in life and business.

We envision a society where all forms of communication are a natural part of every business and the lives of all individuals. Everyone will be able to take part based on their own individual needs and without technological constraints.

We will contribute to this development – and achieve success – through innovative communications solutions based on leading expertise and technology.

Our success also contributes to a richer society and reduced impact on the environment.
“Fine-tuning our operations will free up the resources that can be used to enhance Telia’s core business”

Telia’s President, Marianne Nivert, says that she is satisfied with Telia’s performance during the year. It has been particularly pleasing to see the robust growth in Telia’s current focus areas and the improved profitability of the established business operations.

Are you satisfied with what Telia has achieved during the year?

“Yes, I am satisfied with what we have achieved. We made substantial structural changes during the year, which means that we are concentrating more on our core businesses and our high-priority target areas and divesting operations that are outside Telia’s actual core business. We have been very successful in these efforts.

“I can now say that we have had very rapid growth and strong demand in our high-priority areas, while at the same time we have been successful in fine-tuning our operations.

“Other good news is that we have improved profitability in our established business – fixed services in Sweden – where we strengthened our margins despite significant rate cuts.

“The improvement in underlying EBITDA from the third quarter was sustained in the fourth quarter, which is also positive.”

How has Telia been successful during the year?

“In mobile services, we completed a strategically important deal, that is the acquisition of the Norwegian mobile operator NetCom ASA. We have also had powerful organic growth in new mobile customers, and on a market that already has high mobile penetration. These two factors have resulted in a stronger position on the Nordic mobile market where our objective is to be the undisputed leading operator.

“We also expanded our international carrier network even further in 2000. Today, Telia has the second longest fiber-optic network in Europe and is one of the few operators that can offer telephony, IP traffic, and network capacity in its own pan-European infrastructure. Our network is of exceptionally high quality and we offer competitive prices, which resulted in a robust increase in revenues during the year. I expect that we will see positive effects in the income statement from the carrier business as early as 2001.

“Another success was that we managed to turn a defeat into a victory by signing an agreement with Tele2 (NetCom AB) for cooperation on developing a UMTS network in Sweden.”

How detrimental was it that Telia was not awarded its own UMTS license in Sweden?

“It was, of course, a serious blow for Telia not to receive a UMTS license since offering third generation mobile services across the entire Nordic market is part of our strategy. But now we have found a good solution. The agreement with Tele2 means that we can build up a UMTS network in Sweden quickly and, not least, cost-effectively.”

What was less pleasing in 2000?

“I am not entirely satisfied with the sales trend for the Group as a whole. Our goal is to expand at a faster pace. We will do that when we have fully implemented our strategy.

“Our earnings were also weighed down by our shareholdings in certain associated companies. At the beginning of 2001, we signed a Letter of Intent for the sale of the mobile operator Tess in Brazil, which will have a positive impact on earnings in 2001.

“We were not able to deliver broadband to Swedish households fast enough to meet demand. We have now built up an effective delivery system that will allow us to satisfy the huge demand for broadband. There is enormous potential for growth in broadband.”

Any comments on the performance of Telia stock?

“It was wonderful that the IPO went so well and that Telia attracted so many new shareholders. But it is, of course, less positive that the stock went on to perform as it did. I know that many people had different expectations and were disappointed.”

“There was pressure on the telecom sector industry-wide during the fall, partly due to the uncertainty surrounding the extent of investments in UMTS. Telia has been valued on par with other European telecoms, even though we are not among those who purchased expensive UMTS licenses.

“As President and CEO, it is my job to take action and strengthen the company and thereby lay the ground for positive share price development.”
Telia has initiated significant fine-tuning and cutbacks in its operations – what will Telia look like when these are fully implemented?

"Telia’s refine and focus strategy means that we will have a company that is nimbler and more focused on core business. We will enable and inspire communication between people – that is our mission and that is what we do best. Fine-tuning our operations will free up the resources that can be used to enhance Telia’s core business."

Why is Telia introducing a new organization?

"The new Group structure, which will be in effect as of 1 April 2001, will make it possible to participate in the ongoing restructuring of the industry while we strengthen our orientation and promote the internationalization of the company. The new organization will also make us more effective on the Swedish market.

"The new organization will also promote definition and transparency. I want to be able to follow our established business and see how our new business operations develop. And our new organization will facilitate this."

What will happen next at Telia?

"We will carry on working to implement our strategy and our new set goals. We will continue to focus on our core businesses and we will do this within a new Group structure and with strengthened management.

"Here in Telia’s management, we will carefully monitor the developments and trends within the industry and the world and strive to seize the opportunities that present themselves.

"To our shareholders, I would like to conclude by saying that I have a very positive outlook on Telia’s future and that I promise to do all I can to develop and strengthen Telia as a modern, profitable and successful communications company."

Stockholm, February 2001

Marianne Nivert
The largest IPO in the Nordic countries

The listing of Telia on the OM Stockholm Exchange last summer was the largest IPO in the Nordic countries to date. Over one million Nordic private investors subscribed to Telia shares. Telia still has a large spread of ownership in the Nordic countries.

In May of 2000, the Swedish government decided to make a public offering to purchase the Swedish state's stock in Telia, after which the state's holding would total no less than 70 percent of all shares. The decision to issue new shares was also made at this time.

There was huge demand for Telia shares from both private and institutional investors and the offering was oversubscribed four times. Over one million private investors in the Nordic countries subscribed to shares. Of these investors, 954,000 were Swedish.

On 13 June, Telia's shares were quoted on the A list of the OM Stockholm Exchange. The share price was set at SEK 85 through tender procedures. The Swedish state retained a 70.6 percent holding of Telia after the listing of the company. At the time of the listing, private investors held 23 percent of the pre-sold shares, Swedish institutions and businesses held 41 percent and foreign investors 36 percent.

Simultaneous with the IPO, a new share issue of 150 million shares was also made. The new share issue brought an infusion of MSEK 12,429 of new capital to Telia after deducting issue expenses.

As of 31 December, Swedish institutional investors had increased their holdings to 63.5 percent and foreign investors had decreased their holdings to 15.9 percent. Telia retained 866,000 shareholders.
Of these, 847,000 were private investors who had now reduced their holdings to 20.6 percent of the shares.

At the end of 2000, Telia’s market value totaled GSEK 146.6. The market value corresponded to 4.1 percent of the total market value of the OM Stockholm Exchange.

The general index for the OM Stockholm Exchange indicated a decline of –20.6 percent from 13 June. The decline for the telecom sector was also significant during the year. The Dow Jones Euro Stoxx Fixed Line Communications Index showed a decline of –40 percent. The highest settlement price for Telia shares, SEK 94.00, was quoted on 13 June and the lowest, SEK 46.90, on 28 December.

On the last trading day of the year, 29 December, the closing price was SEK 48.5. The share price fell by 43 percent during the year.

During the year, Telia shares were one of the ten most traded on the OM Stockholm Exchange. The total turnover approached 1.353 billion shares at a value of GSEK 100.2. The traded shares correspond to 45.1 percent of the total number of issued shares. Share turnover averaged MSEK 710.4 per trading day and an average of nearly 2,400 trades were completed daily. One trading lot is 200 shares.

The number of shares in Telia AB as of 31 December 2000 was 3,001,200,000 shares. Each share is equal to one vote. Each share has a par value of SEK 3.20. The total share capital amounted to SEK 9,603,840,000.

The Board of Directors has decided to recommend a dividend of SEK 0.20 per share for 2000 to the annual general meeting. In addition, the Board of Directors is proposing an extra dividend of SEK 0.30 per share. The total distribution for a total dividend of SEK 0.50 per share is MSEK 1,501. The target is normally a dividend totaling 15–25 percent of net income for the year.
Expand in growth areas and streamline existing operations

To secure the Group’s long-term growth and competitive strength, Telia is completing three initiatives in its core businesses: developing broadband for Swedish households, establishing an international carrier business, and focusing on mobile communications with an emphasis on the Nordic market.

The telecommunications industry has undergone huge changes within a very brief period. From being a strictly regulated industry of powerful monopolies and nationally anchored players, it has transformed itself in recent years into a complex industry of intensive investment, with significant business logic capability and a growing number of specialized players active at a regional or global level.

Several forces, often working together, have driven the development and changed the structure of the industry. The deregulation and liberalization that began in the 1980s, in combination with new, less investment-heavy technologies, have made it possible for new players to establish themselves on the telecom market while established operators have been allowed access to compete on each others’ home markets.

The Internet, which exploded onto the scene in the mid-1990s, has been a huge force. IP (Internet Protocol) has quickly become a globally accepted standard for linking computer networks worldwide with capacity for interactive multimedia communications based on voice, text, data and video.

Together with web technology, IP has practically revolutionized not only the telecommunications industry, but other related industries as well, such as data, IT and media. IP is being used to create a common technical platform for a growing number of industries. The resulting convergence of industries is laying the ground for the development of entirely new types of services.

Economies of scale and synergies

Intensifying competition is driving the creation of new services at an ever faster rate, while putting pressure on prices. This trend is increasing the need for streamlining in order to sustain margins and for concentrating resources to core business in order to maintain competitive strength in a market of increasingly short product life cycles.

As competition intensifies, companies need to seek out synergies and economies of scale. We expect to see a consolidation of the most expansive growth areas in coming years.

Three core businesses

Telia was early in cutting operations that lacked strategic significance. Further structural changes and decisions were made during the year based on the principle of divesting all operations that are without industrial synergies and that are outside the Group’s strategic core.

Telia has three major core businesses: fixed services, mobile services and portals. Alongside the three core businesses is a fourth business, Telia Equity, which consists of financial investments, including participating interests that Telia has decided to retain in divested companies.

One of the big players on the carrier market

Two more pioneering initiatives were implemented within the fixed services core business: the development of an international network platform for the global carrier market and the development of broadband for Swedish households.

The burgeoning number of players in the market and the expansion of the Internet and other IP-based services are generating demand on networks that transport IP traffic on a global level. Historically, one of Telia’s strengths has been its ability to apply new technologies to develop infrastructure and basic systems for application on a broader scale. Telia was also one of the first operators in Europe to establish itself as a transporter of IP traffic over the Atlantic.

In order to be able to develop a strong position on the carrier market for IP-based traffic, Telia decided to operate its own network platform in Europe and the United States. The increasing volumes of information transported across networks are placing greater demands on quality and security. Prices are declining as access to capacity increases. This means that carriers that aspire to be successful must be able to offer high quality at attractive prices for their services, something that is only possible for those who have control over networks.

Telia’s goal is to be one of the three major network wholesalers in Europe and to own one of the five major IP networks in Europe and the United States.

Steer broadband for Swedish households

Sweden has the highest IT maturity of any country in the world, according to studies done by IDC/World Times, and Telia has been an important contributor to this development. One important parameter for assessing a country’s IT maturity is the proportion of
home computers and home Internet access. Sweden is at the top of the 55 countries ranked.

This high Internet and computer penetration provides a good foundation for a rapid implementation of broadband in Swedish households. Telia’s ambition is to steer the development of broadband on the Swedish consumer market by offering access at reasonable prices and developing attractive services that create incentives for households to move to the world of broadband.

The leading mobile operator in the Nordic countries

Another robust growth area is mobile services. Throughout the history of mobile telephony, Telia has been among the world’s leading companies and been involved in driving developments. Mobile communications are in a powerful stage of development with technological shifts and new regulatory policies.

Telia already has a very strong position on the Nordic mobile telephony market, which is one of the most developed in the world with users who show broad acceptance for trying new services and new technologies. Telia’s goal is to be the undisputed leading mobile operator in the Nordic countries, in terms of sales as well as customer base and expertise. In coming years, Telia intends to further strengthen its position in the Nordic countries by developing cutting edge services and utilizing economies of scale and synergies created by the growing customer base.

Outside the Nordic countries, the ambition is to take a leading position on the chosen European markets in mobile Internet by taking advantage of the new regulatory conditions that allow companies to offer services to end-customers without building and operating their own networks.

Beyond this, Telia will develop new innovative wireless services for machine-to-machine communications, M2M, which is an area with enormous potential.

Portals – a platform for new services

Telia’s third core business is portals. Telia was quick to realize early on the importance of developing portals as platforms for introducing new types of content services. With portals, Telia can utilize and strengthen its position in fixed and mobile Internet services. Portals are very important tools for cementing customer relationships.

The main focus of Telia’s portal operations is to create a multi-portal for the Swedish consumer market along with a growing range of broadband services. On the international market, the focus is to establish operator-independent mobile portals in order to attain a position in mobile Internet services.

Ensure profitability in existing operations

Telia’s current initiatives in mobile communications, broadband and international carrier operations are aimed at ensuring the Group’s long-term growth and competitive strength and at creating profitability and shareholder value at least on par with the most successful telecoms.

The established business, fixed services in Sweden, continues to represent the greater part of the Group’s sales and earnings. Initiatives and investments made for future growth are largely financed by the surplus generated by the established operations. In order to ensure profitability, Telia continuously streamlines its operations. During the year, the marketing channels and delivery process were revamped in order to reduce Telia’s costs while at the same time improving customer access to Telia.

Telecommunications provide an environmentally friendly means of communication. Telia has an ongoing dialog with representatives from trade and industry as well as the public aimed at inspiring people to view telecommunications as an opportunity for creating sustainable development.
The integration of the Nordic market is continuously evolving. Many Nordic companies have operations in the other Nordic countries, while other companies are looking to form alliances and collaborate across borders. A growing number of companies view the Nordic countries as their home market, which drives the demand for communications services that are functional, simple and effective across the entire Nordic region.

Telia is the only mobile operator with its own mobile network and services in Sweden, Norway, Denmark and Finland. The acquisition of NetCom ASA in Norway has bolstered Telia’s competitive advantage.

"Now Telia has a unique business opportunity to quickly create a pan-Nordic services offer and an ‘intra-Nordic’ communications market,” explains Terje Christoffersen, President of NetCom ASA. “I look forward to seeing the potential synergies inherent in our pan-Nordic presence being realized on the customer side. Our first step is to address our prices. It is a paradox that while mobile telephony promotes globalization, the price structure for mobile services is local.”

For companies with operations and employees in several countries wishing to simplify their administration and subscription management, Telia is offering a pan-Nordic subscription with one rate from all Nordic countries in 2001.

“We will also develop new cross-border services with real customer value,” says Terje Christoffersen. “The needs are obvious. Anyone who has traveled abroad and experienced difficulties retrieving messages on their mobile phones or PCs knows what they are.”

The pan-Nordic subscription will allow Telia to combine various functions in its network in order to offer services such as retrieving e-mail on a mobile phone and forwarding selected calls abroad. Positioning information makes it possible to steer incoming calls to the user’s physical location and to receive information from local sources, such as the airline of an upcoming flight in order to check details of departures, gate numbers, delays, etc.

"In order for this to work, the information must be customized to my personal needs – and the services must follow me wherever I go," explains Terje Christoffersen. "Until now, mobile telephony has mostly been mobile voice, but today there are more and more mobile data communications options. A huge part of corporate work processes are based on data communications. The solutions used by one company are often completely different in different countries. The technical infrastructure must be integrated to make mobile data communications work across national boundaries."

Pan-Nordic services are only the first step, of course. Pan-global is the obvious goal. The Mobile business area already offers a service that works the same way all over the world. HomeRun is a wireless broadband connection that allows travelers with Telia subscriptions to connect their portable computers to their companies’ Intranets. This is a powerful service with transfer speeds up to 11 Mbps.

HomeRun is already available at some 80 hotels in Sweden and at Arlanda airport. During the year, Telia signed an agreement with SAS to install the HomeRun service in all of the airline’s international lounges.
Leading role in the development of the mobile information society

The market for mobile services continues to demonstrate powerful growth. Technological developments are making it possible to create totally new types of services. Telia’s large customer base is a strong platform for launching new services and generates significant economies of scale.

Telia is the leading mobile operator in the Nordic countries, in terms of both customer numbers, market share and sales. The company has a strong position in the Baltic region as well, through participation in several mobile operators in the Baltic states and northwestern Russia. Through its partial ownership of the investment company Telia Overseas, Telia has also made several financial investments in mobile operators in growth regions, primarily outside of Europe.

Telia is also among the leaders in mobile Internet, partly due to its early launch of mobile portals, the WAP portal MyDOF in Sweden and the operator-independent Speedy Tomato portal, which was test-launched in the U.K. and Denmark in 2000. Telia also has a market presence via the Halebop portal jointly owned with Oracle.

Telia is the only full-service operator in the Nordic countries with its own mobile network and services in Sweden, Norway, Denmark and Finland. The strong presence on the Nordic market combined with the largest customer base in the Nordic region gives Telia unique opportunities to create value using today’s voice-based telephony while securing the transition to increasingly data-based wireless communication. Telia’s strong Nordic presence also entails opportunities for offering unique pan-Nordic services.

“Telia is also conducting extensive business development in mobile services, primarily within its New Business unit, which includes several start-ups and developing operations and companies. New Business works as a venture capital company aimed at creating shareholder value for Telia.

The operations in New Business during the year included Telia GlobalCast Internetworking AB (owns and manages networks for high speed mobile data transfer), Wireless Main-gate AB (develops mobile communications solutions for M2M applications), WirelessCar AB (develops mobile communications products and services for the automotive industry), Svenska Drutt AB (manages the Halebop portal), Telia Bright (offers mobile IP telephony to business customers) and various projects such as HomeRun (wireless broadband access and services to sites such as airports, railway stations, hotels and conference facilities).

Telia’s strong brand is also an important competitive advantage, both in the marketplace and for attracting partners. Various partnerships have been established with global leaders such as Oracle and Olivetti, which shows Telia’s strong attractiveness as a partner.

A totally new market for mobile services

The market for mobile services continues to grow at an extremely fast pace. There are many technological breakthroughs on the horizon, including the transition from narrowband telephony networks to broadband data communications. Different technical platforms will be integrated and customers will have access to a variety of services from different networks without technical limitations. Technological developments are making it possible to create totally new types of mobile services.

The Nordic mobile market is one of the most developed and innovative in the world, with significant user readiness to try new applications. The ongoing convergence between the telecom, media, entertainment, retail and financial services industries is likely to take place relatively quickly in the Nordic countries. This means that the market is growing and that the value chain is expanding and making room for new roles and players.”
between telecom, media, entertainment, retail and financial services is therefore likely to take place relatively quickly in the Nordic countries. This means that the market is growing and that the value chain is expanding and making room for new roles and players.

The new scenario is opening up totally new business opportunities and increasing the total value of the mobile market. The developments will require a high quality infrastructure, good coverage and availability for a large part of the public, however. If this can be secured, the market for wireless communications will be able to expand rapidly in coming years. Telia is very well prepared for this scenario.

Since expansion in terms of customer number is limited – mobile penetration is very high in the Nordic countries – a large part of the growth will be in value. Telia will seek growth in value through a growing range of new services and increased demand due to declining price levels. This is also necessary for quick migration from fixed to mobile telephony.

The price level for mobile services in the Nordic countries has fallen in recent years, which in turn has generated strong growth in the volume of both customers and traffic. Telia expects that traditional voice traffic will continue to grow as mobile phones increasingly replace fixed telephony, and that rates for traditional mobile services will continue to fall. However, more sophisticated and easy to use services will lead to bounding growth in data traffic over the mobile network.

The share of data traffic will increase as access to better terminals expands in combination with the breakthrough of the new broadband technologies, GPRs and UMTS. The UMTS network will play a significant part, but Telia is also developing several new services by upgrading the existing GSM network with high speed technology, HSCSD, and packet-switching technology, GPRS.

The Nordic market is among the most deregulated and competitive in the world. The mobile networks have been opened for service providers that lease out network capacity for services to end-customers. Telia already has agreements in place with service providers in Sweden and Norway.
Overall goals and strategic focus
The mobile business is the primary value-driver and part of the foundation of Telia’s comprehensive growth strategy. Telia will continue to play a leading role in the development of the mobile information society. We actively seek to identify and utilize economies of scale across the entire mobile area in order to promote cost-effectiveness and profitability. Our goal is to show a profit on a par with the best in the industry.

The main goal is for Telia to be the leading supplier of wireless communications in the Nordic and Baltic region. On the Nordic market, Telia is to be a full-service operator, which means managing networks as well as offering services for broad target groups, consumers and businesses. Our ambition is to establish GPRS and UMTS across the entire Nordic market.

"Telia is well positioned for the technological shift in mobile communications and plans to offer GPRS and UMTS services throughout the Nordic market."

Mobile Internet is a general term for Telia’s mobile portal initiatives. As the market for mobile Internet becomes more defined, our customer offers have gained importance. Telia’s goal is to be the leader in mobile Internet in the Nordic countries in terms of customer base, development of advanced services and use of new technology. Elsewhere in Europe, where Telia does not intend to build and operate its own networks, Telia’s objective is to work in partnership with investors and content providers to establish itself as one of the five major owners of mobile portals by acting as a mobile virtual network operator (MVNO).

In the Baltic region (the Baltic countries and northwestern Russia), Telia is a partner in mobile operators and intends to increase its involvement in the companies.

The development of services is gaining importance as more and more players are establishing themselves on the market as operators with their own networks or as virtual network operators launching services to end-customers as well as other operators’ networks. This growing competition makes great demands on product and services development and the ability to offer new value added services both to customers and operators. Telia intends to offer a competitive range of broad and innovative services for consumers and businesses and to introduce new technologies early in order to stay on the cutting edge of the development of new types of mobile services.

GPRS and UMTS
The expansion of GPRS is already underway and Telia expects to offer GPRS services in all the Nordic countries in 2001. GPRS is the first step towards third generation mobile networks and is based on packet-switched technology in contrast to circuit-switching in today’s GSM.

The UMTS licenses for third generation mobile communications are an important part of Telia’s strategy in mobile communications. Telia was awarded a UMTS license in Finland as early as 1999, followed by a UMTS license in Norway in 2000 via NetCom ASA.

Telia applied for a UMTS license in Sweden during 2000 as well.

PTS (Swedish National Post and Telecom Agency), the government agency that grants licenses, announced at the end of the year that Telia had not been granted a license due to a lack of technical feasibility. Telia does not find any lack of technical feasibility and has appealed the decision on 8 January 2001 and intends to take legal action against PTS in order to obtain a license.

In order to quickly gain access to a UMTS license, Telia has signed a Letter of Intent with the Kinnevik company Tele2 (NetCom AB) to collaborate on the expansion of third generation UMTS mobile networks. Tele2 (NetCom) and Telia intend to establish a network company as a 50:50 venture. The jointly owned company will utilize Tele2’s (NetCom’s) UMTS license.

This deal will make it possible for both companies to build and operate a cost-effective UMTS network in Sweden. Telia and Tele2 (NetCom) are working together on building and managing the network, but will later compete on the end-customer market for their company-specific services.

The Danish regulatory authority will grant UMTS licenses in Denmark by auction in 2001.
The Malmö region is full of activity. One exciting venture is the world’s largest broadband local area network (LAN) currently under construction in Malmö and the surrounding area, being built by Skanova for HSB. The network is concentrated in Malmö, but extends throughout the region as far as Trelleborg. What makes it “local” is the fact that users can communicate in the network without having to go via the Internet.

“This is unique,” explains Torbjörn Skarsgård of Skanova. “Not only because of its size, but also the fact that it is an open, public broadband network without constraints.”

Despite the fact that HSB Sverige has a general agreement with a competitor, HSB Malmö chose Telia as its regional supplier.

“Here is a customer that understands the concept of open networks, without any binding portal as a gatekeeper,” says Skarsgård.

The technical structure is based on high-speed fiber-optics (1,000 Mbps Ethernet) and LAN-based customer premises networks (10/100 Mbps). The residential areas with ADSL are also connected to the regional “Gigabit network.”

HSB Malmö’s contracting party is Telia Partner and Skanova is building the network and delivering equipment. HSB Malmö acts as a reseller to the residents in the area, with Skanova as a wholesaler. Customers go to their local Telia shop to sign contracts and obtain equipment. Construction on the network will be completed by May/June and will include 30,000 outlets, primarily households. Residents pay SEK 200 per month for access to the regional network and the Internet.

“In addition to the basic service – a fixed, high-speed connection in the local broadband network with Internet access – residents also gain access to many new services,” says Peter Johnsson of HSB Malmö. “These services include everything from everyday functions such as information about common areas and alarm systems to video on demand, education and IP telephony. We conducted surveys to find out which services are of interest to HSB residents. Security services and education were among the most popular preferences.”

“An open local area network has enormous advantages,” says Skarsgård. “Most relationships and communications, both personal and business, are local. In most cases, there is no need to go the long way around over the Internet. Tasks such as sending a video to a neighbor can be done much more quickly in the regional network.”

Initially about 25 percent of the households have subscribed for connections, but in some cooperatives as much as 70 percent have already obtained subscriptions. One subscriber already using the network is Uno Esbjörnsson, 76:

“I collect stamps and the network is a great way to see what is available in different countries. Today I also looked at some motor homes. Not for right now, but maybe someday…”

“Besides making the world of broadband available to HSB residents, this also allows the building cooperatives to use the network, for example for automated services such as monitoring heating systems,” explains Johnsson. “This is an exciting new role for us as a service provider.”
Telia has a strong position in fixed networks with a well-developed infrastructure and a wide range of services. Telia is working on two major strategic initiatives for enhancing the fixed services core business: developing broadband for Swedish households and establishing Telia on the international carrier market.

Telia has an extensive infrastructure of fixed networks and a wide range of services, both basic and premium services. Telia is also active in fixed networks in both retail and wholesale.

On the retail market, Telia has its main focus in Sweden, along with operations in Denmark and Finland as challengers with a limited range of services. Beyond this, Telia is also a partner in fixed network operators in Poland and the Baltic countries.

The network wholesaling operations are concentrated in Sweden, Europe, and the United States.

Despite advanced competition, Telia retains a strong position on the retail market in Sweden in the major product segments: fixed telephony, data communications and Internet access. This applies to both the business and private consumer markets. Telia is also the largest supplier of broadband and IP-based services in Sweden.

Telia has slashed its prices on the Swedish end-customer market in recent years. Since these rate cuts, Telia’s offerings have become very competitive and the company expects the price structure will now be stabilized.

A growing proportion of voice communication is now gradually moving from the fixed access networks to mobile networks. However, at the same time, the use of PC-based services such as e-mail and the Internet is rising, with a subsequent increase across the total market for communications based on fixed networks.

Demand is also growing on the wholesaling market, in Sweden as well as abroad. Deregulation has led to a large number of new players establishing operations on the market. Many of these players lack their own networks or have only partial networks. This gives Telia the opportunity to deliver network services as a wholesaler, everything from leased lines to more sophisticated services, in Sweden and internationally.

Telia’s Swedish operations in both wholesaling and retailing mean that the reduced revenues on the retail market due to increased competition are partially compensated by higher wholesale sales. The fixed network operations in Sweden, services and infrastructure, are a profitable business for Telia and accounted for approximately 50 percent of the Group’s total revenues in 2000.

In order to develop the fixed services core business, Telia currently has two major strategic initiatives underway. One is developing broadband access and broadband services for Swedish households and the other major initiative is developing Telia as one of the major network wholesalers on the international carrier market.

**Broadband services for households**

Sweden is the country that, along with Denmark, is considered to be the best prepared for rapid large-scale implementation of broadband on the consumer market. This is chiefly due to the high level of IT maturity in the two countries, together with a high proportion of PCs and home Internet access.

The broadband initiative currently being implemented is aimed at developing access solutions for households at affordable prices as well as offering attractive services, both content services and communications services, that encourage customers to migrate from narrowband to broadband.

Telia offers different types of broadband access to households: ADSL, a combination of fiber and LAN (local network), and a combination of LAN and ADSL. ADSL is a cost-effective broadband technology that makes it possible to upgrade the existing copper-based telephone lines closest to the customer to speeds up to 6 Mbps, corresponding to today’s television-quality, audio and video.

ADSL makes it technically possible to deliver broadband to all households within a radius of four kilometers from a telephone exchange, which is approximately 90 percent of Swedish households. In 2000, Telia constructed an automated delivery system for ADSL. At present (February 2001) approximately 700 of Sweden’s 7,200 telephone exchanges are equipped for ADSL.

Demand for broadband is very strong. As of year-end, the general agreements Telia closed with rental property owners, building cooperatives and homeowners represented potential connection of 822,000 households to the fixed network.

During the year, Telia initiated the development of broadband services for the retail market in Sweden. The first broadband services, mainly in entertainment and leisure, were launched on www.startsidan.telia.se, which is the basis for the multi-portal for the retail market which is to launch at the end of the first quarter of 2001.
Integrated services for business customers
Most of the larger business customers already have some form of broadband communications. The focus for business customers is to offer solutions that integrate voice and data, fixed and mobile on a shared IP-based platform.

Another high-priority initiative for the business market is the development of services and applications that customers can lease over the Internet, paying only for the time that the service is actually used. Demand for these kinds of services is expected to grow as companies begin working in earnest in business-to-business networks.

As networks and applications grow more complex, business customers have greater need for outsourcing parts or all of their IT and communications systems. Telia is expanding its resources and expertise in order to be able to offer business customers the opportunity to outsource their IT-based communications systems.

Developing services that are distributed over or integrated in the network, for example Games on Demand, Video on Demand or other types of dematerialized services such as Centrex (network-based PBX), also reduces the impact on the environment by making hardware, diskettes and packaging obsolete.

In order to be able to develop network-based services for both household and business customers, Telia has initiated collaboration with several strategic partners.

Network wholesaling in Sweden
In order to be able to satisfy the anticipated large demand for broadband services, Telia is currently augmenting its capacity in the nationwide fiber-optic transport network in Sweden while upgrading the logical networks.

The main focus is on shifting from circuit-switched networks to packet oriented networks. Telia is now rapidly constructing a national IP-based network integrated with the international Viking Network.

Telia today has a very strong position on the Swedish network wholesaling market with by far the best network coverage and the largest range of services. In order to cement our position even more strongly, Telia is currently developing a number of new network

The Viking Network – Telia’s global IP platform
Telia has established an international fiber-optic carrier network within a short period of time.
In 1999, Telia began an aggressive initiative to construct its own pan-European infrastructure. By swapping infrastructure with other operators, Telia has also gained access to a fiber-optic network in the United States. The American and European parts of the Viking Network are integrated via the Atlantic TAT-14 cable.

The Viking Network has six major interlinked connection points – five in Europe and one in New York. Telia has set up data centers at these points where large, global content providers with high demands on security and capacity can store their servers and connect to the network.

The Viking Network, built to carry high volume IP-based traffic, is monitored from operations centers in Stockholm, Jönköping and Washington DC.
services for the external market. At the end of the first quarter of 2001, Telia will be the first Swedish operator to offer IP telephony to broadband providers who connect their customers via LAN.

**International carrier operations**

Deregulation is also generating demand on network capacity and network services on the global market. The growing use of the Internet and broadband services also makes demands on networks’ abilities to carry voice, text, data and video securely and at high speeds.

In order to be able to take a position on the international carrier market, Telia has begun establishing an international carrier network, the Viking Network. This network, mainly concentrated in Europe and the United States, makes Telia well positioned for joining the leading carriers of transatlantic IP traffic, where the major streams of Internet traffic are carried.

The Viking Network is being established cost-effectively. Telia invests in surplus capacity that can be sold or used for swaps with other owners of infrastructure. Through swapping deals, Telia has gained access to a coast-to-coast fiber-optic network in the United States covering eleven of the largest metropolitan areas.

At year-end, the Viking Network extended over 13,000 kilometers in Europe and 18,000 kilometers in the United States. The various routes began to be lit up in 2000.

The greater part of the traffic currently consists of telephony, but Telia expects that transport of IP traffic and leasing IP capacity will be the dominant products in the future. Demand for IP traffic tripled during the year 2000.

The goal is for Telia to be one of the three major network wholesalers in Europe and to own one of the five major IP-based networks in the United States and Europe.
Blend 2 cl vodka, 3 cl gin, 2 cl Poire au Cognac (pear liqueur) in a glass, fill up with lemon soda and top with a cherry tomato. That’s a Speedy Tomato!

This recipe is found at Speedy Tomato’s homepage, along with other tomato-based drinks and food recipes.

“Social technology” is a key concept behind Speedy Tomato, Telia’s international mobile portal. Heavy on the social, Speedy Tomato supports and inspires people in their daily lives and when spending time with family and friends. This is the creation of a new interface to “real life,” a helpful friend for everyday life and special occasions, with particular focus on social life and interaction. The portal also has communities for customers with shared interests, communities that can be expanded in all the countries where the portal is available. And the number of countries will keep growing.

“Most portals today focus on the technology they can deliver,” says Anne Liljeroth, Communications Director for Speedy Tomato. “We believe that people are not especially interested in technological details. They just want to know how they can use technology. Our customers can use an ordinary mobile or WAP phone, a PDA device or other mobile terminals – it’s the services that are important. We have only started, and are now working intensely on developing new services – services based on two-way communication with our users.”

Speedy Tomato AB was established in September 2000 and is a wholly owned subsidiary of Telia. The portal was test-launched during the year in the U.K. and Denmark and introduced in Finland in February 2001. It will be launched in several other European countries during 2001.

Speedy Tomato is operator-independent and Telia plans to offer services on this portal for the European consumer market without building and operating its own networks. The expansion outside of the Nordic countries will be achieved through joint ventures with local partners. Our goal is to be one of the five largest portals in Europe, which means that Speedy Tomato will build a strong consumer brand in Europe.

Speedy Tomato offers basic services with global content along with communications services and country-specific services with local content. Examples of today’s services include a personal calendar and address book, e-mail direct to a mobile phone, SMS, WAP searching, customer-selected news, ads from personally selected companies, financial news, sports, weather, etc. The portal is a multi-portal and will later on be completely access-neutral.

The portal is personalized, of course, i.e. users create their own user profiles with personally adapted services.

“We expect communities to be a major feature of the portal,” says Anne Liljeroth, “where people interested in a specific area share tips and help each other – and maybe meet in person.”
Portal operations are an important part of Telia’s transition from a traditional telecommunications company to a modern IT and service company offering a wide variety of sophisticated services. Today’s development is rapidly moving towards terminal-independent multi-portals focused on interesting content.

Portals are part of Telia’s core business for several reasons. Portals are very important tools for strengthening customer relationships. One significant aspect of this is the development of personalized portals which allow the user to configure the content of the portal to suit his or her own interests. Personalized portals will be used by more and more consumers as their start pages and gateways to all interaction over the Internet. For Telia, this means that portals can generate and secure traffic while serving as an effective platform for introducing new services.

Portal operations are also an important part of Telia’s transition from a traditional telecommunications company to a modern communications and service company offering a wide variety of sophisticated services. Using portals, Telia will be able to use and strengthen its position in fixed and mobile broadband by providing incentives for customers to move up along the value-added chain. This means that price cuts in our traditional telephony business can be compensated by revenues from new types of services that are available via portals.

Telia is one of the pioneers in portal initiatives, both for private consumers and business customers. Telia started www.passagen.se already in 1995. Today, this portal is run by Telia’s associated company SOL and is one of the most popular Internet portals in Sweden. MyDOF, launched in 1999, was one of the first mobile portals in the world.

A new phase of Internet use
The Internet has skyrocketed to become our largest source of and channel for information. More and more services are distributed and executed over the Internet.

The use of the Internet has now entered a new phase, where the focus is on sorting information and services for quick access to the desired information and services free of clutter. Portals are one way to structure information and routes and, as the name indicates, serve as doors to a world of information and services with a customized focus – the user determines the level of detail. The more preferences the user sets, the sharper the focus.

Users can combine business with pleasure in their personalized portals. An individual user may want to add a news service, for example, to obtain news about his or her areas of interest – everything from Italian politics to sports scores, even in real time. Users can also play games in the portal, listen to music, read newspapers, order films, follow live broadcasts over the Internet, complete banking transactions and do their shopping.

Portals also provide quick and easy access to a variety of services. Via portals, users can currently make travel reservations, look up telephone numbers, find the nearest pharmacy, add to their own telephone and address books and send e-mail and SMS messages. And users can manage not only their own information over the Internet, but even data for the whole family, such as schedules and memos.

Securing interesting content for portals is the most critical factor for portal penetration and determines how much time it takes to establish new consumer and business customer patterns.

Some services can be unique to the portal and possibly produced in-house, but a great many can also be linked or repackaged from other sources. External services can also be packaged and presented under the portal’s or portal owner’s brand. Connecting interesting content providers and applications to the portals has gained great strategic importance.

Portals today are developed and run by both telecom operators and other players. Operator-dependent portals are portals connected exclusively to one subscription by a particular operator. Because these are significant for locking in traffic, operators will compete fiercely using these subscription-dependent portals.

Today’s developments are rapidly focusing on terminal-independent multi-portals, i.e. those that can be accessed from all types of terminals: mobile, fixed (PC and cable TV) and via all types of access at different transfer speeds.

"Portal operations are an important part of Telia’s transition from a traditional telecommunications company to a modern communications and service company offering a wide variety of sophisticated services."

"Portals generate revenues from advertising, transactions, and communications services. Advertisers and e-commerce companies use portals to direct their offers to specific target groups."
Different sources of revenue
Portals generate revenues from a variety of sources: advertising, transactions and communications services. Advertisers and e-commerce companies use portals to direct their marketing efforts and offers to specific target groups and interested users.

More ways to create sources of revenue and earn money on portals will be developed. Operators, with their large customer bases, should be among the winners. The commercial interest in portals is not due mainly to the technology, but rather to the magnitude of the customer base and the content that portals provide.

"Securing interesting content is essential for a portal's penetration. The trend is towards more extensive collaboration, sometimes partnerships, between service providers and operators."

"Developments are now focussing on terminal-independent multi-portals, i.e. those that can be accessed from all types of terminals: mobile, fixed (PC and cable TV) and via all types of access at different transfer speeds."

Future development will be commercially driven by the creation of services beyond purely information- al services. These services will finance as well as link information to a great extent.

Operators must enter into agreements with interesting content providers and applications. The trend is towards more extensive collaboration, sometimes partnerships, between service providers and operators. This is how a more attractive information and service offering is built, to serve as the basis for revenue.

Telia anticipates that more and more sales of goods and services will take place through portals. For this to happen, portal owners must successfully establish themselves as "consumer aggregators," which means that they must bring consumers together in the same place, for example like in a shopping mall. This also enables information to be gathered about consumer patterns and sales to be focused to the advantage of both the customer and supplier. This will be the most important commercial function of portals.

Development towards multi-portals
There are no pure broadband portals on the market today. All have elements of both narrowband and broadband, and this is likely to continue for some time. There is no reason to use broadband for applications such as today's e-mail messages. On the other hand, broadband makes it possible to develop new types of services for electronic mail, for example video-mail.

Telia anticipates that all portals will offer broadband material in coming years, as well as both fixed and mobile access.

This will make the major portals multi-portals with less to differentiate between the various portals. Access to, or at least control of, a wholly owned network is essential for the success of a portal, but it is the customer base that is the most important factor and this customer base can only be maintained by the company that provides attractive services and content.

Robust growth in mobile Internet
Internet services will be reached more frequently through portals, which in turn are reached through computers, mobile phones, TVs and handheld devices (PDAs). From Telia’s standpoint, this terminal-independent or access-neutral development is a major strate-
<table>
<thead>
<tr>
<th>Portal</th>
<th>Description and market</th>
<th>Example of services</th>
</tr>
</thead>
</table>
| **Startsidan (www.startsidan.telia.se)** | The website startsidan.telia.se is Telia’s portal for Internet users. The portal has a broad range of content services and functions. This start page is the foundation for Telia’s multi-portal for the Swedish consumer market. Several broadband services were launched during the year. | The following broadband services with text, sound and video were launched during the year:  
• Hockeyrinken  
• Nyhetskanalen  
• Nöjesnytt  
• Musikkanalen  
• Games on Demand |
| **Speedy Tomato (www.speedytomato.com)** | Speedy Tomato is an operator-independent portal for mobile terminals on which Telia will offer services in the European end-customer market. The portal was test-launched during the year and will be launched commercially in 2001 in several markets in Europe. | Country-specific services with local content. Basic services with global content and communications services, such as:  
• News, weather, sports, stock market reports  
• E-mail, SMS  
• WAP searching  
• Personal calendar |
| **MyDOF (wap.teliamobile.se)** | MyDOF is one of the first portals in the world for WAP users and is available to all customers with mobile subscriptions with Telia. MyDOF was acclaimed Sweden’s best WAP portal in 2000. | • Own WAP pages  
• E-mail  
• Gula Sidorna Nära Dig (a service that locates and guides users to businesses)  
• Bank account balances  
• Ticket booking  
• Wine recommendations  
• News  
• Games  
• Search engines |
| **Halebop (www.halebop.com)** | Halebop is an operator-independent portal that is mainly for mobile terminals, but can also be accessed from a PC. Halebop was developed in collaboration with Oracle. The portal will also be launched outside Sweden, starting in Norway. | • Financial news, share prices, exchange rates  
• Transactions between bank accounts  
• E-mail, SMS  
• Music news, top hits  
• Local news  
• Lottery, gaming  
• Current film showings |
| **Navigator (www.comhem.se)** | The com hem website features a navigator for digital TV and a portal for Internet services. In 2001, the Navigator will be relaunched as a cross-media portal for TV, PC and later even mobile portals. | • Film, music, entertainment, news, weather, sports, financial news  
• TV listings  
• E-mail, chatrooms  
• Banking services  
• Shopping  
• Games |
| **Scandinavia Online – SOL (www.passagen.se, www.sol.no, www.sol.dk, www.suomi24.fi)** | SOL is an associated company that operates the largest network of portals in the Nordic countries. These portals share a common technical platform and joint product development. SOL owns minority shares in other portals, of which most are adapted to specific target groups. | • Broad range of locally adapted content services  
• E-commerce  
• Web-based meeting places  
• E-mail, chatrooms, SMS |
Telia Research – driving business renewal and innovation

The primary task of Telia Research, the Group’s research and development company, is to contribute to Telia’s business renewal and ensure the Group’s long-term competitive strength. To this end, Telia Research works together with the Group’s business areas, end-customers and other internationally leading players within IT and telecom. One of the reasons for the new organization in effect as of 1 April 2001 is to strengthen the R&D company’s position as a driving force for renewing the Group’s business.

Telia Research operates on an international level in order to be at the forefront of development, and increasingly cooperates with end-customers in order to be sure our initiatives are on target. The lead times from concept to market launch have become so short that developmental work must be completed directly where the operator meets the customer – in the marketplace. Telia Research established a smaller unit in Silicon Valley in California in 2000. Telia Research led the initiative during the year to establish Hiperlan2 Global Forum, an international open industry forum focused on reaching consensus on the next generation of wireless local networks.

Research and developmental efforts during the year concentrated mainly on the following areas:
• Personal communications
• Broadband services for home and business
• IP-based network services

System interoperability and scalable services
The trend in personal communications is towards creating new concepts and types of systems and mobile services that are available regardless of the user’s geographic location and the type of terminal and access. This requires interoperability between underlying infrastructures and systems and that the services and the information are transparent and scalable, i.e. that they function for all types of terminals and access forms. The goal is to be able to offer session mobility, which means that the service – while in use – can be moved uninterrupted from one type of terminal to another.

Wireless video right in the palm of your hand
During the year, Telia Research presented a number of noteworthy system solutions and service concepts for mobile and wireless applications. Telia Research was among the first companies in the world to develop solutions for live video to mobile terminals, Wireless Video In Your Palm.

This development is in cooperation with Mäkitalo Research Center. The concept demonstrates how live video broadcasts in combination with information services can enhance and enrich an experience, for example, a hockey game.

By equipping the players with pulse and blood pressure monitors and attaching cameras to their helmets, viewers are able to follow the game extremely close up, along with the reactions of the individual players.

“One overall goal for Telia’s R&D efforts is personal communications, i.e. securing the user’s access to services regardless of terminal, access or geographic location.”

New positioning services
The new generation of mobile networks, based on data technology and packet-switching and introduced with the launch of GPRS, makes it possible to be continuously connected to the Internet, even from mobile terminals while securing high quality reception, even of video. Combined with technologies for identification and positioning, this lays the foundation for developing completely new types of mobile services.

Telia launched positioning services during the year, including Gula Sidorna Närä Dig (a service that locates and guides users to businesses) and Yacht Position Närä Dig (a similar service tailored to boaters). Telia Research then developed these positioning services and presented the Friend Finder service concept, which maps the position of the person or thing you wish to find, for example a store, bank or an individual, on the mobile terminal screen.

Mobile electronic commerce
Telia Research began studying and developing methods for electronic commerce early on, concentrating on payment transactions.

Extensive initiatives were taken during the year to develop services for mobile electronic commerce, m-commerce. These include a concept for mobile wallets, based
on using a mobile phone to replace a physical wallet. It will be possible to use mobile phones to make payments when shopping both on the Internet and in “brick and mortar” stores, transfer money between accounts or check account balances, show identification, use as a commuter pass, play the lottery or take part in other games.

Mobile Internet, in combination with services for identification and positioning, opens up the potential for a boundless new world of services. To demonstrate the possibilities, Telia Research developed an electronic shopping cart in 2000 that replaces traditional checkouts and provides several new services.

First-class Internet service for the home
When it comes to broadband services for the home, the focus of new development is on finding methods and technologies that enhance sound and image quality. The goal is to create a first-class Internet service, effective streaming, i.e. the ability to follow video broadcasts on a PC over the Internet, and high quality IP telephony, i.e. voice over the Internet.

Future broadband services must also work on terminals other than PCs, including TVs and handheld devices, PDAs. During the year, several initiatives were implemented that are expected to yield results in 2001. Soon Internet-ready screen phones will be available that allow users to make calls, surf as well as send and receive e-mail. Affordable and easy to use screen phones are expected to attract late adapters, and thereby contribute more to the use of Internet-based services.

Virtual offices and meeting places
On the business customer front, the focus is on developing concepts for the virtual office that allow employees to communicate freely with their companies and have access to all the information and IT tools they need, regardless of their physical location.

Another area of development for the business market is the virtual meeting place, i.e. meeting rooms that are connected over the Internet and allow a team to work together as if they were all at the same location.

Telia Research is also focusing on the development of session mobility, which makes it possible to move a service between different terminals without interruption. For example, a virtual conference may be started in a room with fixed video conferencing equipment. A participant who has to leave the conference is then able to move the conference to her PDA and even to audio only if she wants to continue to take part while in the car.

Pilot tests were begun during the year on “the virtual file cabinet” and “the virtual team office.”

IP-based network services
The overall goal of the IP-based network services initiative is for Telia to be able to offer a differentiated and unique range of network services on IP, using an open and effective network platform that fully utilizes the possibilities of optical technology and allows the customer to choose price and performance. The IP Quality of Service (QoS) initiative is creating new services for Telia International Carrier, which with its transit operations will be capable of supporting IP-based virtual private networks. The routing optimization project is creating opportunities for Telia to support services with high-level requirements, such as telephony, TV and radio broadcasts over IP.

The demand for bandwidth is growing as new services are launched on the market and Telia must be able to satisfy customer demand in a cost-effective way. In its developmental work on broadband accesses in 2000, Telia Research concentrated its resources on furthering the development of ADSL and the XDSL solutions of future generations as well as on fiber-based solutions and solutions based on fixed radio.

Telia Research was also active in 2000 in developing new security architectures for IP networks and on broadband services that will enable Telia to develop services more quickly and offer customers differentiated levels of security in future services.
A new Group structure is being introduced on 1 April 2001 in order to strengthen Telia’s orientation and promote internationalization while laying the ground for Telia to participate in the restructuring of the industry. Telia’s management is divided into two constellations, the Executive Committee and Group Management.

Organization and management in 2000
During 2000, operations were organized in five business areas. Each business area had total responsibility for its respective products on all markets.

Mobile business area: Mobile networks, mobile services, and other wireless applications.
Carrier & Networks business area: International carrier operations and network wholesaling in the Nordic countries.
Enterprises business area: Companies to be divested in whole or in part.
Business Solutions and People Solutions business areas: The Telia Group’s service providers mainly on the Swedish market. Packaging and integrating the Group’s products and services with special responsibility for developing services based on the fixed network.
The President and CEO had full responsibility for the Group’s operations and the ultimate responsibility to the Board of Directors. The CEO is supported in her tasks by Group staff units, which include specialists in accounting and finance, legal issues, communications, organizational development, and human resources. To be able to consult others on decisions affecting the entire Group, the CEO has appointed a Group executive management team of seven people, including Telia’s Chief Financial Officer, head of Corporate Development and Human Resources and three business area heads.
Each business area head had full responsibility for that business area’s operations and received his or her mandate and assignment from the CEO through delegation.

Organization and management as of 1 April 2001
A new Group structure is being introduced on 1 April 2001 in order to strengthen Telia’s orientation and promote internationalization while laying the ground for Telia to participate in the ongoing transformation of the industry. The new organization makes it possible to cultivate the Swedish market more effectively.
The new business areas under formation will continue to be responsible for their respective products, from development to sales, on all markets, in Sweden and internationally.
A joint sales and customer unit for consumers and business customers is being established on the Swedish market to serve the business areas.
Telia Research is expanding its operations and will report directly to the CEO.
Telia’s management will operate in two different constellations, the Executive Committee and Group Management.
The Executive Committee handles issues concerning the Group’s strategic development, business control and Group-wide measures. In addition to Marianne Nivert, the President and CEO, the Executive Committee includes Bo Jacobsson, CFO and Head of Corporate Financial Control, Lars Härenstam with special responsi-
Five new business areas are being formed. Each business area has responsibility for its respective products on all markets. A joint sales and customer unit to serve the business areas is being established on the Swedish market.

**Telia Mobile**
Telia Mobile is responsible for the mobile network, all mobile services and for the development of integrated fixed/mobile services. The business area offers network capacity and mobile services on the wholesale and retail markets to consumers and businesses in the Nordic countries and mobile portal services in Europe. Telia Mobile largely comprises the operations of today’s Mobile business area.

Business Area Head: Kenneth Karlberg, currently head of the Mobile business area.

**Telia International Carrier**
Telia International Carrier is responsible for the international carrier operations in Europe and the United States, including some business in Sweden. The business area produces and sells international network services in the form of infrastructure, network capacity, and transport of IP and telephony traffic as a wholesaler to operators and service providers. The business area largely comprises the operations run in the existing Telia International Carrier and Telia UK.

Business Area Head: Lars Rydin, currently head of international carrier operations in Carrier & Networks.

**Telia Networks**
Telia Networks is responsible for the fixed network, fixed telephony services and data communications services as well as further development of the IP infrastructure. The business area offers network capacity and fixed telephony on the wholesale and retail markets, primarily to customers in the Swedish market, but also in other Nordic country markets and in the Baltic region where Telia has operations.

The business area also includes the Telia Net router operations.

Business Area Head: Jan Johansson, previously business area manager at Vattenfall.

**Telia Internet Services**
Telia Internet Services is responsible for the Group’s Internet services: accesses, applications and portals. The business area offers Internet services to consumers and business customers in Sweden and other Nordic countries.

Business Area Head: Indra Åsander, currently Marketing Director for Skanova in Carrier & Networks.

**Telia Equity**
Telia Equity is responsible for the Group’s stakes and interests outside of Telia’s core businesses.

Business Area Head: Eva Lindqvist, currently project manager for partial divestitures of companies within Enterprises.

**Telia Sweden – joint sales and customer unit**
Telia Sweden is forming a joint sales and customer unit for consumers and business customers in Sweden. The unit acts on behalf of the business areas and is responsible for sales, invoicing and customer care under Telia’s brand on the Swedish market through its own sales organization and through retailers.

Responsible: Anders Gylder, currently head of the Business Solutions business area.

**Telia Research**
The new Telia Research is comprised of parts of Telia Business Innovation, the Group’s Business Intelligence and Information Center, Demotel and Teldok. The unit has Group-wide responsibility for research and development within the Group and is directly under the CEO.

Responsible: Claes Nycander, currently head of Telia Research.
Stronger position as the leading Nordic mobile operator

The acquisition of NetCom ASA in Norway was one of the most important events of the year and increased Mobile’s Nordic customer base by 773,000 customers. The acquisition was an important step in our strategy for cementing our position as the leading mobile operator in the Nordic countries.

The Mobile business area offers wireless services, everything from communications services to services in information, electronic commerce and entertainment. The business area manages the operational mobile business and is represented in all four Nordic countries. In the Baltic states and Russia, the business area has a market presence through Telia’s participations in the mobile operators EMT (Estonia), LMT (Latvia), Omnitel (Lithuania) and in northwestern Russia through North-West GSM and Telekominvest.

Successful year on the Nordic market
The business area enjoyed great success across the entire Nordic market in 2000. Mobile has invested in substantial customer growth, which has expanded our Nordic customer base by a total of 1,712,000 customers. The acquisition of NetCom ASA in Norway was one of the most important events of the year and increased the business area’s Nordic customer base by 773,000 customers (at the time of the acquisition in June 2000). The acquisition was an important step in our strategy to be the leading mobile operator in the Nordic countries. The business area estimates that the acquisition will create significant synergies in the expansion of future mobile networks and the development of new data-based services.

On the Swedish market, the number of customers grew during the year by 619,000, an increase of 23.5 percent. The number of customers on the Finnish market more than quadrupled to 149,000. In Norway, the number of customers grew by 850,000, including the acquisition of NetCom ASA, while the number of customers in Denmark increased by 127,000. This customer growth is due to new services and attractive prices coupled with active marketing and market cultivation. The total number of customers in the Nordic countries at year-end was 4.6 million.

Sophisticated mobile market
The Mobile business area is active on one of the most competitive and deregulated markets. The Nordic mobile market has the highest level of mobile usage in the world with sophisticated and demanding customers.

The large customer base is one of the business area’s main assets and a prerequisite to drive the migration from fixed to mobile networks and new services. Lower mobile telephony rates will also facilitate the migration from fixed network to mobile, which will even have a positive effect on traffic development.

As the market approaches saturation, it is crucial that we focus on developing new services and new applications for mobile communications. Mobile has carried out intensive development on technical platforms and new services during the year. Competition is growing on the mobile market, along with product and service offerings, making it more important than ever to take active care of our customer relationship. The business area has accordingly carried out several initiatives to strengthen our relationship with customers and increase the already high level of customer loyalty.

Ready for 3G
Mobile is well prepared for the greater bandwidth and more advanced multimedia services of the next generation of mobile communications.
The business area is building a mobile data network, based entirely on IP technology. The new infrastructure will give Mobile a head start on offering customers new innovative services throughout the Nordic region. Data traffic is now gradually increasing in the business area’s networks and the new platform will be able to handle a substantial jump in IP-based traffic.

The IP network, which started construction during the year, will be used as a platform for both GPRS and UMTS. The most important step towards third generation mobile telephony will come with GPRS technology. During the year, preparations were made to offer GPRS services in all the Nordic countries in 2001.

GPRS provides packet-switching of data traffic at speeds up to 115 kbps, which makes it possible to be continuously connected to the Internet via a mobile phone. GPRS will initially offer speeds of up to 40 kbps.

During 2001, Mobile will be ready to offer the first UMTS services in Norway. In Sweden and Finland, UMTS services are set to be launched in 2002 and in Denmark in 2003.

In order to quickly gain access to a UMTS license in Sweden, Telia signed a cooperative agreement during the year with Tele2 AB (NetCom AB) for the expansion of third generation mobile network UMTS via a new company, a 50:50 venture which will utilize Tele2’s (NetCom’s) UMTS license.

No decision regarding participation in the bid for a UMTS license in Denmark has yet been made.

Upgrading GSM for high speed
To boost transmission capacity for mobile data, the business area began upgrading the GSM network using high speed technology during the year. This technology raises the data transfer rate from 9.6 kbps to 38.4 kbps.

High speed technology is one step in the development towards the future’s advanced mobile data services. The new technology provides faster access to the Internet, e-mail and company intranets. All the business area’s mobile customers with Telia’s premium service Mobile Data and customers with DOF subscriptions have access to the higher speed.

In order to ensure full nationwide coverage in Denmark and thereby attract more customers, Mobile applied for and obtained a GSM 900 license during the year. This investment also means that we will be able to reduce costs for domestic roaming.

In Finland, a roaming agreement was signed with the mobile operator Radiolinja, which means that Mobile is able to offer nationwide coverage for its GSM services, which in turn increased the stream of new customers.

On the Swedish market, it was time for the previously announced close-down of NMT 900. Several other countries are also shutting down their NMT 900 networks in favor of the GSM system. The business area continues to operate the NMT 450 network, however, which still has advantages thanks to its excellent coverage in sparsely populated areas and coastal areas.
Mobile portal for the European market
Several products and services were developed during 2000, all based on service, simplicity and good value in order to satisfy customer needs. Major development efforts were made on mobile Internet and broadband solutions.

During the year, Mobile was dedicated to the construction of the mobile portal Speedy Tomato, which the business area is using to establish itself on the European mobile Internet market. The portal was test-launched in the U.K. and Denmark at the end of 2000. A test-launch of the portal was also initiated in Finland at the beginning of February 2001.

This portal allows customers to select access to several functions such as SMS, WAP services, personal calendar, address book and other services. The range of services is initially limited, but will gradually be developed to meet user needs.

The resources in Speedy Tomato have been gathered in an independent company in order to boost the strength of this initiative. Cooperative agreements with content providers and application suppliers will secure the attractiveness of the portal. A partnership agreement was signed in February 2001 with the Italian company Olivetti Tecnost for establishing Speedy Tomato in the Italian market.

The MyDOF portal, previously accessible only to customers with DOF subscriptions, was made available during the year to all of Mobile’s customers, including prepaid card customers. MyDOF was acclaimed Sweden’s best WAP portal by the magazine Mobil in 2000.

Unique positioning services
New services were introduced during the year with the launch of two of the world’s first commercial positioning services designed to reach a wider general audience; Gula Sidorna Nära Dig and YachtPosition Nära Dig. The latter service provides boaters with access to local information such as the location of the nearest harbor or boat refueling station and local weather conditions.

Positioning functions are expected to gain importance as these services continue to be developed. Using the customer’s geographic position to identify offers that are of interest in that area creates unique opportunities for “targeted” offers. The business area has worked closely with Ericsson since the beginning of 2000 on the development of positioning services.

These positioning services can be used by all of the business area’s mobile customers.

M-commerce initiative
One high-priority development area is mobile electronic commerce (m-commerce), i.e. using mobile telephony for commercial and payment transactions. Mobile has joined together with the Swedish bank FöreningsSparbanken to start a project for the development of mobile payment systems.

In this collaboration, FöreningsSparbanken is responsible for payment and authorization processes while Mobile handles the technical platform, adapted to SIM cards and PKI (Public Key Infrastructure) certification. Pilot tests were initiated on a number of

Permitto Care
– IT for public home health care
Mobile Internet may revolutionize fieldwork in home health care. Workers in this industry are constantly on the move and need to quickly reach their “home-base” in order to report information or receive assistance in a particular situation.

During the year, the Mobile business area worked together with Sweden’s public home health care organization to develop Permitto Care – a mobile Internet-based service that provides caregivers, an extremely mobile group, with access to critical data and allows them to quickly document and report important events or actions. The service can also be used to assign tasks and coordinate staff. The service is a great time-saver, which means that the caregivers have more time to provide healthcare and other related services.

The public home health care organization leases Permitto Care from Mobile, which is responsible for operation and maintenance and helps train users. The public home health care organization obtains the required mobile terminals and Internet connections. This organization is the first to use mobile Internet for its communications needs, but the demand for this type of service is expected to be very big from other industries with a large number of field workers.
services during the fall. We expect to be able to launch services nationwide during the latter part of 2001. The business area already offers the mobile e-postgiro service.

New types of SMS services were launched during the year, including functions for sending postcards from mobile phones and downloading ring signals. The use of SMS was greatly expanded during the year and serves as a gateway to mobile data services.

Together with the company Stockholm Parkering, the business area completed pilot testing on "mobile" payment for parking. The service is called Park&Ring.

Subscriptions without subsidies
The non-subsidized subscription "Mobitel Fri" was launched during the year. The concept behind "Mobitel Fri" is that the customer does not need to sign a 12- or 24-month contract. From Mobile's standpoint, this type of subscription means that there is no discount for the terminal, which reduces the cost of recruiting customers.

The Mobile business area was the first in the world to connect telecommunications and data communications over IP. This is an exciting new technology in which local networks are linked together with GSM using IP. This initiative is called Telia Bright and offers services such as e-speak, Wireless Office and WAP access to the company intranet.

Wireless Application Service Provider
Mobile began operating as a WASP (Wireless Application Service Provider) during the year. The first WASP service, Permitto Care, developed in cooperation with the public home health care organization, is used in healthcare and medical services and is primarily targeted at municipalities and county services.

Global Area Network
The business area also became one of the first operators in the world to launch the Global Area Network service, a new generation of satellite services with transfer rates comparable to ISDN rates (64 kbps). The service uses INMARSAT's satellite system and covers a large part of the Earth's surface.

Successful joint ventures
The New Business unit, which is responsible for creating and developing alliances and partnerships, was very successful. One example of this is the cooperation between the business area and Oracle for the mobile portal Halebop, which is run by the company Svenska Drutt AB. Mobile has also been involved in a joint venture since December 1998 with Wireless Maingate AB for the development of different types of services for machine-to-machine communications (M2M).

Mobile Internet in-flight
New Business also participated in the development of HomeRun, a wireless broadband access, which is gradually being installed in public meeting places, such as hotels and train stations, where people can quickly and easily connect to the Internet and their companies' intranets. HomeRun, which provides transfer rates up to 11 Mbps, was installed at locations around the country during the year, including 80 hotels.

The business area signed an agreement with SAS in 2000 for installing HomeRun in all of the airline's international lounges worldwide. The parties have also joined together to test and implement wireless Internet access onboard airplanes. This will make SAS the first European airline to offer passengers the opportunity to send and receive e-mail in-flight.

Interconnect rates
The ongoing legal action between PTS and Telia reached an interim order in the county administrative court in December. The court decided that Telia's interconnect traffic will be compensated at SEK 1.35 per minute. This rate is applicable as of 8 January 2001. The Mobile business area has petitioned the court for a substantially higher rate for terminating traffic.

During the year, 29.5 percent of First National Holding was acquired, which holds 85 percent of the investment company Telecominvest, which in turn has interests in several mobile operators in northwestern Russia.

The participating interest in Thoreb ITmobil AB was divested. The company's operations were focused on the development and sales of mobile information systems for public transportation.

Focus on core business and streamlined operations
In order to ensure a continued positive development in the profitability of the mobile business, the Mobile business area has implemented a refine and focus strategy while carrying out streamlining and efficiency measures. Operations that do not belong to the mobile core business are transferred to another business area or are outsourced. During the year, the network contracting operations (construction and operation of mobile networks) were moved to the Carrier & Networks business area.

A strong employer brand
The demand for skilled employees is extremely high in mobile communications. Mobile's unique Nordic position makes it a very strong "brand" as an employer, which makes recruiting new staff easier and facilitates competence development for existing employees. Responsibility for business development and employee development was divided during the year within the Swedish operations, which is expected to add to the focus on competence development and skills recruitment.
A leading player on the network wholesaling market

The rapid expansion of the Viking Network has made Telia one of the few operators able to offer telephony, IP traffic, and network capacity in its own pan-European infrastructure. Telia International Carrier is also one of the largest carriers of transatlantic IP traffic. At the same time, greater demand from external customers and attractive offers have helped Skanova strengthen its position on the Swedish wholesaling market.

With its substantial experience and knowledge of constructing and operating networks and developing network-based services, Telia has quickly achieved a position on the network wholesaling market, both in Sweden and globally.

Through Skanova, Telia has already become the leader and the largest company on the Swedish network wholesaling market, with nationwide transport networks and different types of logical networks and access to practically all businesses and households in the country.

Telia was also an early entrant on the international IP market. When Internet traffic took off after 1995, Telia was the first operator in Europe to obtain a license for constructing IP networks in the United States. At about the same time, Telia established an IP connection between Stockholm and New York and was then able to quickly establish itself as a transatlantic IP carrier, where the major streams of Internet traffic are carried.

Objectives and strategies
The goal on the Swedish wholesaling market is to secure Telia’s leading position through continued development of the infrastructure and further refining of network solutions for the external market.

On the global wholesaling market, Telia’s goal is to be one of the three leading network wholesalers in Europe and to own one of the five major IP networks in Europe and the United States. The strategy here is to quickly establish a cost-effective IP-based carrier network offering high-quality services at competitive prices.

Skanova
As of 1 October 2000, Telia’s network wholesaling business in Sweden has been run as an independent unit under the Skanova brand. Sweden is the main market, but some offerings are also marketed in the other Nordic countries.

Skanova offers services in six product areas:
- broadband/Internet
- customer-specific data communications solutions
- capacity
• partner products (solutions that combine Skanova’s products with those of another supplier)
• telephony
• interconnect

Telia was among the first telecom operators to take advantage of the opportunity to do business on its own network capacity. Telia began actively selling network products to operators and service providers in addition to offering the interconnect traffic stipulated by the regulatory authorities.

Skanova is the clearly dominant network wholesaler in Sweden and has, based on network capacity and infrastructure, the best market coverage in the Nordic countries.

Telia’s own business areas are Skanova’s largest customers, although demand from external players is showing robust growth. In 2000, the number of external customers rose from 50 to 120 and sales from external customers accounted for approximately 15 percent of Skanova’s total net sales.

Heavy investment in packet oriented networks
Skanova invested MSEK 4,340 during the year. Major initiatives are underway on network development, and on developing different network products and offerings. The main emphasis is on improving the infrastructure from a circuit-switched network to a packet oriented network, which is more cost-efficient and better equipped to meet the surging market demand for broadband services.

The domestic fiber-optic network, which functions as a transport network for the logical networks (ATM network, IP network, telephony network, mobile network), was expanded during the year at a rate of 40,000 kilometers of fiber pairs per month. Capacity was also greatly expanded using dense wavelength division multiplexing (DWDM), which multiplies the transfer capacity of a single fiber pair.

The broadband fiber-optic network currently links 3,000 locations throughout all of Sweden’s municipalities. The percentage of fiber closest to the customer has also jumped due to the great demand. Major initiatives have been carried out in Stockholm, Gothenburg and Malmö, as well as other locations in Sweden. At year-end, 121 Swedish cities and towns had complete fiber-based infrastructures.

Of the logical networks, the national IP network is currently being expanded at a rapid pace. The Swedish IP network is integrated with Telia’s global IP platform (the Viking Network), making it cost-effective and simplifying IP connectivity with other operators’ networks.

The ATM network, a circuit-switched nationwide network for advanced data communications, was upgraded to higher speeds and further condensed.

40,000 customers with broadband connections
An automatic ADSL delivery system has been built up to meet strong demand for broadband from Swedish households. Skanova is increasing delivery capacity in pace with demand. Nearly 40,000 customers had broadband connections via ADSL or LAN by the end of the year.

“As during the year, Skanova constructed an automatic delivery system for ADSL. Nearly 40,000 customers had broadband connections via ADSL or LAN by the end of the year.”

Telia’s fiber-optic broadband network in Sweden
Skanova has built a fine-mesh fiber-optic network in Sweden that connects 3,000 locations throughout all of Sweden’s municipalities. In addition, Skanova has built fiber-optic rings in 121 Swedish cities and towns. The figure shows levels 1 and 2 of the network.

The majority of household broadband connections are based on ADSL, but Skanova also delivers other solutions, such as a combination of fiber and LAN. LAN solutions were delivered during the year to about 40 building cooperatives.

Skanova and Telenordia reached an agreement in February 2001 on delivery of broadband connections based on ADSL.

IP telephony and other new services
The TeleHost service was launched during the year, allowing companies in Sweden to offer fixed telephony as a complement and added value to their other products. Skanova produces, operates, and maintains the service and provides billing data. The service is used by a variety of companies including abonnera.com, HemEl, and Norrköpings Miljö&Energi.

On its own initiative, Telia opened its Swedish access networks to competing operators and service providers in March 2000. In preparation for the EU directive that took effect on 2 January 2001, Skanova will launch additional access products including shared lines, which allows operators to lease a higher frequency band in copper lines for their specific services while telephony services continue to utilize a lower band.

As of March 2001, Skanova is the first Swedish operator to offer IP telephony to broadband providers who connect their customers via LAN.

“As of March 2001, Skanova is the first Swedish operator to offer IP telephony to broadband providers who connect their customers via LAN.”
First part of the Viking Network lit up in the U.S.

Telia’s U.S. presence took a dramatic turn in the year 2000, moving from an international gateway provider to a full-fledged wholesale backbone network provider. Telia is lighting up 11,000 route miles of fiber-optic network with 11 points of presence in key metropolitan areas. When the network is completed later in 2001, the U.S. segment of the Viking Network will be capable of carrying domestic and European, Internet, data and voice traffic at speeds of up to 800 Gbps.

In New York, while international voice services have been available since 1996, Telia’s network service began in January 2001, including backhaul services to our transatlantic connection to the TAT-14 cable system. Service will begin in the East Coast region followed by the Midwest in March. The West Coast will be in service in June. In July, interconnection between the East and West Coasts via a diversified and fully protected network will be operational. Both Coasts’ most northern network points, Boston and Seattle, will be added in the fall of 2001 to complete the nationwide network.

“Whereas most of Telia’s competitors are trying to grow as quickly as possible and establish the biggest market share, Telia’s business strategy focuses on being a quality provider with competitive pricing. As competition intensifies, Telia’s superior ability to manage costs translates into long-term profitability,” explains Stephanie A. Lokmer, Vice President – Business Development.

During 2000, in addition to implementing the U.S. network, Telia focused on establishing internal tools and building a highly skilled team for its U.S. operations. Besides being a facilities-based service provider, Telia manages its own network operations center (NOC) – an important advantage for successful customer service relationships.

The flexibility of Telia’s fiber-optic network is a competitive advantage, providing a cost-effective and technically superior alternative to established carriers on the growing wholesale market.

Prior to joining Telia, Stephanie was an international business development and marketing consultant, and founded and led a marketing communications agency. In these capacities, Stephanie advised European and U.S. telecom carriers, broadcast cable companies and pharmaceutical and manufacturing companies. For these companies, Stephanie opened up new markets in Germany, Switzerland, Canada, Mexico, Japan, and the Middle East.

When completed in the fall of 2001, the Viking Network will cover the 11 largest metropolitan areas in the U.S., where more than 75 percent of long-haul traffic is transported.

Telia International Carrier

Telia International Carrier was formed in March 1999 as an independent unit in the Carrier & Networks business area. Its mission is to produce and sell international network services to other operators and service providers on the entire global market.

At the same time, Telia began an aggressive initiative to construct a pan-European fiber-optic infrastructure, the Viking Network. The strategy was to rapidly establish a high-quality and cost-effective international IP-based carrier network. A consolidation of the international carrier market is anticipated within the next two or three years, and it is vital that Telia be among the major players.

Owning the network gives Telia International Carrier control over both costs and the quality of the network, while making it possible to develop value added services. As the electronic networks carry more complex information, in greater volumes and higher values, the demands on network quality and security are becoming steeper.

Prices are declining as access to capacity increases on the global market. In order to create a cost-effective carrier network, our strategy is to invest in surplus capacity, which can be sold to other parties and the revenues can be used to keep down the costs of entering the market and for swapping capacity with other infrastructure owners. This will allow Telia to expand the geographic reach of the network further or to increase the density of coverage.

The rapid pace of expansion has made Telia one of the few operators today able to offer telephony, IP traffic, and network capacity in its own pan-European infrastructure. International Carrier is also one of the largest carriers of IP traffic over the Atlantic and one of the first European operators to begin doing business in the United States with a wholly owned network.
Five main products and continuous refinement

Telia International Carrier offers five main products, more or less refined:
- infrastructure (ducts and fiber)
- capacity (point-to-point and wavelength)
- value added services such as collocation of equipment, operation and maintenance
- transport of telephony
- transport of IP traffic

The company’s product offerings are continuously refined. Telia International Carrier launched a global IP-VPN service in early 2001. The service is aimed primarily at Internet Service Providers (ISP), which resell the service to end-customers.

The IP-VPN service gives business customers access to an IP-based virtual private network with global coverage that can be used for all types of communications — voice, data, video — within the company, as well as externally with customers, partners and suppliers.

The Viking Network — one of the world’s largest IP networks

Telia’s international fiber-optic carrier network, the Viking Network, was further expanded during 2000. A total of MSEK 6,576 was invested during the year, of which the greater part was to install ducts and fiber as well as capacity for dense wavelength division multiplexing, DWDM.

Several agreements were signed during the year for swapping infrastructure with other infrastructure owners and for the sales of infrastructure, capacity, service and collocation to operators and service providers.

In Europe, the fiber-optic network’s reach was extended from 4,070 to 13,000 kilometers, while ducts were extended from 1,900 to 5,300 kilometers. The following routes were brought into service in 2000: Northern Nebel-Kolding-Århus, Strasbourg-Frankfurt, Stockholm-Malmö, Malmö-Drage–Copenhagen, Copenhagen-Kolding-Hamburg, Oslo-Gothenburg, Gothenburg-Helsingborg, Helsingborg-Helsingör-Copenhagen and Amsterdam-Hamburg.

The fourth quarter of 2000 saw the roll-out of the Scandinavian section of the Viking Network, Stockholm-Helsinki-Copenhagen-Oslo, as well as the London-Brussels-Amsterdam, Amsterdam-Düsseldorf, Amsterdam-Hamburg, and Helsinki-Haraldsholm routes, and the German domestic section of the Viking Network.

In Europe, continued network expansion is underway in the Czech Republic, Austria, and Hungary. In partnership with the Russian operator Rostelecom, International Carrier was awarded a license to design a fiber-optic cable for the St. Petersburg-Moscow route and a submarine cable connecting Finland, the Baltic states, Poland, and Russia.

Positioned network

Swaps with two American operators during the year gave the business area access to an 18,000-kilometer-long fiber-optic network in the United States with coverage to most of the larger urban areas. The American network is integrated with the European part of the Viking Network via the TAT 14 Atlantic cable, in which Telia holds a 5.9 percent stake. Work was initiated during the year on equipping the network with IP routers and wavelength capacity.

The network in the U.S. will transport both IP traffic, data and voice (telephony) at speeds up to 800 Gbps.

The first network route New York–Miami (East Corridor) was lit up at the beginning of 2001. Next will be the Midwest (March) and West Coast (June), after which the West and East Coasts will be linked. Once the entire network has been brought into service, which is expected to be in the fall of 2001, the American section of the network will cover 11 of the largest American cities, which account for 75 percent of American long-distance traffic. This means that Telia’s carrier network is strategically positioned in relation to the American traffic patterns.

In the spring of 2000, Telia acquired the operations of the U.S. Internet service provider AGIS. Through its acquisition of AGIS, Telia International Carrier gained Tier 1 status in the United States as well as access to an IP network, which will be integrated with the Viking Network. The operators that have Tier 1 status are able to freely swap traffic with each other at no cost.

Huge demand on IP

Through the Viking Network, Telia has one of the largest IP-based networks in the world using our own share of the infrastructure. The network is monitored from operations centers in Stockholm and Jönköping. A third operations center will be opened in Washington DC in the beginning of 2001.

The Viking Network has six major interlinked connection points — five in Europe and one in New York. Telia has set up data centers at these points where large, global content providers with high demands on security and capacity can store their servers and connect to the network.

Telephony is currently the dominant type of traffic, but IP traffic and leasing of IP capacity are expected to become the more significant products further on. Demand for transport of IP traffic and leasing of IP capacity tripled during the year.

The number of Points of Presence (POP) in the Viking Network expanded from 27 to 52.

Environmental management system

Carrier & Networks established an environmental management system that also includes partners, suppliers, and contractors. The system integrates environmental requirements into our purchasing routines and ensures that scrap and residual products are handled responsibly.

“The Viking Network is one of the largest IP-based networks in the world in terms of our own share of the infrastructure. The network is monitored from operations centers in Stockholm, Jönköping and Washington DC.”
Business Solutions offers a broad and complete range of basic and premium services in fixed telephony, data communications, mobile solutions and Internet. The basic components are used for creating both standardized systems and more customized solutions. The business area is also well positioned on the emerging ICT market (Information Communication Technology), which entails total responsibility for integrated IT and communications solutions, including hardware and applications.

Although Business Solutions’ main market is Sweden, the business area also has operations in Denmark and Finland as well as the U.K. and Spain to a lesser extent. This business area also manages Telia’s shares in several operator companies in the Baltic region.

On the Swedish business market, Business Solutions is the largest player with respect to both fixed and mobile telephony as well as data communications traffic. The business area is also by far the largest supplier of IP solutions and broadband solutions and already delivers a variety of broadband solutions to most of its larger business customers.

Fixed telephony represents 50 percent of Business Solutions’ revenues. This product area is highly competitive with deeply slashed prices in recent years. However, the basic fixed telephony business reports strong profitability and the business area has a relatively stable market position.

**Strategic focus**
The goal of the business area is to consolidate market leadership on the Swedish business market and become one of the leading providers of integrated solutions with increasing focus on IT. The objective is to significantly increase the business area’s share of its customers’ IT budgets – by being the best at helping them enter the new networked world and making their IT management more cost-effective. Another objective is to strengthen Business Solutions’ position in the SME segment (small and medium-sized enterprises).

The major business opportunities lie in showing customers how new solutions can yield greater benefit and improve their competitive power by means of new functionality and more effective communications. This can be realized by moving from mainly fixed services to a combination of fixed and mobile services, which reflects and even anticipates the development of customer needs.

The cornerstone of Business Solutions’ strategy is to
- Safeguard Telia’s position regarding current high-volume services in fixed telephony and data communications;
- Offer new superior functionality by integrating voice and data communications as well as fixed and mobile communications based on IP;
- Focus on the Swedish market and offer customers global reach;
- Develop new volume services as an ASP (Application Service Provider) as well as in outsourcing, hosting and workstation services, among others;
- Streamline and fine-tune existing operations by increasing the efficiency of work processes and market cultivation, while improving customer service and interaction.

**Healthy growth in telecom-related IT services**
The market for basic telephony services to Swedish businesses continues to experience increased competition, while demand for telecom-related IT services is surging. Business Solutions’ strong market position and broad expertise in Internet and mobile technologies lay a solid foundation for participating in the powerful expansion of telecom-related IT on the business market.

**Five benefit areas to satisfy customer needs**
At the core of Business Solutions’ operations is its complete range of telecom and IT products that can be combined and integrated
into flexible solutions that support companies and their business development. The concept is that the customer chooses benefit before technology, with Telia’s guarantee that the technology works.

The services can be grouped into five benefit areas, which can all be combined with each other in different configurations:

• **Marketplace** — all the services that affect communications with our customer’s customers, for example contact centers, own websites and portal solutions, including all the services applicable to electronic commerce and Internet banking. This area is growing very rapidly.

• **Intercompany communications** — voice and data separately or combined in an IP solution, between and within offices. The growth in this area has benefited from the transition to personal telephony and the migration towards IP solutions.

• **Outsourcing** — more and more companies are choosing to outsource IT network operations and management to telecommunications companies in order to be able to focus on their core businesses. This is a rapidly expanding area.

• **Flexible Office** — IT and communications tools for employees working from home or away from the office on business trips, e.g., mobile services and standardized software available in the customer’s network. Business Solutions is cultivating collaboration with important partners in this area.

• **Communication with suppliers and customers** — solutions in e-commerce, interactive voice response, extranets and e-mail, which support a company’s needs for effective communications with its customers and suppliers.

The business area’s five identified benefit areas are facilitating rapid growth and compensating for lost revenues due to slashed telephony rates. This new focus is aimed at considerably raising the value added of the business area.

The focus requires a continued fast pace in the development of new services based on extensive customer benefit. The business area is establishing strategic partnerships in order to do this at a reasonable cost.

IP-based solutions dominate

A large proportion of the business area’s customers already have broadband communications. Telia’s Business Solutions is the leading supplier of IP and broadband solutions on the Swedish business market in terms of the number of accesses (connections), number of customers and market share, and offers the entire range in its portfolio, including accesses, corporate networks and applications.

Business Solutions is making great strides in moving existing services and networks to IP and Business Class IP networks, including accesses and applications with increased security and a higher service rating. It is estimated that nearly half of the traditional tele-

---

**Centrex – the PBX that is always state-of-the-art**

“The advantages are clear,” says Per Näslund. “Not only are we free from investing in traditional PBX equipment, but Centrex also makes the PBX always available, regardless of our location.”

Per Näslund is in charge of telecommunications at FöreningsSparbanken. This bank has had a subscription for Telia’s network-based PBX since December 2000 and has begun rolling out the solution at its smaller branches.

Centrex 2000 is based on an IP platform and is a revolutionary breakthrough – a software PBX instead of hardware. In principle, Centrex is a computer program.

“We have a functional agreement with Telia,” explains Per Näslund. “We purchase several functions that we deem to be important, and we are then able to add functions and cancel others. The goal is to find a common base functionality that we can implement nationwide.”

Centrex is available in Telia’s network and the service can be customized to each company’s specific needs.

Centrex supports all existing forms of connection — DECT, GSM, ISDN and the local IP network. It can also be connected to the company’s existing PBX and provide all existing extensions with the same easy-to-use switchboard functions. It doesn’t matter where the company’s employees are or the type of phones they use, all switchboard functions are available at the touch of a button. And calls can be forwarded to a mobile phone anywhere a network is in place.

Since Centrex can be reprogrammed, it is always state-of-the-art.

New technologies and functions introduced on the market can easily be integrated into Centrex. There is no risk that the company will outgrow the PBX since the capacity can always be adapted up or down.

“The flexibility and scalability are clearly great advantages,” says Per Näslund. “When Telia develops new functions, we will definitely be interested.”
com and datacom business will have migrated to IP within the next three years. IP-based solutions already dominate the scene in today’s data communications.

**New functions available via the network**

Business Solutions is currently working on developing its role as an ASP, aiming to make more of Telia’s services and applications available over the Internet. The concept is based on building application “libraries” that the user leases over the Internet, with customers paying for the time that the application is used. Demand for this type of application is expected to become very high as companies begin working in earnest in business-to-business networks.

During the year, Business Solutions laid a platform and began development work in the ASP segment. Business Solutions has also forged alliances with several strategic partners specialized in business and accounting systems. The development of applications is focused on making solutions scalable and being able to offer solutions on the international market, for example through licensing.

Current ASP offers include NetApplication Office (MS Office suite), solutions for electronic commerce and Internet retailers, e-mail and web applications such as Instant Office, Instant Education, Instant File Manager and Instant School.

**Outsourcing – an important target area**

One of the business area’s important target areas is operating and maintaining our customers’ communications and IT systems. In order to further enhance its expertise, Telia IT-Service, which specializes in IT and communications systems, was transferred to Business Solutions during the year.

Telia’s offers on the outsourcing market include not only system operation, but also system management, which means that Business Solutions takes responsibility for upgrading the systems as needed.

**Stronger market position**

The expansive customer base is the business area’s strongest asset. Business Solutions has a total of 58,000

> "Business Solutions’ expansive customer base is its strongest asset. Increasing our deliveries to existing customers is more important for growth than winning more customers and geographic expansion."

---

**One number for anywhere access**

What if you could have a single, personal telephone number that you could use to call from your mobile phone, PC, multimedia terminal or an ordinary telephone whenever you need, from anywhere?

You can!

In the summer of 2000, Telia was the first company in the world to sell GSM telephony over IP networks, in the form of BrightOffice – the wireless office. This solution connects data, Internet, mobile and fixed telephony in the same network, the company’s local network (LAN). GSM base stations are connected to the local network, providing GSM coverage for local traffic.

Fixed telephony can now be moved from PBXs to the local network where both GSM and IP telephony are integrated. The solution also includes support for operator functions. BrightOffice can simplify and streamline communications for companies with employees who frequently work outside the office, creating a more flexible work environment. Outside the office building, the phone works like an ordinary GSM telephone with a WAP browser. This telephone gives the user access to the company’s databases wherever there is GSM coverage. Inside the office, the phone works as a mobile at a flat rate.

Telia’s current solution is based on Ericsson’s product GSM on the Net.

“Many experts claim that the possibility of GSM over IP will be as revolutionary for business customers over the next ten years as GSM and the Internet were during the 1990s,” says Pelle Lindvall, responsible for Telia Bright, which is jointly owned by Business Solutions and Mobile.
customers. Several successful marketing activities were carried out during the year aimed at winning back telephony and Internet customers in the small and medium-sized business segment, who had opted for another operator to provide basic telephony, partly in connection with the carrier preselect reform.

Business Solutions concentrates mainly on the Swedish market, focusing on offering global communications solutions together with Infonet for customers with international activities.

Business Solutions’ already strong position in the corporate customer segment was further reinforced during the year. Global communications platforms were delivered to several major Swedish companies such as Stora Enso and Sandvik. The network delivered to Stora Enso is an IP-based broadband network that connects 15,000 users to 400 locations around the world.

In Denmark, major efforts have been made during the year to streamline and improve profitability in telephony, data communications and Internet. The Danish market demonstrates great similarities to the Swedish and the business area expects to be able to take a position on the emerging ICT market, though with a more limited range than in Sweden.

Business Solutions also has a focused portfolio of pan-Nordic services for Swedish companies with operations in other Nordic countries.

More efficient distribution
Our continuous efforts to raise profitability in the business area have included eliminating unprofitable products and modernizing business support IT systems.

In order to create more efficient distribution, an adjusted organization with two main sales channels – Telia Partner and Telia Online – was brought into service on 1 January 2001.

"Two main sales channels – Telia Partner and Telia Online – create a platform for closer cooperation with customers and a cost-effective, accessible channel for our standard products."

Telia Partner is the channel for customers who need sophisticated, customized solutions. This is where customers meet specialists in integration, network solutions, IT, mobile technologies and outsourcing.

Telia Online is a cost-effective sales channel that allows customers to quickly and easily order products and services from the standard range and packaged offerings anytime, anywhere. Sales are handled via a portal with 24-hour service and self-service capabilities.

The new sales channels will help customers find exactly the Telia product or service that they need.

New services and new functionality
Demand for broadband solutions continues to climb. The year 2000 saw the development of several IP-based services – both open Internet-based and more company-specific solutions such as virtual private networks over IP. The PlaNet service was launched during the year, which is a total broadband solution for small and medium-sized businesses that want to connect their offices in one shared network with transfer speeds up to 100 Mbps. The market reception has been very positive.

A new Centrex platform was developed during the year. The solution, which is a network based exchange with integrated telecom, mobile and IP-based communications capabilities, has been very well received on the market and has already been sold to several customers, including the City of Gothenburg (8,500 connections) and the City of Stockholm (17,000 connections).

Business Solutions was the first in the world to provide solutions that link local networks and GSM over IP. Several customers are currently testing the service.

The number of Internet accesses rose during the year. Telia Business Broadband ADSL was launched with transfer speeds up to 2 Mbps over a company’s ordinary telephone line and with 24/7 service.

Several new Internet applications were launched, such as Telia Instant Intranet for building information intranets, and Telia Instant Education, a platform for learning in schools and businesses.

Additional services were added to the webhotel service during the year, including Telia Dynamic Web, a platform and tool for creating websites with advanced functions and interactivity.

Telia Streaming Media, a service for web-based TV broadcasts – "Internet TV" – has won the respect of leading production companies and is even used by Sveriges Radio, SVT, ICA, several banks, AMS and Dagens Industr.

Business Solutions is the leading provider in the area of contact center services. A number of new deals were made during the year. SJ, the Swedish state railways, which has one of Sweden’s largest customer service divisions, signed an agreement with the business area for the delivery of solutions for managing all of SJ’s incoming telephone calls concerning ticket sales and traffic information, as well as supporting SJ’s expansion of its web-based services.

Today’s businesses need to build customer relationships through interaction over the Internet. This is why Business Solutions has developed two new services in its e-service offerings; a tool that allows customers to call, chat and send e-mail via the company’s website and a system that manages the company’s incoming e-mail effectively and intelligently.

Telia Reflex, which was launched during the year, lets customers control their telephony usage by viewing invoices, analyzing traffic and managing their own subscriptions on the web. Many customers see substantial value added in this tool and the service has contributed to increasing the business area’s attractiveness as a supplier of basic telephony.

Cooperation with FöreningsSparbanken for e-commerce
The demand for electronic commerce solutions is on the rise in Sweden.

Telia and FöreningsSparbanken decided during the year to cooperate on forming a jointly owned company for the development of e-commerce solutions."

"Telia and FöreningsSparbanken decided during the year to cooperate on forming a jointly owned company for the development of e-commerce solutions."
More affordable basic telephony and new services

Customers are migrating from narrowband to broadband. During the year, People Solutions launched a service based on ADSL technology, which gives consumers unique opportunities for obtaining broadband. At the same time, several broadband services were launched on the website startsidan.telia.se, which is the starting point for a new multi-portal aimed at the Swedish consumer market. As competition on the market is becoming more concentrated on winning profitable customers, the business area is focusing more on “customer share.”

The People Solutions business area offers fixed telephony, Internet, broadband access and information services. The business area aims to be a full-service supplier to private individuals and small business customers with attractive offerings and good service adapted to customer demands at competitive prices.

People Solutions has three strategically important roles in the Group – as an important promoter of the Telia brand in Sweden and Denmark, as a supplier of Telia’s comprehensive product portfolio to the consumer and small business market, and as a platform for building a strong business position in the new “e-world.” A new multi-portal with a continuously growing share of broadband services will play a central role in this development.

Growth is driven by technological development, which is moving from dial-up Internet (PSTN and ISDN) to broadband (ADSL and LAN). With its large customer base, Telia has both unique opportunities and a special responsibility to influence this development while ensuring that real value is continuously created for customers.

People Solutions’ main market is in Sweden, where the business area leads the market for fixed telephony and dial-up Internet access (PSTN and ISDN) as well as broadband. The business area also holds a strong position on the consumer market in Denmark as the second leading company for fixed telephony, Internet and cable TV. The business area has operations in Finland and on the cable TV markets in the Baltic states and Russia via associated companies.

Goals and strategies
The business area’s goals and strategies are to:
• Maintain the leading market position in voice telephony in Sweden in selected segments by encouraging customers to use Telia for a greater part of their telecommunication consumption, thereby increasing the customer share;
• Be the leading supplier of broadband services and Internet traffic to Swedish households by being first to market with a wide range of access products and content services;
• Attract customers to move to broadband through the initiative to make a third generation multi-portal available to the Swedish consumer market;
• Secure good profitability in the business through continuous improvements, streamlining, and effective marketing channels.

Focus on customer share
The People Solutions business area has a very large customer base – 4.4 million telephony subscriptions in Sweden. As the market becomes more concentrated on winning profitable customers, the business area is focusing more on “customer share” while working to maintain its market shares.

There are currently approximately 1.4 million Swedish customers who have at least three different subscriptions (fixed, mobile and Internet). Of these, only 25 percent have bundled their subscriptions with one individual operator. This means that there are great opportunities for increasing customer share in a substantial part of the customer base, thereby boosting the share of profitable customers. The tools to do this include the loyalty program Telia Advantage (Telia Fördel), which has quickly become a great success, along with expanded product and service packages.

In order to streamline its marketing, People Solutions is dividing the market into five main segments. During the year, the business area promoted a number of successful offers targeted at specific customer groups, such as Internet offers to young consumers and offers to small-business owners for ISDN upgrades and Telia Instant Web.
A fast-paced market
The Swedish communications market is growing in value, despite falling prices. Access-neutral and traditional mobile services are the fastest growing segments. New mobile services and products for broadband access, for example cable TV, ADSL, LAN and various radio-based solutions, are expected to yield positive growth in coming years. At the same time, the number of subscriptions per household is on the rise, which also contributes to growth.

A new consumption pattern is developing on the Swedish market today. An increasing part of fixed telephony is being replaced with mobile communications and e-mail. As a result, revenues from fixed voice telephony are on the decline while the total market for communications is growing. This gives Telia great opportunities to expand its business and secure customer relationships by moving customers from fixed voice telephony to new services in mobile communications and Internet with more broadband features.

Competition on the household consumer market in Sweden is highly developed with some 60 operators in fixed telephony, approximately 20 Internet operators and 15 broadband suppliers. This has led to very competitive pricing. Telia’s price adjustments in 2000, however, have made it more difficult for the market to focus on price alone and more players are now starting to set themselves apart with a combination of service, brand, individual offers and bonus clubs.

On the Internet market, we will see a shift to different forms of broadband access such as cable TV, ADSL and LAN solutions in coming years. The development will be gradual, which in the short-term means that there will be a continued market for dial-up Internet services.

Sweden and Denmark positioned for broadband
According to analysts (Forrester Research), the Swedish and Danish markets are the best positioned countries for a rapid introduction of household broadband. The demand for broadband from

Information and entertainment "on demand"!

Play wacky jungle tennis! Or race against Schumacher in your own Ferrari through the streets of Monte Carlo!

Broadband will have greater impact on everyday life in 2001, especially when the People Solutions business area launches its multi-portal in the early spring.

The multi-portal is a very broad initiative aimed at making life simpler and more enjoyable for all consumers. The most popular action, sports and adventure games will be available for customers. The goal of a multi-portal is to be personal, i.e. to reflect the user’s interests. A multi-portal is integrated by connecting different suppliers and services and can be accessed via PC, TV, mobile phone and PDA.

Broadband is a general term for high speed connections that enable potent combinations of audio, video and interactive applications. Several broadband services were launched at the end of 2000 for sports, games, news, entertainment and music on Telia’s upgraded start page.

Telia was the first company in the world to offer Games on Demand – games played on the Internet, paid for per use. This service, launched in the spring of 2000, is only available to customers with broadband connections. A special invoice has been developed for the service that can be used in the future for handling Telia’s and other suppliers’ micropayments on the multi-portal.

Games on Demand is a service developed by Telia together with Microsoft and the Swedish company Vision Park and is based on a platform from Exent. Games are supplied by companies such as Electronic Arts – the world’s largest vendor of interactive games.

The portal will offer the most attractive content on the market by expanding its range of services in close cooperation with leading providers of information and various types of services. Some of the other partners that Telia has signed agreements with include Barracuda (entertainment), Bonniers, Disney, FunPlanet (games), TT and Warner Music.

During 2001, broadband connections will become a more important part of everyday life in Swedish homes. Telia’s early spring launch of its multi-portal is just the first step on a journey of new services and new opportunities to be developed. The goal is to make life a little simpler and more enjoyable for all of Telia’s Internet customers.
Swedish households is already significant. Telia has general agreements in place for connecting a total of 822,000 customers. Broadband, dial-up Internet, and content services are in a dynamic stage of development, which requires a focused organization. To streamline operations, the business area’s resources in broadband, Internet and content services were unified in a special company, Telia e-bolaget. The company launched an individual broadband service based on ADSL during the year. ADSL technology provides unique opportunities for individual consumers to obtain broadband by upgrading ordinary copper wire to broadband.

At the same time, a number of broadband services were developed and introduced on the market, for example Games on Demand, Nyhetskanalen (TT news service adapted to customer preferences; voice, text, video), Nöjesnytt (including music, film and fashion), Musikkanalen (a selection of current music videos from Warner Music Sweden AB) and Hockeyrinken (ice hockey game, video clips from professional play, expert commentators, player information, etc.).

The services were launched on www.startsidan.telia.se, which is the starting point for the coming multi-portal to be launched at the end of the first quarter of 2001. The number of visitors jumped by 50 percent to more than 515,000 when the new portal services were introduced.

Simplified price structure, lower prices
During the year, People Solutions slashed its prices, simplified its price structure and streamlined its range of discount plans. In mid-February, a single local rate was introduced for all domestic calls in Sweden. This means that customers can now make an 80-minute long call from anywhere in Sweden for less than SEK 10. In August, international rates were cut by 50 percent on average while the number of price classes was reduced from 22 to nine. A ten-minute call to the U.S. costs only SEK 10. These price changes have made Telia more competitive and have enabled Sweden to strengthen its position among the European countries with the absolute lowest rates.

The major carrier preselect reform was implemented in Sweden in the fall of 1999. Those customers who did not select an operator at that time remained customers of Telia. In order to promote customer loyalty, People Solutions commissioned a series of ad campaigns and mailings in 2000 in an effort to convince as many customers as possible to actively choose Telia.

Cable TV – strong offering outside Sweden
Telia has two wholly owned cable TV companies in Denmark, Telia Stofa A/S and Jydsk Central Antenne A/S. Telia Stofa upgraded its network for broadband and began to offer high speed Internet to customers in 2000. No decision has been made, however, on extensive initiatives in broadband in Denmark.

The 60 percent participating interest in the Estonian cable TV company Starman Kaabeltelevisiooni was divested during the year. Telia became a shareholder in 1996 and since then the company has reported very favorable progress.

The cable TV company Telia MultiCom in Latvia, of which Telia controls 49 percent, doubled its total number of customers during the year. MultiCom also offers high speed Internet.

During the year, Telia acquired 65 percent of the cable TV company Telix in St. Petersburg. The company is building a state-of-the-art cable TV network that is adapted to interactive broadband services.

During the year, People Solutions took over the responsibility for Telia’s stake in Scandinavia Online (SOL), which manages a network of portals in the Nordic countries.

Reduction of emissions to the environment
People Solutions consistently focused on TeleMöte teleconferencing and NetMeeting in order to minimize travel and the consequent pollution of the environment. This resulted in reduced travel costs by MSEK 10-15 during a period of six months.

Customer advantage
Telia Advantage is the Group’s loyalty program for high-volume private consumers. This program was launched in April 1999 and quickly attracted a large number of members.

The program rewards high-volume consumers and those who use several Telia services. Customers accumulate points on all of their traffic – fixed, mobile and Internet. Points can be traded for Telia products (such as refill cards or telephones) or various types of events (such as movie tickets or travel). A third category that has become very popular is to make a donation to the Red Cross. Points are “exchanged” for money and Telia matches the contribution.

Telia Advantage customers also receive attractive targeted offers and access to a special customer service. The Advantage loyalty program promotes the development of total customers and increased customer share.
Faster, cheaper, easier, more convenient!

Several new services were launched during the year, in addition to broadband services:

**Voice-activated call connection**
As a complement to the automatic call connection service, a pilot test was initiated during the year for voice-activated call connection in certain geographical areas. When calling a number that has been changed with new number information provided, the caller may automatically connect to the new number by answering "yes" at the voice-prompt. This service will be implemented nationwide following the evaluation. There is a trend toward more voice-activated functions in the future and Telia has developed one of Sweden’s most sophisticated voice-activated platforms for taking a leading position in this area.

**Low price telephony**
Telia Mikrosamtal is Telia’s low price offering within fixed telephony for international calls. Calls normally go over IP (Internet Protocol) which means that the quality may be somewhat lower than that of ordinary telephony. This service is attractive for price-conscious customers and those who make many international calls. These calls are made from an ordinary telephone. The service was launched during the second quarter and was received positively.

**Faster Internet**
In the middle of the year, Duocom customers were invited to supplement their subscriptions with an additional 64 kbps channel for Telia’s Internet connection, which means that they can surf the Internet at double the speed (128 kbps).

**Message indicator for TeleSvar voicemail**
A message indicator was added to the voicemail service TeleSvar that alerts the user when there is a new message. There are two variations of the message indicator, either as an indicator on the caller ID or as a distinct dial tone.

**Telia Instant Web**
Telia Instant Web was launched during the year. This is an application that allows the customer to build his or her own website directly on the Internet. This service is aimed primarily at small businesses and organizations.

**Telia e-mail notification**
Telia launched its e-mail notification service for immediate notification of new e-mail messages on caller ID or mobile phones.
Enterprises is comprised of three different types of companies; companies to be divested, companies that need restructuring, and companies that function as support for more than one business area. As a part of the Group’s operational fine-tuning, it was decided during the year to divest – wholly or partially – 22 of the business area’s total of 27 companies. The companies were not connected to the Group’s core business and were deemed to have greater value development potential outside of Telia.

The divestitures were executed in various ways; by selling the entire company or parts thereof, by listing on the stock exchange, or by building new companies together with partners. The companies that will remain within the Telia Group will be restructured and then transferred to another business area.

When the current refine and focus strategy is complete, Enterprises (Telia Equity) will further develop and refine the minority shareholdings that Telia has decided to retain in divested companies. The Group’s other financial commitments will also be managed by Telia Equity.

The companies in the Enterprises business area in 2000 were grouped into six operational areas: Financial Services, InfoMedia, Systems & Support, Support Services & Retail, IT & Innovation and International.

The following companies were divested during the year: Telia Contracting, Telia Kompetens, Telia Konferens, IN good company, Svefo, Telia Academy, Smålandsbörsen, Starman Kaabeltelevisioniooni, the Danish Telia System and Service, and parts of Telia’s remaining real estate holdings. Participations in Egmont Online and ADC Communications were also sold during the year. In the beginning of 2001, the consulting company Combinator was sold, as well as Telia Trading.

The directory business Eniro AB was listed on the O list of the OM Stockholm Exchange in October. A total of 75,150,000 shares were issued, representing 50.1 percent of the capital in Eniro. The IPO price was set at SEK 84 per share. Telia received MSEK 6,114 from the sale, and capital gains totaled MSEK 6,020. Telia’s shareholding totals 49.1 percent after the listing.

Financial Services

Financial Services has a broad range of payment services and financing solutions for telecom and IT products. Of the companies that belong to Financial Services, Telia Försäkring will be kept within the Group while other companies will probably be wholly or partially divested. Telia Försäkring’s offerings include insurance for Telia products and business and personal insurances within the Group.

InfoMedia

InfoMedia includes directory assistance and call center services, as well as cable TV operations.

The Swedish cable TV business com hem AB, which is being restructured from a traditional TV distributor to a player on the broadband market, made major strides during the year in the development of technical platforms for Internet and other interactive services for TV and PC.

During the summer, com hem signed agreements with the Framtiden Group for broadband connections for the company’s 67,000 apartments in Gothenburg. At the end of the year, com hem had signed agreements with property owners for broadband connections for a total of 346,000 households and 193,000 households had broadband connections.

“WeThe directory business Eniro AB was listed on the stock exchange during the year. A total of 75,150,000 shares were issued, representing 50.1 percent of the capital in Eniro and capital gains totaled MSEK 6,020.”

Systems & Support

Systems & Support offers CPE communications solutions (networks and exchanges) and offers installation and support services.
Telia IT-Service was transferred to Business Solutions during the year in order to strengthen that business area’s competence in operation and maintenance of IT installations for business customers.

Swedia Networks, a company specialized in setting up and maintaining networks, signed a general agreement during the year with Bredbandsbolaget to establish 500,000 broadband connections in Sweden and Norway. An agreement was signed with the carrier Storm for installation and maintenance of Storm’s network in Europe.

Telia Nätservice became an independent company called Neterna. The company is specialized in operating and maintaining fiber-optic cable. A major deal was finalized with parties including Stockholm Transport.

Telia Företagsservice and Telia Installation also became independent companies and Telia Företagsservice changed its name to Relacom at the beginning of 2001. Relacom offers communications solutions services based on IT and telecom products. Telia Installation delivered a large number of broadband installations during the year.

Support Services & Retail
Within Support Services & Retail, Telia Handel and Telia Fastigheteter will be kept within the Group, but divestiture is planned for all other companies. Telia Handel is responsible for Telia’s sales via external resellers while Telia Fastigheteter owns and manages Telia’s real estate properties, most of which comprise technical facilities. During the year, Tändstickspalatset (“the Match Palace”) in central Stockholm was sold, among other holdings.

IT & Innovation
Within IT & Innovation, all operations will be divested, with the exception of the research and development company Telia Research and the venture capital company Telia Business Innovation. Telia Business Innovation (TBI), which invests venture capital in unlisted companies in growth areas, divested its participating interest in Altitun to ADC Telecommunications AB during the year.

International
Most of the investments in International are financial in nature and are aimed at generating value for Telia, which means that these investments are divested in the short to medium term.

Telia Overseas, in which Telia has a 65 percent stake, primarily invests in mobile operations in growth regions, mainly in Asia, Africa and South America. Mobile operators are currently in a relatively early stage of development and have shown strong customer growth during the year. A Letter of Intent was signed in early 2001 on the sale of the mobile operator Tess in Brazil to Telecom Americas.

"At the end of the year, com hem had signed agreements with property owners for broadband connections for a total of 346,000 households and 193,000 households had broadband connections."

Telia is IN good company
During the year, Telia started a joint company for business support services together with WM-data and the insurance companies If and Skandia. Telia contributed IN good company AB (600 people) while Skandia/If contributed the support company Ackuratess Administration AB (250 people) to the new company. WM-data contributed support services in WM-data Företagsservice AB (150 people).

The new company, which is doing business as IN Ackuratess, already offers a wide range of services in office services, personnel services, accounting services, payment services, payroll administration, telephony services and archiving and documentation services. IT is a significant part of the service offering, both as an integrated part of the services and as consulting.

“Spin-offs mean that we can focus more on our core business while gaining access to needed business support services in the new company,” explains Bo Gustavsson, Telia’s representative on the new company’s board of directors. Gustavsson anticipates that the company will yield a return and be a good financial investment for the partners. Telia and WM-data each own one third of the company while If and Skandia each own one sixth.

“We expect to be able to take a strong position on the growing market for business support services in Sweden, but will also support our customers in their international operations,” says Kristian Rothoff, president of the new company. Rothoff was previously president of the staffing company, Olsten Sverige. He explains that the shareholder base of the company may be expanded even further.

In 1996, Telia established a special company, Telia Assist, for large parts of the administrative support services. At the same time, new procurement procedures were initiated in order to streamline operations and increase cost-consciousness within the Telia Group. The company later changed its name to IN good company. At the time of the merger, IN good company had 10 percent of its sales from customers outside Telia.

“Spin-offs mean that we can focus more on our core business while gaining access to needed business support services in the new company,” says Bo Gustavsson, Telia’s representative on the new company’s board of directors. Gustavsson anticipates that the company will yield a return and be a good financial investment for the partners. Telia and WM-data each own one third of the company while If and Skandia each own one sixth.

“We expect to be able to take a strong position on the growing market for business support services in Sweden, but will also support our customers in their international operations,” says Kristian Rothoff, president of the new company. Rothoff was previously president of the staffing company, Olsten Sverige. He explains that the shareholder base of the company may be expanded even further.

In 1996, Telia established a special company, Telia Assist, for large parts of the administrative support services. At the same time, new procurement procedures were initiated in order to streamline operations and increase cost-consciousness within the Telia Group. The company later changed its name to IN good company. At the time of the merger, IN good company had 10 percent of its sales from customers outside Telia.

“Spin-offs mean that we can focus more on our core business while gaining access to needed business support services in the new company,” says Bo Gustavsson, Telia’s representative on the new company’s board of directors. Gustavsson anticipates that the company will yield a return and be a good financial investment for the partners. Telia and WM-data each own one third of the company while If and Skandia each own one sixth.

“We expect to be able to take a strong position on the growing market for business support services in Sweden, but will also support our customers in their international operations,” says Kristian Rothoff, president of the new company. Rothoff was previously president of the staffing company, Olsten Sverige. He explains that the shareholder base of the company may be expanded even further.

In 1996, Telia established a special company, Telia Assist, for large parts of the administrative support services. At the same time, new procurement procedures were initiated in order to streamline operations and increase cost-consciousness within the Telia Group. The company later changed its name to IN good company. At the time of the merger, IN good company had 10 percent of its sales from customers outside Telia.

“Spin-offs mean that we can focus more on our core business while gaining access to needed business support services in the new company,” says Bo Gustavsson, Telia’s representative on the new company’s board of directors. Gustavsson anticipates that the company will yield a return and be a good financial investment for the partners. Telia and WM-data each own one third of the company while If and Skandia each own one sixth.

“We expect to be able to take a strong position on the growing market for business support services in Sweden, but will also support our customers in their international operations,” says Kristian Rothoff, president of the new company. Rothoff was previously president of the staffing company, Olsten Sverige. He explains that the shareholder base of the company may be expanded even further.

In 1996, Telia established a special company, Telia Assist, for large parts of the administrative support services. At the same time, new procurement procedures were initiated in order to streamline operations and increase cost-consciousness within the Telia Group. The company later changed its name to IN good company. At the time of the merger, IN good company had 10 percent of its sales from customers outside Telia.
Lars-Eric Petersson
Chairman of the Board. Elected to the Board of Telia AB in 2000. President and CEO of Skandia. Chairman of the National Agency for Higher Education. Born 1950.
Number of shares in Telia: 4,800

Carl Bennet
Elected to the Board of Telia AB in 2000. Chairman of the boards of Elanders AB, Getinge Industrier AB, Halmstad University, Lifco AB, Scanrec AB and Sorb Industri AB. Member of the boards of AMS and SNS, Center for Business and Policy Studies. Born 1951.
Number of shares in Telia: 10,500 (through companies)

Birgitta Johansson-Hedberg
Elected to the Board of Telia AB in 1993. President and CEO of FöreningsSparbanken. Member of the board of FöreningsSparbanken. Chairman of the boards of Lindex and Knowledge World. Born 1947.
Number of shares in Telia: 500

Anders Igel
Elected to the Board of Telia AB in 1999. President and CEO of Esselte. Member of the board of Esselte AB. Born 1951.
Number of shares in Telia: 0

Ingvar Carlsson
Number of shares in Telia: 400

Jan-Åke Kark
Elected to the Board of Telia AB in 1999. Member of the boards of Telia Nära AB, Telia Mobile AB and the Federation of Swedish Industries. Chairman of the boards of Göteborg University and the Invest in Sweden Agency. Member of the Royal Swedish Academy of Engineering Sciences, Section XI (Research and Training). Born 1946.
Number of shares in Telia: 2,250
Ronny Käck
Employee Representative. Elected to the Board of Telia AB in 1995. Chairman of the Union of Service and Communication Employees, support and communications (SEKO TELE). Member of the board of Telia Pension Fund. Born 1944.
Number of shares in Telia: 0

Berith Westman
Number of shares in Telia: 550

Elof Isaksson
Employee Representative. Elected to the Board of Telia AB in 2000. Vice Chairman of the Union of Service and Communication Employees, support and communications (SEKO TELE). Member of the board of Telia Mobile AB. Born 1942.
Number of shares in Telia: 550

Deputy members
Anders Boman
Employee Representative.
SEKO TELE.
Number of shares in Telia: 100

Christer André
Employee Representative.
SEKO TELE.
Number of shares in Telia: 352

Gösta Mölleby
Employee Representative.
SIF-TELE.
Number of shares in Telia: 450
Marianne Nivert
President and Chief Executive Officer.
Employed by Telia since 1963, member of Group executive management since 1995. Previously head of the Carrier & Networks Business Area, Gothenburg telecom district and telecom region East. Born 1940. Number of shares in Telia: 2,150

Lars Härenstam
Executive Vice President and head of Corporate Development and Human Resources. Employed by Telia and member of Group executive management since 1999. Previously responsible for compensation and benefits within the Ericsson group, also personnel and corporate communications director, Ericsson Microwave Systems. Has served as human resources director at Sandvik Coromant, Sandvik Tooling, Volvo (Cars and Penta) and Stena Line. Born 1949. Number of shares in Telia: 2,550

Bo Jacobsson
Executive Vice President and Chief Financial Officer. Employed by Telia and member of Group executive management since 2000. Previously CFO at Trelleborg AB and president of Scancem AB. Born 1951. Number of shares in Telia: 600

Lars-Gunnar Johansson
Head of the Carrier & Networks business area. Employed by Telia since 1969, member of Group executive management since 2000. Previously active as efficiency director and head of network development in the Gothenburg telecom district and telecom region West. Born 1944. Number of shares in Telia: 350

Kenneth Karlberg
Senior Executive Vice President and head of the Mobile business area. Employed by Telia since 1987, member of Group executive management since 1999. Active in mobile communications since 1995, first as regional head and product manager, subsequently as business area head and president of Telia Mobile. Born 1954. Number of shares in Telia: 1,400
**Michael Kongstad**  
Senior Vice President and head of Corporate Communications. Employed by Telia and member of Group executive management since 2001. Previously president of Burson-Marsteller’s Swedish operations and communications director for Posten AB, WASA Försäkring and OM Gruppen. Born 1960.  
Number of shares in Telia: 0

**Emanuela Pedrocco**  
Marketing Director, Skills Market. Employed by Telia since 1996, member of Group executive management since 2000. Previously worked with business development at Telia Handel, as an international product manager and sales manager for Italy at Allgon Mobile.  
Born 1969.  
Number of shares in Telia: 1,950

**Jan Rudberg**  
Number of shares in Telia: 2,000
How to Reach Telia

President and CEO
Marianne Nivert
Telia AB
SE-123 86 Farsta
Sweden
Telephone: +46 (0) 8-713 10 00
Fax: +46 (0) 8-713 33 33
E-mail: marianne.a.nivert@telia.se

Mobile
Business Area Head
Kenneth Karlberg
Telia AB
Augustendalsvägen 7
SE-131 86 Nacka Strand
Sweden
Telephone: +46 (0) 8-90 300
Fax: +46 (0) 8-601 97 58
E-mail: kenneth.b.karlberg@telia.se

Carrier & Networks
Business Area Head
Lars-Gunnar Johansson
Telia AB
SE-123 86 Farsta
Sweden
Telephone: +46 (0) 8-713 10 00
Fax: +46 (0) 8-94 76 83
E-mail: lars-gunnar.j.johansson@telia.se

Business Solutions
Business Area Head
Anders Gylder
Telia AB
Fabrikörvägen 8
SE-131 90 Nacka Strand
Sweden
Telephone: +46 (0) 8-566 55 00
Fax: +46 (0) 8-466 99 90
E-mail: anders.l.gylder@telia.se

People Solutions
Business Area Head
Jan Rudberg
Telia AB
SE-123 86 Farsta
Sweden
Telephone: +46 (0) 8-713 10 00
Fax: +46 (0) 31-29 87 52
E-mail: jan.e.rudberg@telia.se

Enterprises
Business Area Head
Anders Bruse
Telia AB
Rudsjöterrassen 2
SE-136 80 Haninge
Sweden
Telephone: +46 (0) 8-707 65 00
Fax: +46 (0) 8-707 52 90
E-mail: anders.a.bruse@telia.se

Investor Relations
Director
Tobias Lennér
Telia AB
SE-123 86 Farsta
Sweden
Telephone: +46 (0) 8-713 10 00
Fax: +46 (0) 8-713 69 47
E-mail: tobias.a.lennér@telia.se

Corporate Communications
Communications Director
Michael Kongstad
Telia AB
SE-123 86 Farsta
Sweden
Telephone: +46 (0) 8-713 10 00
Fax: +46 (0) 8-713 69 97
E-mail: michael.x.kongstad@telia.se
Financial information

Financial information is available from our homepage www.telia.com, Investor Relations.

Interim reports and annual reports are posted on our homepage as soon as they are published and press conferences are broadcast "live" via the Internet when reports are presented. You can also follow Telia’s share price and view all press releases at www.telia.com.

New shareholders who are registered directly may choose to have published reports sent to home addresses.

Telia’s Annual General Meeting will be held on Thursday, 10 May 2001 at 4:00 p.m. at the Globe Arena in Stockholm.

Right to participate in the Annual General Meeting

Shareholders who meet the following criteria are entitled to attend Telia’s AGM:

• entered on Telia’s register of shareholders as per Monday, 30 April 2001; and
• having notified Telia of their intention to attend not later than 4:00 p.m. on Friday, 4 May 2001.

Registration procedure

Telia’s register of shareholders is maintained by VPC AB. Stock may be registered either in the shareholder’s name or in the name of a nominee. To attend the meeting, shareholders whose stock has been registered in the names of nominees must arrange for their shares to be re-registered in their own names at VPC not later than Monday, 30 April 2001.

In providing such notice, shareholders should state:

• name
• social security/corporate registration number
• telephone number
• number of accompanying persons

Payment of dividend

Tuesday, 15 May 2001 is proposed as the record date for the right to receive dividends. Dividends are expected to be distributed by VPC on Friday, 18 May 2001.

Nominees provide assistance with the registration, usually for a modest fee.

Notice of intention to attend

Notice can be given:

• by phone: +46 (0) 8-470 81 20
• by mail: Telia AB, Box 999, SE-171 74 Solna, Sweden
• on Telia’s website: www.telia.com/agm

In providing such notice, shareholders should state:

• name
• social security/corporate registration number
• telephone number
• number of accompanying persons

Telia’s General Annual Meeting will be held on Thursday, 10 May 2001.

Reports may be ordered via:

Telia AB, Investor Relations
SE-122 80, Stockholm
Tel: +46 (0) 8-713 10 00
Fax: +46 (0) 8-713 50 47
Online at www.telia.com, Investor Relations.

Please direct questions regarding content to:

Telia AB, Investor Relations
SE-122 80, Stockholm
Tel: +46 (0) 8-713 37 43
Fax: +46 (0) 8-624 54 72
Online at www.telia.com, Investor Relations.

Financial Information

<table>
<thead>
<tr>
<th>Financial Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual General Meeting</td>
<td>10 May</td>
</tr>
<tr>
<td>Interim Report January–March</td>
<td>10 May</td>
</tr>
<tr>
<td>Interim Report January–June</td>
<td>16 August</td>
</tr>
<tr>
<td>Interim Report January–September</td>
<td>1 November</td>
</tr>
</tbody>
</table>

Telia’s financial reports are produced by Telia AB, Investor Relations.

2001 Annual General Meeting

Glossary

ADSL: Asymmetrical digital subscriber line, a technology that expands the bandwidth on copper-based telephone lines to a maximum 8 Mbps, corresponding to audio and video quality in television today. The bandwidths are different (asymmetrical) in the different directions (to and from the user).

AISP: Application service provider, supplier of software and related services, usually distributed over the Internet.

ATM: Asynchronous transfer mode, a technique that allows switched, flexible bandwidth and gives users access to the bandwidth they require for each particular service.

Central: Switchboard function in the public telephony network.

Churn: Propensity of customers to change operators.

Churn rate: Customer turnover, that is, the proportion of customers who have switched to competing operators.

CTI: Computer-telephony integration, combination of telephony and computing on terminals and networks.

DDP: Department of the Future, Telia’s brand for advanced services, mainly mobile.

Dematerialization: Replacing a physical product with a network-based service.

GPS: General packet radio service, a data service for GSM that makes it possible to surf the Internet and send e-mail at transfer rates up to 115 kbps.

GSM: Global System for Mobile Communication, a digital mobile telephony system based on a global standard; GSM 000 works in the 900 MHz frequency range, GSM 1800 in the 1800 MHz range.

HECDS: High-speed circuit digital system, a technical solution for mobile data communications that allows the transfer of faxes, e-mail, files, and text messages with transfer rates up to 64 kbps.

Internet: The Internet is a large number of local, independent computer networks that are linked using standardized protocols to form a worldwide network.

Intranet: Private network in a company or other organization that is based on the same protocols as the (public) Internet but is intended for in-house use.

IP: Internet protocol, a suite of protocols that helps data networks communicate with one another.

ISP: Internet service provider, an organization that makes it easier for mobile users to access their e-mail and voicemail, send and receive faxes, trade stock and do bank enquires, and view web pages in small format.

Web hosting: A service by which an Internet service provider offers to set up and store customers’ web pages on computers connected to the Internet and owned by the IS.
Our mission is to enable and inspire communication between people by developing communications services that create value and enrich and simplify life.