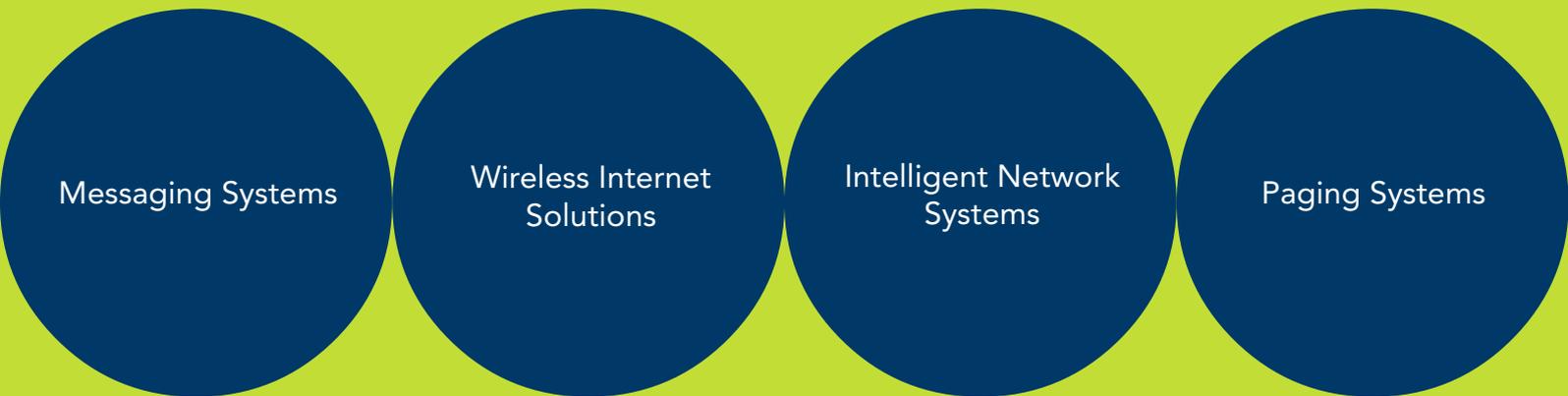




TECNOMEN  
ANNUAL REPORT  
1999

# Tecnomen – A Pioneer in Messaging Systems

Tecnomen develops and markets telecommunication systems to teleoperators and service providers globally. Messaging systems and wireless Internet solutions are priorities in Tecnomen's business operations, and the product range also includes prepaid and paging systems. Tecnomen operates in 13 locations worldwide, and has delivered systems in more than 50 countries. Tecnomen has a history of more than 20 years of innovation, and operates as part of the Kyro Group.



Messaging Systems

Wireless Internet  
Solutions

Intelligent Network  
Systems

Paging Systems

**Tecnomen's mission is to help teleoperators and service providers to create innovative services for end-users in order to improve the quality of their service and give them the competitive edge.**

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## Information for Shareholders

Tecnomen's financial reporting during 2000

- Interim Report 1/2000 (Jan-Apr)      June 7, 2000
- Interim Report 2/2000 (Jan-Aug)      October 6, 2000

The reports can be ordered from

- Nina Hedberg, tel. +358 9 8047 8205  
e-mail: [nina.hedberg@tecnomen.com](mailto:nina.hedberg@tecnomen.com)

## Review by the President

The explosive growth in mobile phones in the last decade has exerted a powerful influence on the telecommunications sector. The digitisation of information transfer and rapid spread of Internet use have laid the foundation for vigorous growth in wireless data and new types of communications applications. This area is now growing more quickly than voice traffic. At the same time a need has arisen to manage large scale information flow in an optimal manner from the end-users perspective; independent of time and place. Changes in the market have been reflected in the focus of Tecnomen's commercial operations as telecommunications operators and service providers recognise the increasing competitive importance of offering new services. This continues to be an important factor guiding the actions Tecnomen is pursuing.



Tecnomen has more than 20 years of experience in the telecommunications sector. Tecnomen globalised and grew rapidly in the early 1990s as a leading supplier of wide-area paging systems and voice mail systems for mobile networks. Following this, the company's business focus moved step by step towards Unified Messaging solutions, and also diversified into prepaid systems based on Intelligent Networks. As it embarks on the new millenium, Tecnomen has established its position as a genuinely international company in the rapidly growing value-added services market.

During 1999, Tecnomen continued to sharpen and hone the strategy and actions required to follow market changes. This meant that R&D resources were increasingly focused on developing platform products for value-added services systems and wireless Internet solutions. Further progress was made in establishing and consolidating strategic partnerships. Several internal development projects were also launched to improve the company's ability to respond to the challenges and opportunities which will certainly arise in the continually accelerating and global operating environment of the future. Along with this strategic work, Tecnomen also reinforced its status as a leading supplier of Unified

Messaging systems to telecommunications operators in 1999. Net sales grew by about 25 percent, and sales of value-added services increased by more than 40 percent. This also had the effect of bringing the company back into a profitable line of growth following two loss-making years. The paging system business unit also became profitable once more, after a period of underperformance.

The goal of Tecnomen is to reinforce its market position still further. Rapid market changes fuelled by GPRS and IP technologies, together with the construction of third generation mobile networks provide excellent prospects for this. Tecnomen will seek to grow faster than its target markets, and will strive to become a world-leading supplier in its core product areas as third generation networks grow in coverage. Achieving these objectives will require significant investments and overall development of the company, but will also demand the ability to work together with other leading companies in the sector. Extending the strong network of customers and partners will continue to be of prime importance. The innovative nature of Tecnomen and its employees, combined with a firm focus on the customer's needs, will be crucial factors in realising these aims.

A shared set of values and corporate culture underlying the skills and activities of the staff are of fundamental strategic importance to expert organisations like Tecnomen. A survey was conducted in 1999 investigating the values of Tecnomen personnel, and the realisation of these within the company. This study, and the refining work done by the company management were used to define three key values for Tecnomen. Realising these ideals will be a matter of prime concern both within the organisation and in relations with customers and partners.

The individual job satisfaction of every member of the staff will be reinforced by ensuring that people are assigned challenging duties and by establishing a working environment for them which corresponds with their skills, thereby giving everyone an opportunity to have a healthy sense of pride in their own work and accomplishments.

Thanks belong to all Tecnomen personnel for achieving our objectives and a good level of success in 1999, because the whole Tecnomen team made a significant contribution to our work during the year. The extensive network of customers and partners that has trusted in the company's expertise has played an essential part to ensure that Tecnomen is well-placed to achieve its future goals. The company is ideally equipped to respond to the opportunities provided by the rapidly growing and evolving market in which it operates. For all of this I would like to thank our employees, customers, partners and the Kyro Group for their confidence and support during the past year.

Espoo Finland, May 2000

Vesa Helkkula  
President and CEO

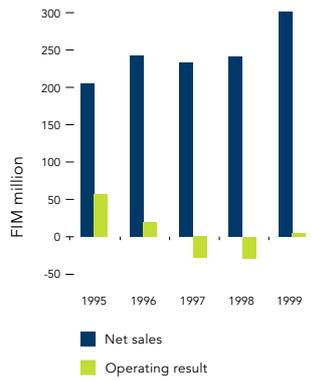
## Tecnomen in 1999

- Net sales FIM 301.6 million (239.7), 26% growth
- Operating result FIM 7.1 million (-26.6)
- 80% of net sales came from value-added service systems
- The company developed into one of the world's leading suppliers of Unified Messaging systems
- Operations in paging systems regained profitability
- New prepaid system customers in Asia
- Increased focus on messaging systems and wireless Internet solutions
- Clientele expanded as new service providers entered the market
- The share of research and product development of net sales was 21%
- Cooperation with telecommunications system suppliers Nokia and Siemens progressed
- Cooperation was launched with AerSoft, a developer of short message service products
- New products including WAP and VoIP compatible Unified Messaging systems introduced
- eZoner, the first product of the wireless Internet product family, was developed
- The net sales and annual result of Tecnomen's subsidiary Tecnomen System Solutions developed as planned

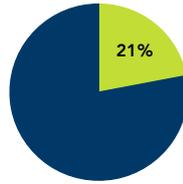
### Michael Kuo, Sales Manager

Chunghwa Telecom, Taiwan's largest teleoperator, has been Tecnomen's customer since 1990. Alongside the growing popularity of mobile phones, the number of people using the voice mail service delivered by Tecnomen has rapidly risen to millions. In this challenging situation, Tecnomen has proven to be a reliable partner.

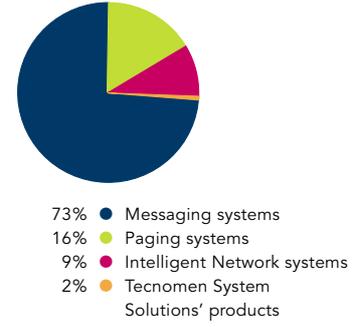
Development of net sales and operating result



Share of research and product development expenses of net sales



Distribution of the net sales by main product lines



# The Market

The telecommunications business is currently undergoing significant changes. The use of Internet and mobile phones has expanded rapidly during the past years. As mobile networks become digitised, the technological base for making new communication applications more common has been established. The fast pace of deregulation in telecommunications has had an impact on the rapid development and expansion of the business both in Finland, and globally during recent years.

## **Demand for new communication applications is on the increase**

Alongside this development, the number of different communications services available has increased at a staggering pace. Thus, end-users face the challenge of managing information overflow and finding the most essential information and processing it regardless of time and place. Private and business users have come to expect services with varying information content which they can use with either their mobile phone or computer.

The growth of the market for communication applications utilising the new wireless data transfer has already surpassed the growth of the market for voice mail systems. Technologies such as IP, GPRS, and UMTS further extend communications by providing the opportunity to develop and introduce new business and entertainment services in the future.

The role of messaging systems will continue to grow as technology and users requirements develop further. The role of communication applications will become more segmented and divided into services designated for business users, institutions, households, youth, investors, and business travelers.

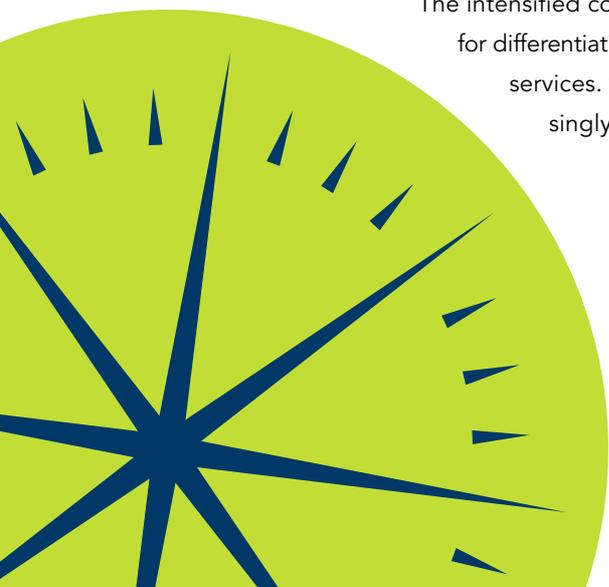
## **Tecnomen's target market expanded and became more diverse**

In 1999, the service supply of fixed and mobile phone operators converged. Business mergers between existing network operators also continued. During the period under review, Tecnomen's target market expanded as new types of service providers came into the market. This includes service providers basing their operations on Internet technology, as well as service resellers renting fixed and mobile telephone networks from operators.

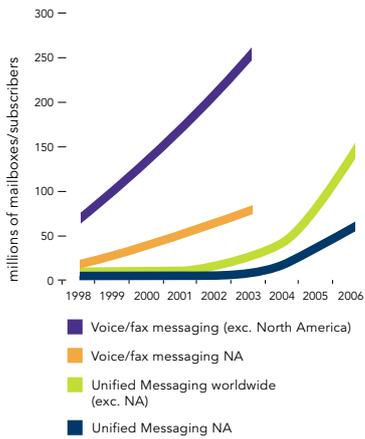
The intensified competition for end-users between operators highlighted the requirement for differentiation in the marketplace. This, in turn, increased the demand for value-added services. Success in introducing new services into the market has become increasingly dependent on timing, as the needs of end-users continually change.

### **Mari Ala-Fossi, Purchasing Assistant**

**Sonera's voice mail service is based on Tecnomen's voice mail system. Cooperation between Sonera and Tecnomen dates back to the early 1980s, and both companies are today acknowledged even internationally as pioneers in their respective business areas.**

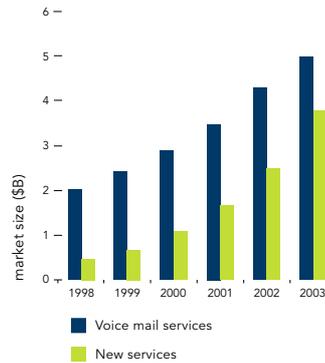


**World messaging forecast**



Source: Ovum

**Forecasted market growth of enhanced services platforms**



Source: John G. Kinnard & Co.

**Unified Messaging and wireless Internet solutions to converge**

Construction of 3G networks increases the potential to include new types of services in Tecnomen’s Unified Messaging and wireless Internet service platforms. New generations of networks enable improved transfer speeds, which entails that messaging services may be accessed through wireless Internet terminals in the future. Receiving and sending voice, fax, and e-mail messages regardless of time or location becomes an integral part of other everyday services available for wireless terminals.

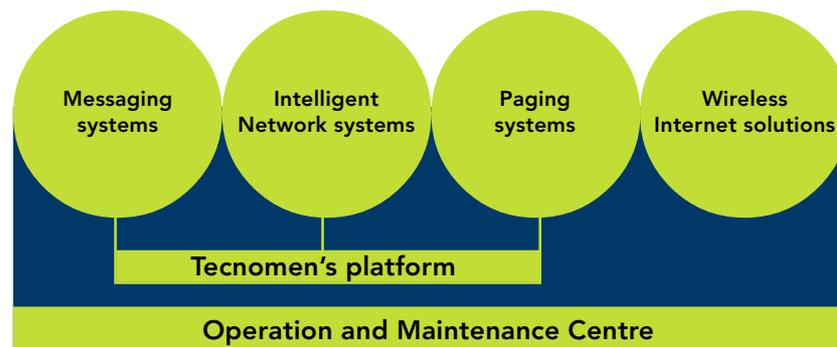


## Products and Services

In a changing market situation, the significance of value-added services as a competitive edge, has increased among operators. Value-added services have become a major source of income for the operators. These services reduce the use of unchargeable network traffic, and can be offered to end-users either as part of a telephone subscription or separately, as in voice mail services. Tecnomen helps operators to maintain customer satisfaction and to enlarge their clientele by putting the company's innovative services quickly onto the market. Tecnomen is a pioneer in the value-added services market, and the share of these systems in the company's net sales is already 80%.

Tecnomen's focus areas are messaging systems and wireless Internet solutions. Other principal product lines include Intelligent Network and wide-area paging systems. Of these product lines, systems utilising telephone networks (messaging, Intelligent Network, and paging systems) are all based in whole or in part, on the same scalable service platform. All systems can be managed with a single operation and maintenance centre.

### Tecnomen's main product lines



### Messaging systems

Tecnomen has established a firm foothold among teleoperators and service providers with its messaging systems, which include both voice mail and Unified Messaging concepts.

Tecnomen's Unified Messaging service concept combines the voice mail services of both mobile and fixed telephone networks, the Internet, and e-mail services into one entity. Unified Messaging enables the flexible sending and receipt of messages, since users may personally choose the time, place, and media to process their messages. For example, a voice mail left in a message box may also be received via the Internet and an e-mail application. Correspondingly, e-mail may be received as a spoken message by phone using text-to-speech conversion, or as a short message sent to a mobile phone.

The sales of messaging systems improved considerably during the year under review, and many of Tecnomen's European customers ordered a Unified Messaging system as an extension of their existing voice mail systems. Tecnomen also sold its first full-scale Unified Messaging system in Asia.



**Pat Harney, Product Manager**

The e-merge service of the Irish Eircell is implemented using Tecnomen's eZoner service platform. eZoner's service areas – mailzone, timezone and funzone – offer the operators a flexibly packaged selection of wireless Internet services, from e-mail to trendy chat.

At the beginning of the year, Tecnomen introduced the world's first WAP compatible Unified Messaging system, and the first orders were received at the end of the year. At the Telecom 99 fair in Geneva the company introduced VoIP Access, a product which enables the use of Unified Messaging services using VoIP over IP networks.

#### **Wireless Internet solutions**

Tecnomen continued to develop wireless Internet products during 1999, and launched eZoner, the first service platform of the product line at the beginning of 2000. The eZoner wireless Internet platform utilises the latest Internet technology, is easily scalable, and features services which can be managed with a common operations and maintenance centre.

eZoner enables personal messaging, entertainment, and communication services. It functions either as a separate product or an integrated part of a more extensive portal. In addition to its own product development, Tecnomen will also offer the services and components of a third party combined with the eZoner platform.



### **Intelligent Network systems**

Intelligent Network products support Tecnomen's messaging product line's growth and market position. Intelligent Network products include prepaid systems and intelligent peripheral components.

In prepaid systems, the end-user pays for calls in advance, for example purchasing a telephone card equipped with a code that can be used to load a certain sum of money to the telephone subscription. This sum is automatically reduced in real time as the call proceeds. When a defined lower limit has been passed, the user receives a message to his/her phone. When the balance of the account has been used up, making calls and, in some cases, also receiving calls is not possible. In the future prepaid systems may also incorporate e-commerce applications.

As the number of mobile phones in developing market areas and among young people grows, the demand for prepaid systems increases. During the year under review, Tecnomen sold prepaid systems and extensions in both Asia and Latin America, where the company has a major presence as a supplier of these systems.

The intelligent peripheral component is also part of the Intelligent Network, where it is tasked to conduct certain routines such as announcement management. In this function, intelligent peripheral informs end-users about their remaining credit or calling time.

### **Paging systems**

Tecnomen develops and markets wide-area paging systems that support all major standards including POCSAG, ERMES, and FLEX™. Despite a declining market, the company strengthened its position as the leading supplier of paging systems in Europe and the Middle East, and in ERMES systems globally. Tecnomen delivered new paging systems in Kuwait and Russia, and supplied system extensions to some existing customers.

### **Product range of Tecnomen System Solutions**

Tecnomen's subsidiary Tecnomen System Solutions designs and supplies equipment and applications for data collection, monitoring, and access control.



## International Network of Partners and Offices

Networking is an essential part of Tecnomen's strategy and operating method. The network of partners is utilised in product development, sales, marketing and distribution. The company has cooperative contracts with telecommunications system suppliers Nokia and Siemens, which offer solutions developed by Tecnomen as part of their own deliveries.

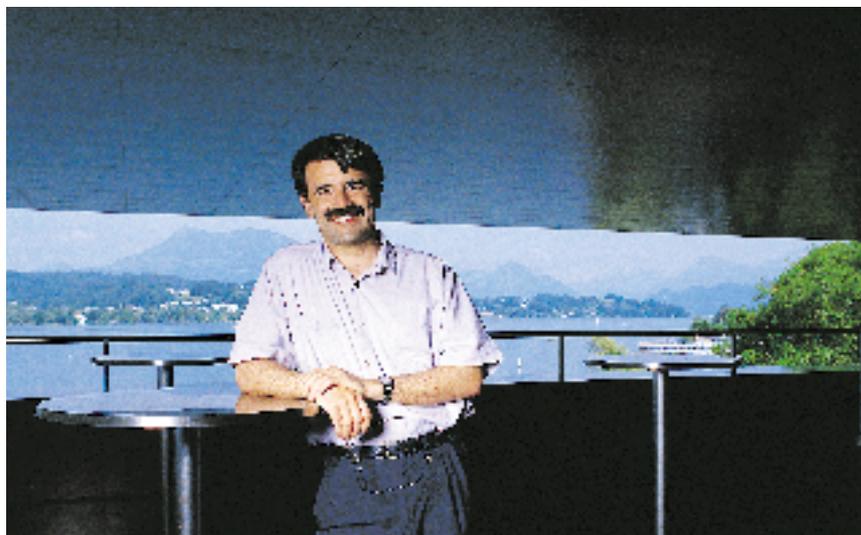
Cooperation with these telecommunication network suppliers developed significantly during the financial year. Distribution of Tecnomen's messaging systems in connection with Nokia's deliveries was confirmed by signing a collaborative contract. The company also received several other orders through its partners during the financial year. Intelligent Network products, associated with prepaid systems, were delivered in cooperation with Compaq and ICL.

To increase its share of the market, Tecnomen is constantly investigating new possible partners. At the end of 1999, the company signed a contract with Critical Path for the distribution of their e-mail servers in some of Tecnomen's product deliveries. Also, co-operation with AerSoft, a company specialising in short message service products, was extended and integrating the company's products with Tecnomen's Unified Messaging systems proceeded as planned. AerSoft is an associated company of Kyro Group, which has an approximately 40% ownership of the company.

Tecnomen's global operations are reinforced by an extensive network of customer service units. At the end of the financial year, the company's operations including head office, sales, projecting, and system maintenance were divided between 11 locations. During the period under review, operations in Taiwan were enhanced and planning of the Vaasa wireless Internet skill centre commenced. The company's other product development units are located in Ireland and Espoo, Finland. By the end of the 1999, systems developed by Tecnomen had been delivered to over 50 countries worldwide.

### Franz Buholzer, Project Manager

The Combox Pro service of the Swiss company Swisscom collects the user's different messages to one single location, from where the user can – regardless of the type of the message – receive them in the desired manner. The service is realised with Tecnomen's Unified Messaging system.



# Organisation and Personnel

## Organisation

Tecnomen's organisation may be divided into three main functional groups

### Sales and customer operations

- Global sales
- Global customer operations
- Regional area organisations
  - Europe
  - Middle East and Africa
  - Asia Pacific
  - Latin America

### Product functions

- Product development and technology
- Product management and product marketing
- Paging business unit
- Manufacturing and logistics

### Staff functions

- Personnel and administration
- Finance and control
- Marketing
- Legal operations
- Business development
- Quality
- Information systems

In order to improve its long-term competitiveness and ability to react according to market changes, Tecnomen has assigned business responsibility to each of its geographic areas. Area units operating independently in different markets are in charge of sales and system deliveries in their region. To increase the efficiency of the organisation product development units in Finland and Ireland were also reorganised during the year under review.

### Tecnomen's values

In Tecnomen's rapidly changing operating environment, the company culture – the values, beliefs, and attitudes of the personnel – is essential for the long-term competitiveness of the organisation. Corporate culture affects all activity, both in interaction with customers, partners and other stakeholders, and within the organisation. Late in 1999, Tecnomen conducted a survey to define Tecnomen personnel's prioritised values and how they are being realised in the company. After the analysis of the survey Tecnomen's core values were defined as

- open and honest cooperation
- focus on right things to achieve results
- continuous development of skills and personal growth.





### Human resources

Specialised and motivated personnel are a valuable resource at Tecnomen. The company makes determined investments in its personnel's development and well-being. This is accomplished with the aid of

- internal and external training
- job rotation
- development discussions and career plans
- experience gained through expatriate assignments.

**eZoner team meeting.** Cooperation between different functions is characteristic for Tecnomen. With this practice, different views can better be taken into account. In product development projects, for example, people from product development, product management, sales and customer operations participate in these meetings.

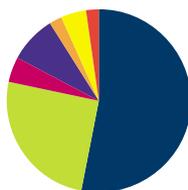


Distribution of personnel by functional group (excl. Tecnomen System Solutions) on 31 December



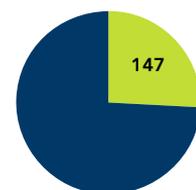
- 141 ● Sales and customer operations
- 210 ● Product functions
- 61 ● Administration and support functions

Distribution of personnel in area organisations (incl. Tecnomen System Solutions) on 31 December



- 223 ● Finland
- 107 ● Ireland
- 18 ● Other European countries
- 35 ● Asia Pacific
- 10 ● Middle East
- 19 ● Latin America
- 9 ● Tecnomen System Solutions

Ratio of employees in product development to the total number of personnel on 31 December



Number of personnel on 31 December

- 1999 ● 421
- 1998 ● 410

Continuous recruitment of experienced personnel for key positions, particularly in product development, product management and customer operations, strengthens the overall competence of the organisation. In order to secure a supply of skilled personnel Tecnomen decided to establish a new unit in Vaasa Finland, specialising in developing wireless Internet solutions. The competitive workforce environment for proficient experts is not as intense in Vaasa as it is in the Helsinki, Finland region.

Job satisfaction and the well-being of personnel are evaluated annually in the entire organisation, in groups, and through discussions between employees and superiors. The job satisfaction survey is an important tool for developing the work of the organisation, teams and supervisors. Tecnomen also contributes to the recreational activities of its personnel by supporting physical exercise and arranging get-togethers with sports and cultural themes.

## Tecnomen's Future Development Priorities

Tecnomen's operations are governed by the company's clear vision of the world evolving into an increasingly information-intensive society, where people have to be able to manage vast amounts of information. Therefore, successful companies will offer related services that improve the quality of life by managing the information flow for the benefit of the people. For Tecnomen this requires an understanding of the communication needs of its own customers as well as end-users. It involves continuous and growing investment in research and development, both independently and in cooperation with other leading companies in the sector.

Tecnomen responds to people's changing communication needs by developing services that utilise the latest technologies. In this area the company already has a solid foundation. It has obtained a firm foothold as a supplier of messaging systems, participated from the very beginning in developing wireless Internet solutions, and invested in Intelligent Network solutions.

Tecnomen's status as a technological pioneer is an important asset as IP networks become more common, information management increases in importance, and new forms of communication expand. This highlights the significance of developing new applications. Tecnomen's platform products are under constant development, and a clear growth path to third-generation mobile networks has been designed for them.

Tecnomen's market is undergoing continued globalisation, and therefore the expansion of our network of partners remains a top priority. Tecnomen is currently investigating both potential partners specialising in future technologies as well as system and equipment suppliers suitable for sales cooperation. Alongside the products and the network of partners, another area of constant development is the expertise and well-being of personnel. In its sector, Tecnomen has achieved a position as a reliable system supplier, which will be further supported by enhancing the company's recognition in the future.



# Report on 1999 by the Board of Directors

## **General review**

Telecommunications market continued to transform considerably. Operators expanded their traditional line of business increasingly towards providing services. In addition to this, new service providers emerged in the wake of the development of the Internet and wireless communication technologies widened Tecnomen's clientele. Tecnomen's status as a supplier of Unified Messaging systems remained strong.

## **Net sales and result**

The net sales of the Tecnomen group grew by 26% from the previous year, amounting to FIM 301.6 million (239.7). Tecnomen's operating result was FIM 7.1 million (-26.6).

## **Investments**

The investments made by the Tecnomen group totalled FIM 15.9 million (16.8) and consisted of outlays for maintenance, computers, and product development equipment.

## **Business operations**

The net sales of the Tecnomen group grew by some 26% from the previous year and totalled FIM 301.6 million (239.7), and the company's result was positive. The share of Unified Messaging systems of the net sales was some 70%, which was significant with regard to the result. In addition to this, personal paging systems regained profitability during the financial year. The launching of prepaid systems, started during the previous year, continued with success, but the investments made in this new product line still exceeded the income generated by it.

As the quantity of data transfer over wireless networks was growing faster than voice traffic, teleoperators expanded their traditional telecommunications activities more clearly towards providing services. Consumers and business users expect new services utilising data transfer and the Internet. For example, users may wish to receive all their messages both to their mobile phones and their e-mail address.

In order to rise to the challenges presented by the rapidly changing market, Tecnomen continued to focus its strategy during the period under review. The sales of Unified Messaging systems picked up considerably. New prepaid systems and extensions to them were sold in Asia and Latin America during the financial year. New deliveries of personal paging systems were made in Kuwait and Russia, which further strengthened Tecnomen's status as the market leader in ERMES personal paging systems.

Cooperation with comprehensive system suppliers Nokia and Siemens proceeded as expected during 1999, and new orders were received. Both companies offer Tecnomen's products as part of their comprehensive system deliveries. Cooperation with Nokia was confirmed by signing a cooperation contract during the year under review.

### **Research and product development**

Tecnomen made a large investment in product development resources during the financial year. The share of R&D of net sales amounted to 21% (21). The company introduced several innovative new products and product improvements during the year. First orders for the WAP-compatible Unified Messaging system, introduced at the beginning of the year, were received. At the Telecom 99 fair, the company introduced its VoIP Access, a product that enables the use of Unified Messaging services over Internet Protocol networks.

Tecnomen's investments in product development and marketing are geared to secure continuing growth. In the future, the priority will be increasingly focused on the new Unified Messaging systems and wireless Internet solutions.

### **Group structure**

Tecnomen Oy is a fully owned subsidiary of Kyro Oyj. No major changes occurred in the structure of the Tecnomen group during the financial year.

### **Board of directors, management, and auditors**

Board of Directors

Pentti Yliheljo, Chairman

Erkki Hautaniemi

Vesa Helkkula as of March 16, 1999

Esko Rantala

Seppo Seitsonen until September 6, 1999

Managing Director

Esko Rantala until April 5, 1999

Vesa Helkkula as of April 6, 1999

Auditors

KPMG Wideri Oy Ab

Responsible Auditor Sixten Nyman, CPA

### **Personnel**

The average number of personnel during the financial year was 423 (399).

### **Future outlook**

The development of Tecnomen's sales during the last third of the past year was good, and the number of orders at the end of the year was higher than the year before. The company has good possibilities to further improve its result, but it also continues making determined and considerable investments in product development and marketing. Rapid changes in the market make it difficult to make any long-term estimates.

## Income Statement

FIM	Ref.	Group		Group		Parent Company		Parent Company	
		Jan.1–Dec.31,1999	%	Jan.1–Dec.31,1998	%	Jan.1–Dec.31,1999	%	Jan.1–Dec.31,1998	%
<b>Net sales</b>	1	301,634,978	100.0	239,747,919	100.0	282,737,134	100.0	221,441,541	100.0
Increase (+) and decrease (-) in inventories of finished products and work in progress		-59,931		-1,429,481		-718,996		-1,461,644	
Production for own use		1,880,536		2,433,907		1,874,966		2,423,853	
Other operating income		6,717				866,102			
Materials and services	2	67,348,757		59,850,298		98,955,941		76,665,177	
Personnel expenses	3	119,800,692		101,441,491		79,968,222		69,545,673	
Depreciation	4	15,918,182		15,276,418		10,189,001		10,341,644	
Other operating expenses	5	93,266,950		90,802,907		87,357,888		94,216,921	
<b>Operating result</b>		<b>7,121,002</b>	<b>2.4</b>	<b>-26,612,054</b>	<b>-11.1</b>	<b>7,422,051</b>	<b>2.6</b>	<b>-27,500,563</b>	<b>-12.4</b>
<b>Financial income and expenses</b>	6	<b>-4,643,134</b>		<b>-6,920,760</b>		<b>-4,489,376</b>		<b>-6,533,753</b>	
<b>Result before extraordinary items and taxes</b>		<b>2,477,868</b>	<b>0.8</b>	<b>-33,532,815</b>	<b>-14.0</b>	<b>2,932,675</b>	<b>1.0</b>	<b>-34,034,316</b>	<b>-15.4</b>
Extraordinary items	7			33,400,000				33,400,000	
<b>Result before taxes</b>		<b>2,477,868</b>	<b>0.8</b>	<b>-132,815</b>	<b>-0.1</b>	<b>2,932,675</b>	<b>1.0</b>	<b>-634,316</b>	<b>-0.3</b>
Appropriations	8					360,382		635,059	
Direct taxes	9	-1,412,438		358,845		-938,761		-103,395	
Minority interest		-151,723		-14,550					
<b>Result for the financial year</b>		<b>913,706</b>	<b>0.3</b>	<b>211,480</b>	<b>0.1</b>	<b>2,354,297</b>	<b>0.8</b>	<b>-102,652</b>	<b>0.0</b>

# Balance Sheet

FIM	Ref.	Group		Parent Company	
		Dec.31,1999	Dec.31,1998	Dec.31,1999	Dec.31,1998
<b>Assets</b>					
Fixed assets					
Intangible assets	10	2,854,059	2,591,996	2,653,119	2,448,782
Tangible assets	11	70,040,574	70,665,868	49,956,446	51,727,073
Investments	12	140,600	140,600	140,600	140,600
Holdings in Group companies				8,528,440	6,518,815
Fixed assets total		73,035,234	73,398,464	61,278,605	60,835,272
Current assets					
Inventories	13	10,818,203	12,976,578	5,694,078	11,127,277
Long-term receivables	14	40,715,134	30,769,214	40,715,134	30,769,214
Short-term receivables	15	166,347,653	160,902,916	153,674,138	157,726,475
Cash at bank and in hand		12,722,869	15,867,423	5,430,369	1,352,673
Current assets total		230,603,860	220,516,132	205,513,720	200,975,640
<b>Assets</b>		<b>303,639,094</b>	<b>293,914,597</b>	<b>266,792,326</b>	<b>261,810,912</b>
<b>Shareholders' equity and liabilities</b>					
Shareholders' equity					
Share capital		9,918,928	9,813,200	9,918,928	9,813,200
Reserve fund		8,251,391	8,350,948	7,778,272	7,884,400
Retained earnings		73,650,230	73,827,225	39,744,958	39,847,610
Result for the financial year		913,706	211,480	2,354,297	-102,652
Shareholders' equity total	16	92,734,255	92,202,853	59,796,456	57,442,158
Minority interest		655,290	527,918		
Accrued appropriations	17			7,983,809	8,344,192
Liabilities					
Deferred tax liability	18	2,315,304	2,336,373		
Long-term liabilities	20	123,626,012	9,356,060	119,367,691	4,860,725
Short-term liabilities	21	84,308,232	189,491,390	79,644,369	191,163,836
Liabilities total		210,249,549	201,183,825	199,012,061	196,024,561
<b>Shareholders' equity and liabilities</b>		<b>303,639,094</b>	<b>293,914,597</b>	<b>266,792,326</b>	<b>261,810,912</b>

## Sources and Application of Funds

FIM	Group		Parent Company	
	Dec.31,1999	Dec.31,1998	Dec.31,1999	Dec.31,1998
Cash flow from business operations				
Payments from sales	245,226,008	195,571,322	231,845,720	184,180,565
Payments for other operating income	5,178	6,717	0	866,102
Costs of business operations	-256,555,199	-266,352,836	-235,040,338	-259,171,455
Cash flow from business operations before financing items and taxes	-11,324,013	-70,774,797	-3,194,618	-74,124,788
Paid interest and payments for other financing of business operations	-7,685,995	-8,630,326	-7,537,589	-8,125,318
Received interests on business operations	2,331,781	1,906,102	2,181,608	1,695,909
Paid direct taxes	-164,439	1,153,719	225,797	683,471
Cash flow before extraordinary items	-16,842,666	-76,345,301	-8,324,802	-79,870,726
Cash flow incurring from extraordinary items in business operations	33,400,000	31,500,000	33,400,000	31,500,000
Cash flow from business operations	16,557,334	-44,845,301	25,075,198	-48,370,726
Cash flow from investments				
Investments in tangible and intangible assets	-15,899,062	-20,307,661	-8,636,516	-9,922,105
Transfer income from tangible and intangible assets	346,160	597,477	20,703	707,938
Outlays on other investments	-	-	-2,009,625	-2,753,861
Repayment of outstanding credit	-198,781	341,092	-	-
Cash flow from investments	-15,751,683	-19,369,091	-10,625,438	-11,968,027
Cash flow from financing				
Change in receivables (Kyro), +/-, decrease/increase	-3,233,205	65,187,275	-3,233,204	65,187,275
Repayment of outstanding credit	-	-	-6,145,876	-7,419,299
Withdrawals of short-term loans	-	147,021	-142,530	-
Withdrawals of long-term loans	-717,000	-4,037,320	-850,454	-4,475,577
Cash flow from financing	-3,950,205	61,296,976	-10,372,064	53,292,399
Change in liquid resources	-3,144,554	-2,917,417	4,077,696	-7,046,355
Liquid resources at the beginning of the financial year 1 Jan.	15,867,423	18,784,840	1,352,673	8,399,028
Liquid resources at the end of the financial year 31 Jan.	12,722,870	15,867,423	5,430,369	1,352,673

# Accounting Principles

## Consolidated financial statements

The consolidated financial statements include all Group companies in which the direct or indirect ownership of the Parent Company exceeds 50%. The consolidated financial statements have been drafted in compliance with the acquisition cost method. The Group's internal business transactions, unrealised margins of internal deliveries, and internal receivables and debts as well as internal profit distribution have been eliminated. Minority interests have been separated from the consolidated shareholders' equity and result, and they are entered as a separate item.

The income statements of the Group companies operating outside Finland have been translated in accordance with the average rate of the financial period, and the balance sheet items, excluding the result for the financial year, have been converted into Finnish markka using the exchange rate quoted on the date of the financial statement. Profits and losses on exchange generated by the translation of shareholders' equity, elimination of the equity of foreign subsidiaries, and the translation of the income statement and balance sheet using different rates have been entered under unrestricted equities.

## Items denominated in foreign currencies

Receivables and liabilities denominated in foreign currencies, excluding the currencies of the countries in the euro zone, have been translated into Finnish markka using the exchange rate quoted by the Bank of Finland on the date of the financial statement. Receivables and liabilities denominated in the national currencies of the euro zone have been translated into markka from the original currencies via euro, using the official exchange rates of the euro. Receivables and liabilities hedged with derivative contracts have been entered at the exchange rate quoted on the date of the financial statement. The interest portions of forward contracts will be periodized over the duration of the contract. The exchange rate differences on derivative contracts made for hedging purposes have been used to balance the exchange rate differences of the corresponding hedged items.

## Net sales

Net sales comprise sales profits from which indirect taxes, exchange rate differences, and discounts have been deducted. Project deliveries are entered as income mainly in connection with equipment deliveries. Estimated costs incurring from installation associated with project deliveries are entered as project appropriations under accrued liabilities and deferred income in connection with equipment deliveries.

## Pension arrangements

In Finland, statutory pension security as well as additional, voluntary pension security are arranged by pension insurance companies. The pension security of personnel in companies operating outside Finland has been arranged in accordance with relevant local legislation and practice.

## Leasing

Leasing payments have been entered as renting expenses. Outstanding leasing payments have been entered as liabilities in the financial statements.

## Extraordinary items

Extraordinary items comprise received Group contributions.

## Research and development expenses

Research and development expenses have been entered as expenses for the financial year during which they have incurred, excluding machinery purchases which will be written off every three years by straight-line depreciation.

## Valuation of inventories

Inventories are presented, using the FIFO principle, at the acquisition cost, or at the lower repurchase price or the probable selling price. Fixed manufacturing costs have not been capitalised.

## Valuation of fixed assets

Fixed assets have been capitalised on the acquisition costs. Depreciation according to plan has been calculated on a straight-line basis over the useful life of the fixed assets.

### Depreciation periods according to plan

Intangible rights	3–10 years
Other expenses with long-term effect	5 years
Buildings and structures	25 years
Machinery and equipment	3–5 years
Computer hardware and software	3–5 years

## Accumulated year-end transfers

The difference between accumulated depreciations and depreciations according to plan has been divided into deferred tax liability and shareholders' equity in the consolidated balance sheet. The portion entered under shareholders' equity is not included in the Group's distributable assets. In the consolidated income statement, the year-end transfers made during the financial year have been entered under the result of the financial year and changes in deferred tax liability.

## Deferred tax liability and tax claims

The Group's deferred tax liability consist of the deferred tax liabilities related to depreciation differences.

# Notes to the Financial Statement

INCOME STATEMENT	Group		Parent Company	
	1999	1998	1999	1998
<b>1. Net sales</b>	<b>301,634,979</b>	<b>239,747,919</b>	<b>282,737,134</b>	<b>221,441,542</b>
Net sales by market area				
Finland	24,447,884	17,032,919	19,328,695	11,563,042
European Union	138,338,092	85,828,000	129,035,000	73,126,000
European countries outside the EU	23,096,000	40,855,000	23,096,000	41,100,000
Middle and Far East	77,536,360	59,968,000	77,686,439	60,020,500
North and South America	38,216,643	36,064,000	33,591,000	35,632,000
<b>Total</b>	<b>301,634,979</b>	<b>239,747,919</b>	<b>282,737,134</b>	<b>221,441,542</b>
<b>2. Materials and services</b>				
Materials and supplies				
Purchases during the financial year	52,714,843	47,656,294	59,713,250	55,430,270
Changes in inventories of materials and supplies	1,969,097	1,094,735	4,584,855	1,115,340
	54,683,940	48,751,029	64,298,106	56,545,610
External services	12,664,817	11,099,269	34,657,836	20,120,068
<b>Total</b>	<b>67,348,757</b>	<b>59,850,298</b>	<b>98,955,941</b>	<b>76,665,678</b>
<b>3. Personnel expenses</b>				
Salaries and fees	98,696,733	83,717,246	64,505,578	56,157,821
Pension expenses	10,734,505	8,413,345	9,800,052	7,573,528
Other personnel expenses	10,369,454	9,310,900	5,662,592	5,814,324
<b>Total</b>	<b>119,800,692</b>	<b>101,441,491</b>	<b>79,968,222</b>	<b>69,545,673</b>
Salaries and remuneration paid to Board members and Managing Director	3,700,000	3,172,140	636,350	484,880
The President of the Parent Company is entitled to retire at the age of 60 years.				
The Group and the Parent Company employed during the financial year on average				
Clerical personnel	423	399	248	253
<b>4. Depreciation</b>				
Depreciation according to plan				
Intangible assets				
Intangible rights	644,151	778,817	601,355	730,234
Other expenses with a long-term impact	114,469	132,868	114,469	132,868
Tangible assets				
Buildings and structures	1,948,943	2,024,455	1,629,236	1,629,236
Machinery and equipment	13,210,619	12,340,278	7,843,943	7,849,307
Shares and holdings				
<b>Depreciation total</b>	<b>15,918,182</b>	<b>15,276,418</b>	<b>10,189,002</b>	<b>10,341,645</b>
<b>5. Other expenses of business operations</b>				
Rents	9,024,976	8,350,688	4,452,709	4,774,908
Other expenses	84,241,974	82,452,220	82,905,179	89,442,014
<b>Other expenses of business operations total</b>	<b>93,266,950</b>	<b>90,802,908</b>	<b>87,357,888</b>	<b>94,216,922</b>
<b>6. Financial income and expenses</b>				
Interest income				
From Group companies	41,425	39,986	114,385	72,913
From others	473,290	787,229	235,576	484,434
Financial income				
From others	2,490,204	1,153,206	2,486,912	1,138,561
<b>Interest and other financial income total</b>	<b>3,004,919</b>	<b>1,980,421</b>	<b>2,836,874</b>	<b>1,695,908</b>
Interest expenses				
From Group companies	-5,075,237	-5,068,775	-5,089,219	-5,068,775
From others	-546,337	-791,494	-244,166	-374,735
Other financing expenses				
To Group companies				
To others	-2,026,479	-3,040,913	-1,992,865	-2,786,153
<b>Interest and other financial expenses total</b>	<b>-7,648,053</b>	<b>-8,901,182</b>	<b>-7,326,250</b>	<b>-8,229,663</b>
<b>Financial income and expenses total</b>	<b>-4,643,134</b>	<b>-6,920,761</b>	<b>-4,489,376</b>	<b>-6,533,753</b>
Other financial income and expenses include differences in exchange (net)	929,701	-1,472,189	927,004	-1,399,164
<b>7. Extraordinary items</b>				
Extraordinary income				
Received Group contributions		33,400,000		33,400,000
<b>Total</b>		<b>33,400,000</b>		<b>33,400,000</b>

8. Appropriations	Group		Parent Company	
	1999	1998	1999	1998
Difference between depreciation according to plan and actual depreciation in taxation			360,383	635,060
<b>Change of reserves total</b>			<b>360,383</b>	<b>635,060</b>
<b>9. Direct taxes</b>				
Income taxes for actual business operations	1,433,508	-169,997	938,761	103,395
Change in deferred tax liabilities	-21,069	-188,848		
<b>Total</b>	<b>1,412,439</b>	<b>-358,845</b>	<b>938,761</b>	<b>103,395</b>

## BALANCE SHEET

### Fixed assets and other long-term investments,

10. Intangible assets, Group	Intangible rights	Other expenses with long-term effects		Total
Acquisition cost 1 Jan. 1999	10,056,614	1,390,344		11,446,958
Increase	1,034,206			1,034,206
Acquisition cost 31 Dec. 1999	11,090,820	1,390,344		12,481,164
Accrued depreciation 1 Jan. 1999	-7,815,068	-1,053,417		-8,868,485
Depreciation during the financial year	-644,151	-114,469		-758,620
Accrued depreciation 31 Dec. 1999	-8,459,219	-1,167,885		-9,627,104
<b>Book value 31 Dec. 1999</b>	<b>2,631,601</b>	<b>222,459</b>		<b>2,854,060</b>
Book value 31 Dec. 1998	2,255,068	336,927		2,591,995
<b>Intangible assets, Parent Company</b>				
Acquisition cost 1 Jan. 1999	9,825,463	1,390,344		11,215,807
Increase	920,160			920,160
Acquisition cost 31 Dec. 1999	10,745,623	1,390,344		12,135,967
Accrued depreciation 1 Jan. 1999	-7,713,607	-1,053,417		-8,767,024
Depreciation during the financial year	-601,355	-114,469		-715,824
Accrued depreciation 31 Dec. 1999	-8,314,962	-1,167,886		-9,482,848
<b>Book value 31 Dec. 1999</b>	<b>2,430,661</b>	<b>222,458</b>		<b>2,653,119</b>
Book value 31 Dec. 1998	2,111,856	336,927		2,448,783

11. Tangible assets, Group	Land and water areas	Buildings	Machinery and equipment	Investments in progress	Total
Increase			14,864,856		
Decrease			-346,160		
Acquisition cost 31 Dec. 1999	11,984,478	44,659,075	87,344,773	173,946	144,162,272
Accrued depreciation 1 Jan. 1999		-8,361,816	-50,684,383		-59,046,199
Depreciation during the financial year		-1,948,943	-13,126,555		
Accrued depreciation 31 Dec. 1999		-10,310,759	-63,810,938		-59,046,199
<b>Book value 31 Dec. 1999</b>	<b>11,984,478</b>	<b>34,348,316</b>	<b>23,533,835</b>	<b>173,946</b>	<b>70,040,575</b>
Book value 31 Dec. 1998	11,984,478	36,297,259	22,210,185	173,946	70,665,868
<b>Tangible assets, Parent Company</b>					
Acquisition cost 1 Jan. 1999	9,831,408	35,943,569	50,079,863	173,946	96,028,786
Increase			7,716,353		7,716,353
Decrease			-20,703		-20,703
Acquisition cost 31 Dec. 1999	9,831,408	35,943,569	57,775,513	173,946	103,724,436
Accrued depreciation 1 Jan. 1999		-7,329,140	-36,972,574		-44,301,714
Accrued depreciation from deductions and transfers			6,901		6,901
Depreciation during the financial year		-1,629,236	-7,843,943		-9,473,179
Accrued depreciation 31 Dec. 1999		-8,958,376	-44,809,616		-53,767,991
<b>Book value 31 Dec. 1999</b>	<b>9,831,408</b>	<b>26,985,194</b>	<b>12,965,898</b>	<b>173,946</b>	<b>49,956,446</b>
Book value 31 Dec. 1998	9,831,408	28,614,429	13,107,293	173,946	51,727,076

Book value of R&D investments 31 Dec.	Group		Parent Company	
	1999	1998	1999	1998
	<b>1,884,696</b>	<b>2,904,803</b>	<b>1,404,696</b>	<b>2,399,803</b>

12. Investments	Group companies	Shares		Total
		Group	Others	
<b>Group</b>				
Acquisition cost 1 Jan. 1999			140,600	140,600
Acquisition cost 31 Dec. 1999			140,600	140,600
<b>Book value 31 Dec. 1999</b>			<b>140,600</b>	<b>140,600</b>
Book value 31 Dec. 1998			140,600	140,600
<b>Parent Company</b>				
Acquisition cost 1 Jan.	6,518,816		140,600	6,659,416
Increase	2,009,625			2,009,625
Acquisition cost 31 Dec. 1999	8,528,441		140,600	8,669,041
<b>Book value 31 Dec. 1999</b>	<b>8,528,441</b>		<b>140,600</b>	<b>8,669,041</b>
Book value 31 Dec. 1998	6,518,816		140,600	6,659,416

Group companies	Hometown	Group ownership, %	Parent Company ownership, %	Parent Company's shares		
				Number	Nominal value/ share, FIM	Book value, FIM
Tecnomen Ltd.*	County Clare, Ireland	100.00	100.00	131,428	8	739,430
Tecnomen GmbH	Dreieich, Germany	100.00	100.00	200,000	3	544,245
Tecnologia de Mensajes Tecnomen SL***	Madrid, Spain	100.00	100.00	500	36	181,800
Tecnomen System Solutions Oy	Espoo, Finland	65.88	65.88	3,115	100	543,887
Tecnomen Hong Kong LTD**	Wan Chai, Hong Kong	100.00	100.00	500,000	0.8	349,750
Tecnomen Sistemas de Telecomunicacao Ltda	Sao Paulo - SP CEP, Brazil	100.00	100.00	1,154,251	3.2	4,389,024
<b>Total</b>						<b>6,748,136</b>

\* 0.00030%, 2 shares P. Fitzgerald, P. Yliheljo, \*\* 0.0002%, 1 share M. Suuntala, \*\*\* 0.0001%, 1 share T. Siuko.

In addition to the group belongs Tecnomen Japan Oy, which is 100% owned by parent company and has currently no activity.

13. Fixed assets	Group		Parent Company	
	1999	1998	1999	1998
Materials and supplies	8,591,162	10,364,685	5,299,075	8,582,447
Work in progress	837,179	650,001		315,801
Finished goods/products	1,389,862	1,961,893	395,004	2,229,030
<b>Fixed assets total</b>	<b>10,818,203</b>	<b>12,976,579</b>	<b>5,694,079</b>	<b>11,127,278</b>

#### 14. Long-term receivables

Receivables from others				
Accounts receivable	40,715,134	30,769,214	40,715,134	30,769,214
<b>Long-term receivables total</b>	<b>40,715,134</b>	<b>30,769,214</b>	<b>40,715,134</b>	<b>30,769,214</b>

#### 15. Short-term receivables

Receivables from Group companies				
Accounts receivable	57,762		1,013,367	6,165,618
Loan receivables			4,745,764	8,982,449
Prepaid expenses and accrued income	11,677	33,400,489	17,872	33,756,148
<b>Total</b>	<b>69,439</b>	<b>33,400,489</b>	<b>5,777,003</b>	<b>48,904,214</b>

Receivables from others				
Accounts receivable	158,121,548	110,546,496	142,055,678	95,109,282
Loan receivables	1,086,385	1,717,530		
Other receivables	1,368,340	3,186,917	581,693	1,926,568
Prepaid expenses and accrued income	5,701,942	12,051,484	5,259,765	11,786,411
<b>Total</b>	<b>166,278,215</b>	<b>127,502,427</b>	<b>147,897,136</b>	<b>108,822,261</b>

#### Short-term receivables total

Prepaid expenses and accrued income				
Receivables relating to sales	1,141,357	9,689,429	1,141,357	9,689,429
Others	4,572,262	2,362,544	4,136,280	2,453,130
Group contributions		33,400,000		33,400,000
<b>Prepaid expenses and accrued income total</b>	<b>5,713,619</b>	<b>45,451,973</b>	<b>5,277,637</b>	<b>45,542,559</b>

#### 16. Shareholders' equity

Share capital 1 Jan.	9,813,200	9,852,800	9,813,200	9,852,800
Decrease/increase	105,728	-39,600	105,728	-39,600
<b>Share capital 31 Dec.</b>	<b>9,918,928</b>	<b>9,813,200</b>	<b>9,918,928</b>	<b>9,813,200</b>

Reserve fund 1 Jan.	8,357,119	8,311,348	7,884,000	7,844,400
Decrease/increase	-105,728	39,600	-105,728	39,600
<b>Reserve fund 31 Dec.</b>	<b>8,251,391</b>	<b>8,357,119</b>	<b>7,778,272</b>	<b>7,884,000</b>

Retained earnings	74,038,705	74,840,655	39,744,958	39,847,610
Exchange rate and translation differences	-388,475	-1,013,430		
Result for the financial year	913,706	211,480	2,354,297	-102,652
<b>Total</b>	<b>74,563,936</b>	<b>74,038,705</b>	<b>42,099,256</b>	<b>39,744,958</b>

#### Shareholders' equity 31 Dec.

	<b>92,734,255</b>	<b>92,202,853</b>	<b>59,796,456</b>	<b>57,442,158</b>
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The company's share capital has been increased by a capitalisation issue amounting to EUR 17,782.42 (FIM 105,728.40). The nominal value of a share converted into euros is EUR 0.04. The share capital of the company is EUR 1,668,244 (FIM 9,918,928.40).

#### Account on distributable assets

Retained earnings	73,650,230	73,827,225	39,744,958	39,847,610
Profit for the financial year	913,706	211,480	2,354,297	-102,652
Portion of accrued depreciation differences and voluntary reserves entered under shareholders' equity	-5,668,504	-6,007,818		
<b>Distributable funds</b>	<b>68,895,432</b>	<b>68,030,887</b>	<b>42,099,255</b>	<b>39,744,958</b>

#### 17. Accumulated appropriations

Accelerated depreciation 1 Jan.			8,344,192	8,979,252
Increase (+), decrease (-)			-360,383	-635,060
<b>Accelerated depreciation 31 Dec.</b>			<b>7,983,809</b>	<b>8,344,192</b>

#### 18. Deferred tax liability

Deferred tax liabilities				
Appropriations 1 Jan.	2,336,374	2,525,223		
Increase (+), decrease (-)	-21,069	-188,849		
<b>Appropriations 31 Dec.</b>	<b>2,315,305</b>	<b>2,336,374</b>		
<b>Deferred tax liability 31 Dec.</b>	<b>2,315,305</b>	<b>2,336,374</b>		

## 19. Bond with warrants

The General Meetings of Tecnomen in 1997 and 1998 have decided on granting options to the management of the company. Together the rights of option included in both these arrangements entitle to subscribe for 4,590,000 Tecnomen shares with an aggregate nominal value of FIM 1,091,636.03 (EUR 183,600.00). The subscription period will begin in two phases so that one half of the options becomes available for subscription as of 2 May, 2000, the other half as of 2 May, 2002. The subscription period of all warrants ends on 30 June, 2004.

The subscription price of a share has been determined on the basis of the company's net asset value presented in the company's consolidated balance sheet: for options granted in 1998, on the basis of the net asset value on 31 December, 1997, and for the bond with warrants of 1997, on the basis of the company's net asset value on 31 December, 1996. The subscription price of a share shall be reduced with the dividend distributed between the granting of options or issuing the bond and the subscription period. Correspondingly, the subscription price shall be changed according to the Group contribution per share, either paid or received. The arrangements include conditions according to which the options or a part thereof may be repossessed by the company if the option holder's employment contract expires before 2 May, 2002.

20. Long-term liabilities	Group		Parent Company	
	1999	1998	1999	1998
From the Group				
Other debts	115,000,000		115,000,000	
From others				
Loans from financial institutions	3,893,430	4,294,377		
Pension loans	4,362,833	4,691,218	4,268,942	4,590,260
Other debts	369,749	370,465	98,750	270,465
<b>Total</b>	<b>8,626,012</b>	<b>9,356,060</b>	<b>4,367,692</b>	<b>4,860,725</b>
<b>Total</b>	<b>123,626,012</b>	<b>9,356,060</b>	<b>119,367,692</b>	<b>4,860,725</b>
Maturity of long-term liabilities				
Times of maturity				
1-2 years	838,359	896,047	298,826	488,033
2-3 years	862,996	781,359	277,908	298,826
3-4 years	893,886	805,996	258,455	277,908
4-5 years	115,841,208	836,909	115,240,363	258,455
over 5 years	5,189,563	6,035,749	3,292,140	3,537,503
<b>Total</b>	<b>123,626,012</b>	<b>9,356,060</b>	<b>119,367,692</b>	<b>4,860,725</b>
<b>Deferred tax liability</b>	<b>2,315,304</b>	<b>2,336,374</b>		
<b>21. Short-term liabilities</b>				
Debts to Group companies				
Accounts payable	39,462		6,324,630	13,289,520
Other payables	17,000,000	135,233,205	17,000,000	135,233,205
Accrued liabilities and deferred income	138,764	173,397	996,025	233,797
<b>Total</b>	<b>17,178,226</b>	<b>135,406,602</b>	<b>24,320,656</b>	<b>148,756,522</b>
Short-term liabilities to others				
Loans from financial institutions	400,947	363,207		
Pension loans	328,385	353,102	321,318	345,504
Advances received	3,235,452	2,065,689	2,913,339	2,065,689
Accounts payable	14,924,307	8,266,223	7,479,711	8,016,076
Other debts	4,639,119	11,028,531	3,278,570	2,455,998
Accrued liabilities and deferred income	43,601,796	32,008,037	41,330,776	29,524,047
<b>Total</b>	<b>67,130,006</b>	<b>54,084,789</b>	<b>55,323,714</b>	<b>42,407,314</b>
<b>Short-term liabilities total</b>	<b>84,308,232</b>	<b>189,491,391</b>	<b>79,644,369</b>	<b>191,163,836</b>
Accrued liabilities and deferred income				
Accruals of salary and personnel expenses	18,274,953	10,580,323	18,274,953	10,580,323
Interests	232,915	270,857	232,915	270,857
Agent provisions	5,052,493	7,434,787	5,052,493	7,434,787
Project appropriations	12,653,726	5,745,111	12,653,726	5,745,111
Others	7,526,473	8,150,356	6,112,714	5,726,766
<b>Accrued liabilities and deferred income total</b>	<b>43,740,560</b>	<b>32,181,434</b>	<b>42,326,801</b>	<b>29,757,844</b>
Non-interest-bearing debts				
Non-interest-bearing liabilities	66,412,183	43,541,873	62,174,334	55,585,725
<b>Non-interest-bearing debts total</b>	<b>66,412,183</b>	<b>43,541,873</b>	<b>62,174,334</b>	<b>55,585,725</b>
<b>22. Contingent liabilities</b>				
Debts with mortgage on property as security				
Debts to financial institutions	4,294,377	4,686,258		
Real estate mortgage	4,294,377	4,686,258		
Securities on behalf of Group companies and on own behalf				
Mortgage on company assets	1,400,000	1,400,000	1,400,000	1,400,000
Contingent liabilities for the Group's debts				
For Group companies' loans			1,920,380	1,971,750
Contingent liabilities and liabilities not included in the Balance Sheet				
Leasing liabilities	3,354,997	2,997,970	1,547,985	1,660,853
With due date in the current financial year	2,020,206	1,297,050	662,116	717,550
With a later due date	1,334,791	1,700,920	885,869	943,303
Pledges				
On own behalf	21,753,142	22,172,588	21,753,142	22,172,588
Other liabilities	3,482,026	3,457,998	3,420,757	3,406,757
<b>23. Values of the underlying instruments of derivative contracts</b>				
Forward agreements	50,307,250	27,008,800	50,307,250	27,008,800

# Proposal by the Board of Directors to the Annual General Meeting

In accordance with the balance sheet of 31 December, 1999, the Group's distributable assets amount to FIM 68,895,431.02, of which the profit for the financial year constitutes FIM 913,706.44. The amount of the Parent Company's unrestricted shareholders' equity was FIM 42,099,255.63, of which the profit for the financial year constitutes FIM 2,354,297.49. The Board of Directors proposes to the General Meeting that the profit for the financial year be carried forward to shareholders' equity and that no dividend be paid.

Tecnomen Oy  
Espoo Finland, February 10, 2000

Pentti Yliheljo

Erkki Hautaniemi

Esko Rantala

Vesa Helkkula  
President and CEO

## Auditors' Report

To the shareholders of Tecnomen Oy

We have audited the accounting, the financial statements and the administration of Tecnomen Oy for the financial year 1999. The financial statements, drafted by the Board of Directors and the President, include the report of the Board of Directors, consolidated and Parent Company's income statements, balance sheets, sources and applications of funds, and notes to the financial statements. Based on our audit, we express our opinion on these financial statements and the company's administration.

The audit has been conducted in accordance with Finnish Standards on Auditing. We have performed the audit to an extent sufficient to obtain reasonable assurance about whether the financial statements are free of material misstatement. The purpose of our audit of administration has been to examine that the Board of Directors and the President have complied with the rules provided by the Companies Act.

In our opinion, the financial statements have been prepared in accordance with the Accounting Act and other rules and regulations governing the preparation of financial statements. The financial statements give a true and fair view, as defined in the Accounting Act, of both the consolidated and Parent Company's result of operations, as well as of the company's financial standing. The financial statements with the consolidated financial statements can be adopted and the members of the Parent Company's Board of Director and the President can be discharged from liability for the period audited by us. The proposal made by the Board of Directors on how to deal with the distributable funds is in compliance with the Companies Act.

Espoo Finland, February 23, 2000

Sixten Nyman, CPA  
KPMG Wideri Oy Ab

# Board of Directors

## **Board of directors**

Pentti Yliheljo (54), Chairman, M.Sc. (Eng.)

Erkki Hautaniemi (60), B.Sc. (Econ.)

Vesa Helkkula (40), M.Sc. (Eng.), MBA (as of March 16, 1999)

Esko Rantala (38), M.Sc. (Eng.), MBA

Seppo Seitsonen (44), B.Sc. (Eng.) (until September 6, 1999)



# Organisational Structure

<b>President and CEO</b>	Vesa Helkkula*
<b>Functions</b>	
Global sales and customer operations	Jukka Hurri*
Product management and product marketing	Kai Kauto*
Product development and technology	Timo Ruoho*
Manufacturing and logistics	Paul Fitzgerald*
Personnel and administration	Froste Ahlfors*
Marketing	Sari Aapola
Finance and control	Riitta Järnstedt*
Paging systems	Timo Kangas
Tecnomen Ireland	Paul Fitzgerald*
<b>Regional business units</b>	
Europe	Jarmo Toivanen*
Asia Pacific	Jarmo Häärä*
Middle East, Africa	Matti Kakko
Latin America	Kimmo Aura
<b>Tecnomen's subsidiary</b>	
Tecnomen System Solutions Oy	Matti Loukunen

\* Member of management board in 2000

# Worldwide Offices



- **Europe**
  - Tecnomen HQ, Finland
  - Tecnomen Germany
  - Tecnomen Spain
  - Tecnomen Ireland

- **Asia Pacific**
  - Tecnomen Malaysia
  - Tecnomen Thailand
  - Tecnomen Beijing
  - Tecnomen Hong Kong
  - Tecnomen Taiwan

- **Middle East, Africa**
  - Tecnomen Middle East

- **Latin America**
  - Tecnomen Brasil

# Concepts and Terminology

## **3G Networks**

Third-generation mobile phone networks that use e.g. UMTS and GPRS technologies. 3G networks enable faster data transfer and the handling of larger amounts of data with future terminals.

## **Data Transfer**

The digital transfer of text, images, sound or other data in wireless and fixed telecommunication networks.

## **E-mail Server**

Provides e-mail services on the network. E-mail applications connect to the server to retrieve and send messages.

## **ERMES Paging Standard**

The Enhanced Radio Message System (ERMES) is an advanced paging system standard developed by the European Telecommunications Standards Institute (ETSI). ERMES ensures that paging messages reach their right destination when subscribers travel from country to country. The ERMES standard includes a high-speed radio protocol and a system and pager specification.

## **FLEX™**

A high-speed radio protocol for paging systems, designed by Motorola Inc.

## **GPRS**

The General Packet Radio Service (GPRS) is a packet-based wireless communication service that has data-transmission speed of 40-115 Kbits/s and continuous connection to the Internet for mobile phone and computer users. The higher data rates will allow users to take part in video conferences and interact with multimedia www sites and similar applications.

## **Intelligent Network Systems and Products**

Intelligent Network (IN) is a telephone network architecture in which the service logic for a call is located separately from the switching facilities, allowing services to be added or changed without having to redesign switching equipment. This principle enables the rapid development of versatile services. Standardised interfaces between network elements secure independence from providers.

## **Intelligent Peripheral**

Intelligent Peripheral is supplement to Intelligent Network (IN) architecture and takes care of special functions like announcements, Dual Tone Multi-Frequency (DTMF) digit collection and IN controlled messaging services.

## **Internet Protocol**

The Internet Protocol (IP) is the method or protocol by which data is sent from one computer to another on the Internet. Each computer (known as a host) on the Internet has at least one address that uniquely identifies it from all other computers on the Internet.

## **Messaging Systems and Products**

Messaging is the creation, storage, exchange, and management of text, images, voice, telex, fax, e-mail and paging over a communications network. Messaging products enable the sending of messages between different telecommunication networks.

## **Operation and Maintenance Centre**

The Operation and Maintenance Centre (OMC) allows an operator to manage a system. Enables e.g. system configuration, management of services and statistics, alarm processing, and invoicing.

## **Paging System**

A one-way telecommunications service used to locate a person. The Tecnomen product range includes high-capacity, wide-area paging systems.

## **Platform**

A platform is any base of technologies on which other technologies or processes are built. A platform consists of operating system hardware and other applications.

**POCSAG**

(Post Office Code Standard Advisory Group) CCIR Radio Paging Code number 1. The first open, digital radio protocol for paging systems. Still the most widely used protocol in the world.

**Portal**

A gateway for a www site that is or proposes to be a major starting site for users when they get connected to the Internet or that users tend to visit as an anchor site. A portal provides a collection of services important to the user, e.g. search engines, links and messaging services.

**Prepaid System**

A service technology enabling subscribers to pay in advance for calling time.

**Service Provider**

A company that produces services with various contents for the Internet and mobile phones utilising the networks of existing operators.

**Short Message Service Product**

Enables the development of services based on short messages. The service saves a copy of the short message until it has reached the recipient.

**(Tele)Operator**

An organisation maintaining a telecommunication network and offering connections. An operator can provide datacommunication services both to service providers and directly to users. Operators are typically licensed telephone companies.

**Text-to-Speech Conversion**

A service with which the text of e.g. an e-mail message can be converted into synthetic speech.

**UMTS**

The Universal Mobile Telecommunications System (UMTS) is a third-generation mobile communication system, based on the standards provided by the international standardisation organisations International Telecommunication Union (ITU) and ETSI. UMTS enables broadband, packet-based transmission of text, digitized voice, video, and multimedia at data transmission speed of 2 Mbits/s. UMTS offers a consistent set of services to mobile computer and phone users no matter where they are located in the world.

**Unified Messaging**

Unified messaging is the handling of voice, fax, and regular text messages as objects in a single mailbox that a user can access either with a regular e-mail client or by telephone.

**VoIP**

Voice over Internet Protocol (VoIP) is a term used in IP telephony for a set of facilities for managing the delivery of voice information using the Internet Protocol (IP). In general, this means sending voice information in digital form in discrete packets rather than in the traditional circuit-committed protocols of the Public Switched Telephone Network (PSTN). A major advantage of VoIP and Internet telephony is that it avoids the tolls charged by ordinary telephone service.

**WAP**

The Wireless Application Protocol (WAP) is a specification for a set of communication protocols to standardise the way that wireless devices, such as cellular telephones and radio transceivers, can be used for Internet access, including e-mail, the www, news groups, and Internet Relay Chat (IRC).

**Wireless Internet Solution**

A data communication solution which enables modified use of Internet services from a mobile phone.

# Addresses

## **Tecnomen**

PL 93  
(Finnooniitynkujä 4)  
02271 Espoo  
Finland  
Tel. +358 9 804 781  
Fax +358 9 8047 8301

## **Tecnomen Ireland**

Shannon Industrial Estate  
County Clare  
Ireland  
Tel. +353 6170 2200  
Fax +353 6170 2201

## **Tecnomen Germany**

Am Lachengraben 7  
D-63303 Dreieich  
Germany  
Tel. +49 6103 50850  
Fax +49 61035 08510

## **Tecnomen Spain**

Calle Génova 21, 6 Dcha  
28004 Madrid  
Spain  
Tel. +34 91 702 1045  
Fax +34 91 702 0952

## **Tecnomen Middle East**

P.O.Box 61483  
(RA 08 SC 06/Jebel Ali Free Zone)  
Dubai  
U.A.E.  
Tel. +971 4 883 8268  
Fax +971 4 883 6779

## **Tecnomen Hong Kong**

Unit 03, 21/F  
Town Place  
Fook Lee Commercial Centre  
33, Lockhart Road  
Wanchai  
Hong Kong  
Tel. +852 2520 6773  
Fax +852 2865 4186

## **Tecnomen Beijing Representative Office**

Room 10-18, 10<sup>th</sup> Floor, Tower B  
Cofco Plaza, 8 Jianguomennei Avenue  
Beijing  
China  
Tel. +86 10 6526 0766  
Fax +86 10 6526 0765

## **Tecnomen Taiwan**

11/F No 6 Ho Ping East Road  
Section 1  
Taipei  
Taiwan  
Tel. +886 2 2369 4901  
Fax +886 2 2369 4903

## **Tecnomen Thailand**

252/96, 18<sup>th</sup> Floor/Unit D  
Muang Thai Phatra, Office Tower II  
Rachadaphisek Road, Huaykwang  
Bangkok 10320  
Thailand  
Tel. +66 2 693 3380  
Fax +66 2 693 3443

## **Tecnomen Malaysia**

2<sup>nd</sup> Floor Wisma Chinese Chamber  
258 Jalan Ampang  
50450 Kuala Lumpur  
Malaysia  
Tel. +60 3 458 1064  
Fax +60 3 458 1092

## **Tecnomen Brasil**

Av. Eng. Luiz Carlos Berrine, 1500 cj. 72  
Brooklin Novo  
São Paulo – SP, Cep 04571 000  
Brazil  
Tel. +55 11 5505 9774  
Fax +55 11 5505 9778

## **Tecnomen System Solutions Oy**

Pihatörmä 1 A  
02240 Espoo  
Finland  
Tel. +358 9 888 1009  
Fax +358 9 888 2783





TECNOMEN

head office | Tecnomen, P.O.Box 93 (Finnoonnaitynkujä 4), 02271 Espoo, Finland  
tel. +358 9 804 781, fax +358 9 8047 8301, [www.tecnomen.com](http://www.tecnomen.com)

worldwide offices | Ireland  
Germany  
Spain  
U.A.E.  
Malaysia  
Thailand  
Hong Kong  
Taiwan  
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