

# **TIETO** ANNUAL REPORT 1998

### GENERAL MEETING OF SHAREHOLDERS

Tieto Corporation's Annual General Meeting will be held on Thursday 13 March 1999, commencing at 5 pm, at Tieto's head office, Kutojantie 10, Espoo, Finland. Shareholders wishing to attend the meeting must notify the company no later than by 4.00 pm (local Finnish time) on 8 March 1997:

**Tieto Corporation** Ms Anne Rontu P.O. Box 33, FIN-02631 Espoo, Finland Tel. +358 9 526 2203 E-mail: anne.rontu@ tieto.com

Shareholders registered in the shareholder register maintained by the Finnish Central Securities Depository Ltd by the record date 6 March 1999 are entitled to attend the meeting

### DIVIDEND PROPOSAL

The Board of Directors proposes that a dividend of FIM 2.90 per share be paid on the year 1998. The dividend approved by the General Meeting will be payable from 23 March 1999.

Interim reports 1999

January – March	30 April 1999
January – June	30 July 1999
January – September	29 October 1999

Tieto will also arrange teleconferencing facilities on the publication of each interim report. The invitation to participate will be sent in the form of a stock exchange bulletin.

### PUBLICATIONS

The company's annual report and interim reports are available in English and Finnish and may be ordered from: Tieto Corporation / Corporate Communications, P. O. Box 33, FIN-02631, Espoo, Finland, or Tel. +359 9 862 62502 Telefax +358 9 862 63331 E-mail: anne.sampi@tieto.com

The annual report and interim reports are also published in Tieto's Internet page, www.tieto.com.

### CHANGES OF ADDRESS

Shareholders are kindly requested to notify any changes of address to the book-entry register where their bookentries are maintained.

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TIETO IS AN INFORMATION SOCIETY BUILDER AND AN IT SERVICE PARTNER OFFERING ITS CUSTOMERS HIGH ADDED VALUE.

> focus beyond 2000

Tieto is an information technology service company which specializes in the developing, integration, maintenance and operation of advanced information systems. Tieto is the largest company in its field in Finland and one of the largest in the Nordic countries. Tieto operates in 12 European countries, principally in Northern Europe.

Tieto's core business is high-value-added professional services, which it provides to large corporate customers within a framework of close strategic partnership. Its main business sectors are banking and insurance, post, telecommunications, energy, trade, media industry, public administration, the forest industry, and the manufacturing industries.

The company provides professional services dedicated to these sectors, as well as processing and network services, financial and personnel management systems and technology products for customers in general.

### TIETO'S LEADING CONCEPTS

### Vision

A builder of the new information society and the leading provider of high-value-added information technology services in Northern Europe.

### Mission

To enhance the efficiency and profitability of its customers' businesses through the use of information technology and information networks.

### Goals

- To achieve faster than average growth exceeding 15 % of annual net sales.
- To increase shareholder value and generate operating profit exceeding 10 % of annual net sales.
- To be an IT partner to its customers offering them high added value.

### BUSINESS MIX OF NORDIC INFORMATION TECHNOLOGY SERVICE COMPANIES



- Application Development
- Value-added % of Sales

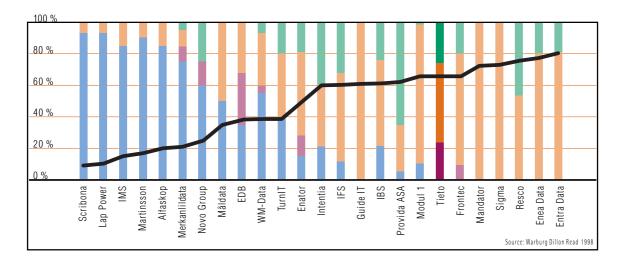
### Strategy

Tieto focuses on those sectors of professional services, processing and network services, and packaged software services in which it can gain the best expertise in the market, command a solid market position and achieve strong profitability.

### Values

Tieto's leading values are Customer Benefit and Personal Growth. The company generates added value for its customers and owners through a high level of knowhow, while offering top professionals in the field continuous opportunity to grow and develop.

Tieto's goal is to be the leading provider of high-value-added professional services in Northern Europe. Tieto has systematically been developed as a company providing high added value to its customers, a strategy which is further strengthened by the alliance with the Swedish company Entra Data.



### HIGHLIGHTS OF 1998

 Demand for information technology services remained strong. Tieto's growth was maintained by information society development, European integration and the turn of the millennium.

 Tieto increased market share in the Nordic and Baltic countries through acquisitions to consolidate its core businesses and by merging of operations. The most important acquisitions took place in the financial services sector. In July Tieto acquired Latvia's largest financial software services company Konts SIA. In November Tieto and the Swedish company Entra Data AB decided to combine their banking, financial and insurance business operations.

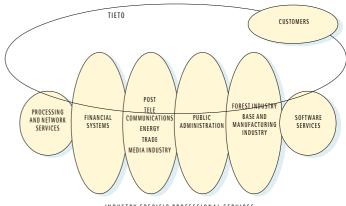
· Country companies started operating in Tieto's principal foreign markets to support and accelerate its internationalization. The country companies are responsible for administration in these markets, freeing Tieto's divisions to concentrate on business development and expansion.

 In May Tieto and Finland Post established a joint venture company called Nordic Printmail Oy, which took over their paper printing operations.

· Tieto selected the information content industry as one of its core customer businesses. This industry is rapidly implementing information networks as a means of producing and distributing products and services.

• In September Tieto concluded a framework agreement with Sonera, Finland Post, Merita Bank, Leonia Bank and the Okobank group to establish a company to supply technical certificate services. This means digital verification and digital signature services for electronic commerce and communication between public authorities and citizens.

• Altogether 2,492 company employees subscribed for the 1998 bond with warrants to personnel. Subscription of shares based on the A warrants attached to the 1996 bond with warrants began on 1 December 1998. Bonds with warrants form part of Tieto's personnel incentive scheme.



INDUSTRY	SPECIFIC	PROFESSIONAL	SERVICES

	1998		1997		change
	FIM	EUR	FIM	EUR	%
Netsales, million	2,813.1	473.1	2,433.0	409.2	+15.6
Operating profit, million	421.8	70.9	274.7	46.2	+53.5
Net financial items, million	6.0	1.0	7.1	1.2	-15.5
Pre-tax profit, million	427.7	71.9	281.8	47.4	+51.8
	F 70	0.07	0.50	0.00	<u></u>
Earnings per share	5.76	0.97	3.58	0.60	+60.9
Earnings (less good will amortization) per share	6.39	1.07	4.19	0.70	+52.5
Shareholders' equity per share	18.42	3.10	17.26	2.90	+6.7
Dividendpershare	2.90 <sup>1)</sup>	0.49	1.79	0.30	+62,0
Investments, million	327.9	55.1	329.5	55.4	-0.5
Interest-bearing net debt, million	-122.4	-20.6	-214.9	-36.1	-43.0
	40.7		01.0		
Return on investment, %	43.7		31.8		
Return on equity, %	32.4		22.3		
Gearing, %	-12.0		-23.1		
Equityratio	62.4		63.2		
Personnelonaverage	4,868		4,221		+15.3
Personnelatyearend	5,064		4,332		+16.9
	3,000		.,		
<sup>1)</sup> Proposal of dividend					

### KEY INDICATORS

### CHIEF EXECUTIVE'S REVIEW



# Tieto, an information society builder ►

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technology services in strong Nordic and data-intensive sectors – that is, its own software products, development and integration services for information systems, and advanced support services – has created the best business expertise in the market.

Tieto is solidly positioned to be a major player in the construction of tomorrow's information society. Tieto's concentration on the highest-value-added information

#### FROM ROADS TO THE INFORMATION HIGHWAY

The world's developed economies are making rapid progress towards a true information society in which all products and services will be produced, marketed and consumed via electronic networks. Servers and information networks will become the most important means of production and distribution for most products and services. Production and consumption are moving to information networks because these offer customers a faster, more cost-effective and more environment-friendly way of getting their products and services.

The Nordic countries and the banking sector are pioneering the development of the information society on a global scale. The high density of Internet and mobile phone connections in the Nordic countries has already made banking and payment services available on electronic networks and the same is happening to travel agency services, entertainment and media services, and public administration services. The sectors making greatest progress in this direction are those most reliant on data, but no sector will be left entirely untouched by this revolution.

### STRUCTURES AND WORKING PRACTICES ARE CHANGING

The 'networking' of production and consumption is radically changing the way business sectors are organized and operate. Physical production of goods is becoming an automatic function of network terminals, while content, servers and transmission paths increasingly converge. This is particularly true of large corporations, whose information systems of the future will be integrated telecommunications and information technology entities enabling fixed and mobile terminals to act as a single system anywhere in the world.

Information systems have expanded from their original mainframe environment to workstation server systems, and further to today's network systems. This is increasing the complexity of data processing, forcing companies to outsource their development and production tasks to specialized service companies.

Strong information technology partners are becoming an essential asset in the move towards the information society of the future. This trend is opening up excellent opportunities for development and internationalization for companies like Tieto which combine knowhow of both business processes and information technology.

### TIETO IS A PARTNER TO ITS CUSTOMERS

Tieto sees its future role as being an information society builder and a partner to its customers; one that is able to strengthen their competitiveness in the new information society by providing highvalue-added information services.

The increasing complexity of information systems, due to their workstation and network architecture, places enormous demands on a business partner operating as an integrator. In Tieto's opinion, information technology companies can offer high-standard integration services and be a real partner only if they also possess a strong knowledge of their customers' businesses, coupled with solid expertise in information technology.

Tieto has refined its business knowledge and partnership strategy more than any other information technology company in the Nordic countries. Examples are our mill systems for forest industry companies and our innovative partnership model for the banking sector.

Tieto's strategy, which emphasizes specialization and high added value, is substantially different from the strategy chosen by many of its competitors to diversify and expand into peripheral information technology services. The differences are explained by the histories of these companies, the structure and size of their domestic markets, and their internationalization priorities.

### READY TO BUILD THE INFORMATION SOCIETY

Tieto is solidly positioned to be a major player in the construction of tomorrow's information society. Tieto's concentration on the highest-value-added information technology services in strong Nordic and data-intensive sectors – that is, its own software products, development and integration services for information systems, and advanced support services – has created the best business expertise in the market. The company has withdrawn from low-value-added services, but has nevertheless maintained annual sales growth in excess of 15 %.

The change in Tieto's service structure has been evidenced by a continuous improvement in its profitability throughout the 1990s. In 1998 Tieto's pretax profit reached 15 % and its return on investment 44 % of net sales.

Growth in shareholder value was positive in all the divisions during the year. Tieto will continue to generated higher than average shareholder value through sales growth, healthy margins and efficient use of capital. Our tools for growth are strong organic growth, precisely targeted acquisitions and a willingness to participate in restructuring in our field. We will make better use of our capital by leasing business premises instead of owning them.

### INVESTMENTS IN PEOPLE

Tieto's leading values are customer benefit and personal growth. This means that the company's most important investments are the resources it devotes to its people. We have placed especially high priority throughout the 1990s on increasing investments in personnel development and last year these investments totalled approximately FIM 120 million.

At the end of the year Tieto had 5,046 highly competent information technology professionals, 732 more than at the end of the previous year. I would like to extend my heartfelt thanks to all of them for their commendable efforts during the year, as I also offer my gratitude to our customers for placing in our charge an even greater proportion of their information technology.

### INTELLECTUAL CAPITAL

### SOLID EXPERTISE BENEFITS CLIENTS' BUSINESSES

Tieto's mission is to provide its customers with major business benefits through the use of information technology and data networks. Achieving these benefits for the customer calls for thorough knowledge of the customer's business processes and sector, as well as solid competencies in technologies, methods and processes.

IT partners are expected to take a proactive approach to understanding their customer's business and to know how other companies in the same sector operate worldwide. The IT partner should help customers develop business operations based on new technology as well as streamline existing operating processes. Professional service depends on understanding not only the customer's needs but also the needs of the customer's customer.

In 1998 Tieto decided to develop a common concept for measuring customer benefit. The first step was to establish how key Tieto customers rank different areas of expertise. Customers placed greatest emphasis on project management, applications management, technology and business sector expertise in their assessments:

Expertise in project management	▶ 4.5
Expertise in applications management	▶ 4.4
Expertise in technology	▶ 4.3
Business sector expertise	▶ 4.1
Operating services expertise	▶ 3.9
Understanding the customer's	
needs and requirements	▶ 3.8
Knowing the customer's needs	
and ways of operating	▶ 3.7
(acale of the C. with C. hoine most important)	

(scale of 1 to 5, with 5 being most important)

The key personnel in project management are experienced project managers, of which we have about 500 in Tieto. We also have some 2,500 experts in systems development and applications tailored to a business sector or customer, and about 1,000 experts in Tieto's own software products. Experts in operating services for mainframes, servers and networks number approximately 800.

The views and opinions of customers form the basis for Tieto's development of its intellectual capital.

### CONTINUOUS DEVELOPMENT OF PROJECT MANAGEMENT AND SOFTWARE ENGINEERING SKILLS

Multivendor projects and international projects are making the work of project managers increasingly more demanding. Training programs for project managers have been updated to meet the rising competency requirements. A training program lasting one year has been launched for experienced individuals, who are then eligible for a project manager's certificate on completion of the course.

Applications management of large database and transaction processing systems calls for a thorough knowledge of mainframes, which will be needed long into the next century. Our 'Mainframe Professionals' program specializes in training new experts to meet this need. Personnel are also given specialized and advanced courses in the methods and tools for software engineering and data management.

### COMPETENCY CENTRES TRANSFER EXPERTISE IN NEW TECHNOLOGY

The trend in technology development is for the widespread deployment of networks and object-oriented software engineering and the introduction of operations management software. Tieto provides its personnel with an array of extensive training programs specializing in these new techniques. Our support groups and Competency Centres keep expertise up-to-date through internal networking.

Competency Centres have been set up for electronic commerce, e-services, smartcards, data warehouses, operational control and data security. These Centres transfer expertise by networking with other Tieto units, participating in personnel training and implementing customers' projects.

Mobile phones are becoming vital terminal devices for users of IT systems as they can be used to offer consumers and companies a wide range of information and banking services. Tieto is developing applications that will integrate mobile technology with clients' IT systems.

Many of Tieto's customers construct extensive operations management systems, aiming to use the same software throughout the world. Standard software applications for this purpose include SAP R/3, Baan and MFG/Pro. The skills essential for successful deployment of these packages are supported by Tieto's expertise in operational management and its business sector knowledge.

### INTERNATIONAL MANAGEMENT TRAINING INCREASED

The 'Tieto International Management Program' and Tieto Executive Development Program' are enhancing the ability of managers to operate in an international business environment. Some 50 executives a year attend courses in Tieto's different units. The programs aim to improve participants' capabilities for working in different cultures and leading international teams. They also provide tools for strategic planning, marketing, personnel management and financial management.



In the new information society many services will be produced, marketed and consumed electronically, via information networks. Information technology and telecommunications are converging into a single seamless entity. Knowhow and specialization are growing in value. Tieto's expertise in network services is based on a combination of technology and knowledge of its customers' business sectors. Sari Seppänen and Mika Könnölä.

## Tieto is building its intellectual capital based on the views of its customers

# Networked banks open round the clock **>**



### FINANCIAL SECTOR

Change and concentration continued to typify the financial services sector during 1998. The common European currency, coupled with European Monetary Union, are removing many obstacles to competition, which is creating a European-wide market. Northern Europe and the Baltic Rim states, on the other hand, are forming a single market mainly controlled by a few number of large banks, insurance companies and financial services houses. Adding to competition in the field are a fair number of local, specialized players.

Information technology and telecommunications are becoming increasingly important competitive factors for financial sector companies. This sector is in the front line of businesses adopting the technology of the new information society, a process which is radically changing operating methods and distribution channels.

Competition is becoming increasingly tough, interest margins are being cut and payments traffic is rapidly becoming more international. Electronic payment and self-service are becoming prevalent. Demand for various investment services is broadening, and the popularity of savings, life and pension insurance schemes is growing.

Tieto's financial services business continued to expand strongly and the company signed agreements for several major projects with its partner-customers. Fidenta Oy, Merita Bank Oyj and Tieto decided to extend their joint system development and cooperation agreements, which will further strengthen the extensive and long-standing cooperation which these companies have enjoyed. Tieto and Leonia Bank Oyj tightened their partnership when their joint venture company Tietoleonia Oy took over responsibility for developing the bank's technical and application architecture.

Liquidity management software based on the latest objectoriented technology was supplied to two banks. A new partnering agreement in Professional and Processing and Network Services significantly deepened cooperation with the Finnish Central Securities Depositary.

A number of new consultancy and information system contracts were signed with insurance companies. Year 2000 projects were for the most part completed, while modifications in prepara-

Banks are among the first sectors to network their services, a process which is radically changing how this sector operates. Information technology and telecommunications are emerging as increasingly vital tools for banking. In Finland, for example, Merita Customer Financing can give customers a decision on a new loan in just four minutes. Leila Lappalainen of Merita Customer Financing with Jukka Melanen of Fidenta.

### FINANCIAL SYSTEMS SECTOR'S SHARE OF GROUP NET SALES IN 1998 <sup>')</sup>



 Includes Tieto's share of net sales of associated companies under Tieto management

tion for the euro got under way. Tieto-Tapiola Oy and Sampo Insurance Company agreed to acquire the new Tieto Object object-oriented method with consultancy services. Sampo also ordered a Documentum document management system.

In the field of pension insurance, TKP Tieto Oy supplied the Pension Security Centre and employment pensions companies with new information systems for data management, transmission of pension applications and registration of pension decisions. This upgrading project, which began in the mid-1990s, will continue into the early years of the next century. Apart from the Pension Security Centre, the ready information systems are now being used by thousands of people in employment pension companies and the National Pensions Institute.

Tieto's Processing and Network Services Division signed a contract with FD Finanssidata Oy transferring responsibility for its paper printing operations to Tieto. FD Finanssidata also decided to go ahead with the first phase of a new twin computer centre. Leonia Bank and Oy Samlink Ab also placed orders for equipment expansions.

Tieto's acquisition of a majority holding in Konts SIA, a Latvian high-technology specialist in payment card systems, marked the transfer to Tieto of Latvia's largest financial software company. Konts made impressive progress in development of its business operations during the year including an agreement worth several million Finnmarks to supply a payment card system to Ukrainian Processing Centre, the largest payment card processing centre in the country.

At the end of the year Tieto and the Swedish company Entra Data AB pooled their expertise in IT systems for the financial services sector. Entra, together with Tieto's other financial sector companies, form the leading IT financial systems business entity in Northern Europe with 1500 professionals networked throughout the Baltic Rim.

#### **B**USINESS REVIEW

### POST

Restructuring in the postal sector continues unabated. In most European countries post and telecommunications have now been segregated into different business entities. Finland is no exception. Teleoperators can look forward to a future involving increasing privatization and internationalization, whereas in the postal sector only the national postal administrations of Germany and the Netherlands have started down this road.

The future of Europe's postal operators is determined by international competition, future EU policies and the ambitions of political decision-makers in individual countries. The EU's guidelines for deregulation of postal services will come into force in 2003. Domestic and international competition will increase, affecting both conventional transportation and distribution as well as the emerging areas of electronic commerce and communication.

Finland Post's systematic measures to develop and intensify its operations have included investments in a new parcel sorting centre. This project, which calls for upgrading of sorting equipment and processes, together with the information systems which support them, is one of the most important of Finland Post's and Tieto's joint projects.

During the year Tieto was also responsible for developing Finland Post's information system, renewing its address database, and bringing a dispatch monitoring system and insurance sales application into operation. The Post's distributed processing and network services were expanded and strengthened with the addition of round-the-clock service.

Tieto and Finland Post were also engaged in significant cooperation in other areas during the year. The joint printing company Nordic Printmail Oy started operating at the beginning of May. In October the decision was made to set up a new company to provide the technical certificate services required for electronic commerce. Besides Tieto and Finland Post, shareholders in this company include Sonera, Merita Bank, Leonia Bank and the Okobank group.

### TELE-COMMUNICATIONS

Demand for telecommunications services grew substantially during the year despite the slowdown in the global economy. Europe's deregulated telecoms markets behaved as expected. The number of competitors increased and many established telemonopolies found themselves in a competitive situation for which they were not prepared. Despite global economic trends and the increased level of competition, the telecoms sector expanded sharply in mobile telephony, data communications and the media field. Telecommunications, media and information technology continued to converge, with new needs and opportunities arising constantly.

Finland ranks among the world's top countries in mobile telephony, data communications and media communications. Finnish companies are recognized worldwide for their innovative products and technical proficiency.

Tieto's success in the field of telecommunications rests on its knowhow and long-standing customer relationships. Tieto's comprehensive service portfolio, coupled with its integrator model, have enhanced its level of service to telecoms companies.

Tieto's deliveries in this sector during the year focused on enhancing the reliability of its customers' existing production systems. In both Professional and Processing and Network Services, Tieto supplied products to develop call centres, customer management, billing and network information systems. The increasingly diverse application of information technology created greater demand for Tieto's integrator services. Tieto also devoted efforts to promoting the international operations of its telecoms customers by globalizing its services and strengthening its network of country companies.

Sonera is one of Tieto's key customers. Tieto has been involved in developing and supporting the information systems used by Sonera in its own business processes. Tieto has also acted as a subcontractor in the development of new products and services in Finland and the international markets.

> Retailers must have a thorough understanding of consumer behaviour and preferences if they wish to improve their product ranges and standard of service. Information technology is a vital tool for managing the all-important "customer interface". The SOK retail chain and Tieto have jointly developed the Bonus system for SOK's customerowners to enhance the chain's offering and marketing. Minna Ruotsalainen of SOK (left) with Tieto's Leila Salkala.

# Networking informed buying



### ENERGY

The energy sector in Finland showed stronger growth during the year than forecast. The reason was an increase in industrial output, driven by buoyant economic conditions, which also raised electricity consumption.

The Finnish energy sector is undergoing major restructuring. From autumn 1998 electricity suppliers also had to compete for private consumers. Deregulation of the energy sector has meant intensified competition over prices, which has reduced electricity retail prices. In this environment quality of service and customer control have grown in importance for energy companies.

The major changes taking place in this sector have also created the need to update and improve information systems. Demand is being further sustained by the system changes necessary for Year 2000 compliance. Investments are focusing especially on renewal of customer service and electricity trading systems.

Tieto is one of the leading suppliers of IT systems to the energy sector in Finland. Its strength is a wide range of products, extensive knowledge of how this sector operates, and its high level of technical expertise. In addition to processing and network services, Tieto concentrates particularly on providing information systems for maintenance and material control, customer service, billing, and financial and personnel management.

During the year Tieto signed a major cooperation agreement with Kraftdata AB in Sweden for distribution of this company's Elegans customer information system. Product development focused on a new version of the PowerMaint maintenance and materials management system, which will broaden its scope of application.

The most important agreements in Professional Services involved project extensions with key customers. A contract to purchase and distribute the PowerMaint system was signed with Imatran Voima Oy, and contracts were concluded with Elnova and Neste Corporation for the Elegans software. During the year Tieto also expanded the application of the Tieto Persona HR human resources management system in IVO. Tieto also took responsibility for managing the LANs and workstations of Fortum Corporation.

Outside Finland, Tieto's major achievements in this sector during the year were deliveries of PowerMaint software via IVO Power Engineering to Hungary and England. Similarly, Processing and Network Services took responsibility for management of the telecommunications and electronic mail systems used by IVO in its power plants in England.

> SERVICE SECTOR'S SHARE OF GROUP NET SALES IN 1998



Newspaper publisher Sanoma Corporation and Tieto are working together to develop an Internet-based electronic marketplace for Helsinki Sanomat's classified ads. This will include information on cars, housing and workplaces with search and response services, as well as editorial matter and news. Services such as these are also pointing the way forward for the development of e-commerce in general. Pekka Korpela of Sanoma Corporation (left) with Tieto's Marko Kinnunen, Taru Kuhanen and Jyrki Poteri.

### TRADE

The trade sector in Finland has experienced substantial structural change in recent years. For consumers this has been evident in the expansion of retail chains and the building of larger retail outlets. This sector also recovered rapidly from the recession. Competition continues to grow more intense. Three main factors describe this process of change. Customers are assuming ever greater importance and the battle for consumers is being waged using a variety of customer loyalty schemes. On the other hand, price competition and logistics have risen in importance. Thirdly, as product ranges are being continuously

broadened, product management depends on an increasingly high level of technology. Traders are focusing higher than ever priority on information

about individual products and customers. Retailers in fact are in an excellent position to exploit information since for years they have been used to collecting large quantities of data on their customers, products and operations. This data has now become a vital asset for enhancing operational management based around consumer needs. Tieto is closely involved in developing new-generation information warehousing systems based on the ROLAP relational database and Broadcasting technology.

To bring new systems into operation successfully, a retailer's IT partner must have a thorough knowledge of this sector's business processes as well as first-class project management capabilities. Tieto has invested heavily in this sector and has the results to prove it.

Tieto implemented a number of projects during the year aimed at promoting more effective use of information. Havistra Oy started its System ESS logistical operations. Alko Oy's logistical operations and distribution were further developed using EDI connections, while Anttilakesko adopted a new system for improving product management.





Giving consumers a say in media ► content

## Public administration services get networked



### MEDIA INDUSTRY

Digitalization and networking are transforming the business environment in which the media industry operates. The media industry covers graphic services, electronic communications and the recording industry. The sector encompasses newspapers and magazines, television and radio broadcasting, films and audio recordings.

Technological advances are creating new opportunities to provide media services for consumers. Over the next few years a major change will be the development of services, making them interactive and personalized. Interactive services already exist in the form of electronic marketplaces based on networked newspapers and magazines. Digital broadcasting technology will soon extend interactive services to television and radio operations.

Information technology has a central role to play in this process. Companies require a reliable IT partner for developing and implementing new ideas and forms of business.

Tieto has been systematically developing its own capabilities in this sector for several years. The company's investments have focused on assimilating the special features of this industry, gathering the necessary technical knowledge, building service entities and forging a network of partnerships.

Tieto's strengths are its understanding of how the industry works, its technological knowhow and its wide-ranging portfolio of services. Tieto also offers solid experience of project management, integration and maintenance as well as skill in processing and combining information from a number of different sources.

Tieto's major media industry projects during the year revolved around networked publications, electronic marketplaces, customer management and Year 2000 compliance. At the same time Tieto also began creating a network of suppliers of technology and digital services for its system deliveries.

Working with Sanoma Corporation, Tieto started up an electronic marketplace for classified advertisements. The first phase of this project includes vehicle, housing and workplace advertisements. Tieto's scope of delivery also includes supplying round-the-clock operating and network services for this marketplace as well as the services of a centre specialized in processing and developing content. The content of Startel Oy's Verkkotaloussanomat (Networked Business News) service was expanded and its visual layout was renewed.

### PUBLIC ADMINISTRATION

The low availability of state funding during the year obliged public administration customers to streamline their activities in line with available resources. Nevertheless information technology investments showed further growth due to the needs created by Year 2000 compliance and the euro, and to the creation of new electronic services based on information technology. Finland's preparations for taking over the presidency of the EU were a further factor boosting investments.

Tieto's market position as an IT partner to public administration organizations was further strengthened during 1998. This was particularly due to Tieto's ability to supply critical systems, its knowledge of this sector, experience in the application of new technology, its advanced products and the comprehensive Totalpro systems management concept. Tieto's secure network service, which provides a technical interface for various networked eservices, was also well received in the market.

Tieto reinforced its partnership with several key customers. Large projects were implemented for the City of Helsinki, the EU Commission, the State Treasury, judicial administration, population registers and tax administration. The latter's IT needs were handled by a new company Tietokarhu Oy, which started operation in January. In the regional government sector growth was most pronounced in healthcare and libraries, both of which are focus areas in this sector.

New information service contracts were signed with the Vehicle Administration Centre and the Population Registration Centre. For the National Board of Patents and Registration Tieto

Finland's Ministry of Justice is updating its infrastructure and administrative systems. Lotus Notes/Domino has been chosen as the basic software tool for legal offices and law courts and this will also be used to develop administrative applications. More than 8,000 users in the legal sector will be using this software early in the next millennium. This enormous project, involving extensive technical and organizational renewal, calls for tight cooperation and rigid project management by the ministry, the courts and offices and Tieto, their supplier. Riitta Marttila of the Ministry of Justice (middle) with Sari Tuohisaari and Olli Nilsson of Tieto. PUBLIC ADMINISTRATION SECTOR'S SHARE OF GROUP NET SALES IN 1998 ')



\*) Includes Tieto's share of net sales of associated company under Tieto management

developed a trial system for electronic management of Trade Register matters. A number of new direct mail services were launched including a service for verification and updating of company registers; customer analysis, profiling and market research services; and complete service packages supporting customer relations.

In personnel administration Tieto retained its already extremely strong position with deliveries of its Tieto Persona software solutions to state and regional government bodies. The company also started deliveries of a new graphical payroll management system. In financial management the Tieto Economa software system was expanded in line with the introduction of new accounting principles in Finland. In the same context the State Treasury adopted a new central accounting system for state finances based on the Leonardo information warehouse solution.

Tieto also succeeded in strongly increasing its presence in the international markets for public administration IT services. Almost ten projects were completed for the EU Commission and three new multiyear framework agreements were signed at the end of the year. In the Baltic countries Tieto continued cooperation with the Estonian government as well as taking its first steps with the government of Latvia. A large contract was agreed with the Sörmland regional government in Sweden for an Effica IT system for dental healthcare management. Exports of the Effica system were also started to the USA. Another major landmark in Sweden was a contract to supply the prime minister's office with a document management system.

### FOREST INDUSTRY

Finland's forest industry companies are recognized as global leaders in their markets. This sector is so important for Finland that the cluster of companies which has grown up around it has also amassed frontline expertise in many other sectors such as mechanical engineering, electronics, transportation and information technology.

Industrial restructuring has led to a continuous concentration of resources in fewer corporations. Mergers and growth pressures have produced a few giant corporations, the largest of which is also the largest in Europe today.

Bigger corporate entities and new technologies, notably pilot electronic marketplaces for trading in timber and paper, are rapidly reforming the industrial and operational landscape. Moreover, the increasing global concern for the environment is challenging countries and companies to conserve natural resources and ensure sustainable use of raw materials. These trends are also raising IT needs to an entirely new level. INDUSTRY SECTOR'S SHARE OF GROUP NET SALES IN 1998

# 20.2%

Tieto commands a strong position in IT systems for the forest industry. Major investments at the start of the decade have now been turned into products which create a solid foundation for international growth. Tieto's forest industry services cover information systems for managing operations from timber procurement to distribution of finished paper products and sawn goods. These information systems for natural resource management, timber procurement, sawmills, pulp and paper mills, or global sales and distribution are integrated seamlessly into the technical environment – the Totalpro solution for managing networked systems.

Tieto serves major corporate customers such as Stora Enso Corporation, UPM Kymmene Corporation, Metsä-Serla Oyj or Myllykoski Oyj on a global scale and around the clock. Key customers are increasingly making decisions outside Finland. Tieto today supplies support services, based on Totalpro system management and international service points, to more than twenty countries.

Many forest industry companies have chosen SAP's R/3 software as their strategic IT platform. Tieto has anticipated this demand by combining its forest industry and R/3 expertise and by participating in the implementation of an R/3 forest sector solution at the SAP development centre. Tieto further strengthened its service offering in the area of logistics when it concluded a cooperation agreement with Steveco Oy, Finland's leading port stevedoring operator.

> The forest industry's increasingly large corporate entities, new technology and greater global concern about environmental issues are also placing entirely new demands on this sector's IT infrastructure. For years Enso and Tieto have been jointly developing sales and logistics systems. The new Stora Enso's business needs are a major challenge for the group's information systems and their service capabilities. Applications management in Stora Enso is based on Tieto's certified operations management system. Anita Laapotti (left) of Stora Enso with Tieto's Eija Viljanen.

# Keeping an electronic eye on wood from forest seedling to finished product



### BASE AND MANUFAC-TURING INDUSTRY

This sector comprises the ten largest Finnish industrial concerns. Their businesses are electronics and telecommunications, mechanical engineering and process engineering. These corporations operate in an extremely demanding environment. Restructuring is taking place throughout the sector, while their business operations are rapidly growing and becoming more international.

Information technology will play an even more crucial role in the business and product development of these companies and also in the way they operate in the future. This is because internationalization creates its own new demands; companies must unify their international operations and manage their logistics on a global scale. Most of these companies have also set themselves the goal of gaining technology leadership in their sectors. Put together, these factors make it imperative for their IT partner to provide wider geographical and operational responsibility, the ability to anticipate development needs, and personnel with experience and professional skills.

Tieto's market position strengthened substantially in this sector during the year. Tieto is widely involved in development of its customers' core systems. Specifically, this involves building and distributing uniform and compatible operational control systems and support services for corporations with global operations.

Management of product information and documentation will be of decisive importance as a means of supporting and integrating traditional operational control solutions. It also ranks highly among Tieto's development priorities for industry.

The most significant events during the year were wide-ranging agreements relating to the development and application management of operative information systems for Nokia Corporation and Neste Corporation, the expansion of Valmet Corporation's and ABB Oy's operational control projects to include start-up and support services, and a number of operational control projects for various business units of Rauma Corporation.

Tieto is further strengthening its service capabilities in this sector by acquiring additional expertise in the management of new technologies and global operational control systems. The company's service units are expanding and their number will increase in line with customer needs.

Crucial new technologies include Lotus Notes/Domino, various web technologies and multimedia.

> NON-ALLOCATED OPERATIONS IN GROUP NET SALES IN 1998



One function of information management at Nokia Corporation is to safeguard the functionality of its critical business applications and ensure rapid global implementation of new technology. Reliable ordering and shipping processes are dependent on logistics systems. As a Nokia partner, Tieto is developing information systems for its rapidly changing business needs. Jari Nukarinen of Nokia (middle) with Tieto's Sissi Kolbe and Mauri Kiili.

### SOFTWARE SERVICES

Demand for financial and personnel administration services was driven by the Year 2000 issue and preparations for the adoption of the common European currency. Tieto Unic Oy supplied more than 6000 versions of its software systems during the autumn. Sales of new systems were lively as well. Technology consulting focused on document management systems and Internet technology projects. Training given in new products was especially intensive. During the year Tieto Unic held training courses for more than 2000 company participants in the changes brought about by the euro, and this pace will continue during 1999.

In payroll administration, the Swedish company Tieto Datema AB completed development of its Tieto Persona Lön payroll management software package. The first customers were SAAB Aircraft AB and SOS-Alarm AB. Large corporate and public administration customers in Finland were offered the Tieto Persona Fortime payroll management system. The first such customers included Finnair Oy, Kesko Oyj and the City of Turku. The System 4 payroll management software package introduced for small and medium-sized enterprises in Norway became further established as orders were placed during the year by more than one thousand customers.

In financial management, the Tieto Economa concept was launched in Norway. Deliveries of the Wintime financial management package, part of this concept, will start in 1999 although AXO System AS has already taken it into use. Other new products include Tieto Economa Arkisto for electronic archiving, and a new graphical software package called Tieto Economa Fixed Assets, which employs barcode technology.

The R&D centre for personnel administration products in Enköping, Sweden, was strengthened. This unit is now better positioned to develop and maintain the internationally competitive Tieto Persona HR product. This software is used by more than 150 organizations, the largest of which include ABB AB, Scania Lastbilar AB, Oy LM Ericsson Ab, Cap Gemini AB, UPM-Kymmene Oyj and Kesko Oyj.



Bringing products to the global market reliably

The Annual General Meeting on 13 March 1998 decided to amend the company's name to reflect its status as a public limited company. Accordingly, the company was renamed Tieto Corporation Oyj in Finnish and Tieto Corporation in English.

### MARKET CONDITIONS

General economic growth, progress in digitalization, the adoption of the common European currency on 1 January 1999 and the approaching change of millennium were the demand drivers in the information technology (IT) markets during 1998. Demand for IT services continued to increase although the lack of qualified human resources started to hamper market growth. Stiff competition for competent professionals continued unabated.

Demand for Tieto Corporation's services remained strong throughout the year. Besides the normal development needs of customers, full capacity was maintained by the Year 2000 requirements and the adoption of the euro. Technological advances encouraged customers to take greater advantage of networks, object-oriented programming and operative control systems in their information systems, which further boosted demand for IT services.

People are a crucial resource for Tieto's business development. The need for new employees in professional services became more acute during the year and will continue to be felt during 1999 as well. The company made major investments in recruitment, personnel development and remuneration to acquire and retain new people.

### CHANGES IN GROUP STRUCTURE Nordic Printmail

Nordic Printmail Oy, the a joint venture set up by Tieto and Finland Post Ltd to handle their paper printing business, started operations in May. Tieto owns 49 % of the new company, which took roughly 90 employees from Tieto. The company's formation reduced Tieto's net sales by FIM 31 million, compared to the previous year.

#### Entra

The Boards of Directors of Tieto Corporation and the Swedish company Entra Data AB decided in November to combine their banking, financing and insurance operations. Implementation of this plan was contingent upon the approval of Entra's annual general meeting and the Finnish competition authorities. An extraordinary meeting of Entra shareholders approved the merger on 22 December 1998 and the approval of the Finnish competition authorities was granted on 21 January 1999.

The new Entra consists of the Entra Data AB business units, the banking and insurance business units of Tieto's Financial Systems Division, and Tieto's Swedish subsidiary Tieto Financial Systems AB.

The merger was implemented by a privileged issue of Entra shares to Tieto giving Tieto 56 % of the company's share capital and 49.99 % of the voting rights. Entra, for its part, owns 100 % of Tieto Entra Oy, formed by the incorporation of Tieto's banking and insurance

### ACQUISITIONS

	% share	Net sales	No. of	Date of	Business
		er	nployees	acquisition	
GROUP COMPANIES					
• Raxum Oy	100	MFIM 6	10	1 Jan. 1998	Fixed assets management systems financial consolidation software
• Tieto Tradeware AB (form. Eloge AB)	91.6	MFIM 5	10	9 Feb. 1998	IT systems for forwarding and foreign trade
• Tietoteema Oy	100	MFIM 4	15	25 May 1998	Industrial reporting systems
• Tieto Konts Financial Systems (form. Konts SIA)	51.6	MFIM 7	62	15 Jun.1998	Payment card systems
<ul> <li>New Technology Software AB</li> </ul>	100	MFIM 3	4	1 Sep. 1998	Document management and data search systems
• Koulutuskolmio Oy	100	MFIM 3	9	1 Nov. 1998	Accounting and operational control systems for book-keeping offices
Tietokolmio Oy	100	MFIM 13	25	1 Nov. 1998	and small enterprises
ASSOCIATED COMPANY UNDER TIETO MANAGEMENT • TKP tieto Oy					
	40 <sup>1)</sup> /60 <sup>2)</sup>	MFIM 66.4	165	1 Jan. 1998	Employment pension systems

business unit. Tieto Financial Systems is a subsidiary of Tieto Entra. Entra will be consolidated in Tieto Corporation's accounts from the beginning of February 1999.

The merger produces the leading provider of IT financial services in Northern Europe. With operations in Sweden, Finland, Norway and Denmark, the new unit will have annual net sales of approximately FIM 400 million and 700 employees.

Entra's A share will continue to be listed on the Stockholm Stock Exchange.

Simplification of structure continues The Group's corporate structure was further simplified during the year. The operative subsidiaries Carelcomp Forest Oy, Carelcomp Industria Oy and Dialogos-Team Oy were merged with the parent company. Six other internal mergers were also implemented. The ownership structure of the parent company, subsidiaries and associated companies is described in the notes to the financial statements.

The acquisitions carried out during the year are on page 20.

### CHANGES TO MANAGEMENT

Executive Vice President Juhani Ryhänen retired on 1 August 1998.

### NET SALES

Tieto's net sales increased 15.6 % to FIM 2,813.1 million. Eliminating the impact of divested and acquired operations, organic growth was 14.6 %.

Growth was strongest in Professional Services, 35.6 %, of which a 10.3 percentage point increase was attributable to the new associated companies under Tieto management, TKP Tieto Oy and Tietokarhu Oy. Growth in Processing and Network Services was 10.7 % after some of its net sales was transferred to Nordic Printmail. Software Services grew 15.1 % including the 2.2 percentage point impact of acquisitions.

From the perspective of customer sectors, net sales growth was most pronounced in the Financial Services sector, 36.4%, of which TKP Tieto Oy contributed 10.3 percentage points.

#### PERFORMANCE

Earnings per share increased 60.9 % to FIM 5.76 (FIM 3.58 in previous year).

The Group posted an operating profit of FIM 421.8 (274.7) million, which was 15.0 % (11.3%) of consolidated net sales. The operating profit percentage in Processing and Network Services was clearly above the average for the Group and roughly equal to the previous year's level. In Professional Services the percentage was the same as for the Group as a whole and clearly higher than one year earlier. In Software Services the percentage was slightly below the Group's overall level but better than the year before. Of greatest significance to the Group, however, was the increase in profitability achieved by Professional Services for industry. This was the result of a higher degree of invoicing, adherence to project timetables and cost estimates, and price increases.

Other operating income included a FIM 6.3 million profit on the sale of the Oy Datatie Ab stock.

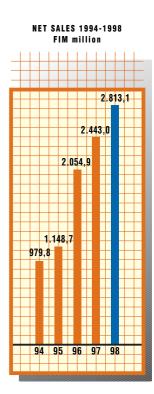
The company recorded employee bonuses totalling FIM 55.1 (21.7) million and a FIM 18 (7.9) million provision for the personnel's development and training fund. Personnel expenses rose 20.3 % due to personnel increases (12.0 %), higher bonuses (3.0 %), statutory salary increases (2.5 %) and individual salary increases (2.5 %).

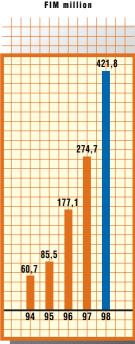
Extraordinary income included FIM 14.6 million in deferred tax assets arising from previous financial periods.

Return on investment was 43.7 % (31.8 %) and return on shareholders' equity 32.4 % (22.3 %).

### ORDER STOCK

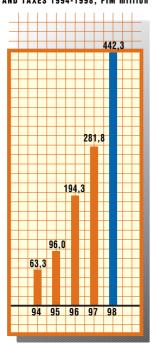
A substantial proportion of net sales in the period was based on contracts consisting of binding agreements for services, long-term service framework agreements, agreements valid for indefinite periods and other types of agreements. In practice the stock of contracts is long

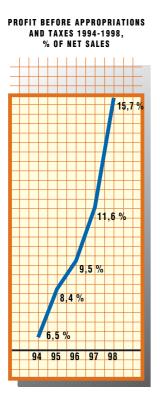




**OPERATING PROFIT 1994-1998** 

PROFIT BEFORE APPROPRIATIONS AND TAXES 1994-1998, FIM million





term. Only binding orders for services are included in the order stock. These totalled FIM 1,878.7 (1,602.8) million, of which FIM 1,220.9 million is expected to be received as income during 1999.

### INVESTMENTS

Direct investments in fixed assets and other long-term assets totalled FIM 327.9 (329.5) million. FIM 89.9 (114.1) million was spent on data processing equipment, FIM 112.8 (101.0) million on property and construction in progress, FIM 3.5 (39.1) million on goodwill from operations, and FIM 43.6 (43.4) million on subsidiary shares. Property investments related to the Group's main business premises in Espoo. Leasing commitments increased FIM 51.0 million.

### FINANCING

Funds arising from operations remained strong, totalling FIM 461.4 million. FIM 9.4 million in long-term loans was repaid and FIM 2.0 million was raised in new loans. FIM 94.3 million was paid in dividends. The company bought back altogether 1,191,080 of its own shares for FIM 192.5 million (2.2 % of the stock and voting rights on the balance sheet date).

The increases in share capital, disapplying shareholders' pre-emptive subscription rights, and the bonds with warrants are described under Shares and Shareholders.

The balance sheet totalled FIM 1,548.5 (1,444.0) million. The equity ratio was 62.4 % (63.2 %) and gearing was -12.0 % (-23.1 %). The company had cash and bank reserves of FIM 178.1 (293.5) million and uncommitted credit limits of FIM 113.3 million.

### INTRODUCTION OF THE EURO ON 1 JANUARY 1999

On 1 January 1999 Tieto adopted the common European currency, the euro, in its external and internal reporting. The Group's business units are adopting the euro as their domestic currency in stages. Some transferred to the euro on the first day of the year and the last ones to adopt the euro will do so by the beginning of 2001.

The adoption of the euro does not significantly affect Tieto's foreign exchange or interest positions.

### YEAR 2000 COMPLIANCE Tieto's software products and customers' information systems

Tieto software products in use by its customers have for the most part been updated for Year 2000 compliance and their functionality has been tested in Tieto's test environment. Customers have been notified concerning outstanding upgrading work and its timetable. Customers have also been informed of the products which will not be upgraded to Year 2000 compliance. Tieto is not aware of any risks concerning its software which could have an adverse effect on the company's operation, performance or financial position.

Tieto, together with its customers, has examined their critical information systems. The required work to achieve Year 2000 compliance has been evaluated and timetables for this work have been agreed. The Year 2000 status of customers and business sectors varies widely. Most customers have already brought their systems up to date, or will have done so by the change of millennium. In certain cases, however, projects have been deferred so much that timetables will be critical. Tieto has examined its contractual obligations and is not aware of any risks associated with its operations, performance or financial position.

#### Equipment and software

Tieto's partners include the largest computer hardware and software suppliers. Risks involve the compatibility of different versions of the hardware and software systems supplied by these companies, and compatibility can only be verified during system testing. Multivendor environments in particular could be problematical. It is not yet possible to evaluate the impact of these risks on Tieto's operations, performance and financial position. Tieto's own Year 2000 readiness Tieto's own Year 2000 readiness is divided into three categories:

- 1. Information systems in use, i.e. applications,
- 2. Data processing equipment, i.e. servers, workstations and telecommunications equipment, and
- 3. Systems embedded in office premises.

Tieto's divisions are responsible for ensuring the Year 2000 compliance of the information systems and premises which they use. At Group level, the Senior Vice President – Development is responsible for coordinating the Year 2000 compliance of information systems and data processing equipment and the Senior Vice President – Finance for office premises.

All internal information systems in use throughout Tieto Group have been examined. Applications are already Year 2000 compliant or will be modified for Year 2000 compliance by the end of September 1999.

The Processing and Network Services Division sells maintenance services for information processing equipment to all Tieto divisions except Software Services. Upgrading of servers, workstations, telecommunications equipment and associated software for Year 2000 compliance is scheduled to be complete by the end of September 1999. The Software Services Division will perform its own upgrades to the same timetable. Tieto's computer hardware and software suppliers and suppliers of external telecommunications links have notified Tieto in writing about the timetables for implementing Year 2000 compliance work in their equipment and services.

The Group and the divisions are responsible for ensuring Year 2000 compliance of the operating and security systems embedded in Tieto's office premises. The Group handles compliance in the large office buildings for which it is responsible, and the divisions for their own premises, both in Finland and abroad. Year 2000 evaluation of these sites has been started. Where Tieto's internal Year 2000 compliance is concerned, the company is not aware of any risks which could have an adverse impact on its operations, performance or financial position. The costs involved in ensuring internal Year 2000 compliance are not significant.

#### DEVELOPMENT

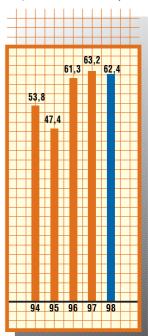
Development in Tieto aims to ensure, among other things, that Tieto's services satisfy as comprehensively and effectively as possible the rapidly changing needs of its customers in a networked environment. Development projects also create the springboard for Tieto's internationalization, enabling the company to increase the coverage of its services to support the international business operations of its customers.

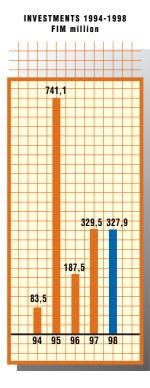
A joint Group project was ongoing renewal of its own operations management system. Issues addressed during the year were Tieto's integrator model providing partnership for specific business sectors and customers; the Group's planning, follow-up and remuneration schemes; and measurement of customer satisfaction.

To support its internationalization, the company completed the second stage of Tieto Object, a project set up to develop object-oriented software production. Project management methods were further developed. Tieto also constructed a model for evaluating the maturity of software production as part of quality development in the company, and it completed an administration model for the foreign units. Tieto also continued to renew its telecommunications network to match the future needs of its various units and countries of operation.

In Professional Services, financial sector development concentrated in particular on object-oriented programming and networked banking operations. In Services the focus was on Knowledge Management expertise and projects. Development in Public Administration centred on information society services,

EQUITY RATIO 1994-1998, %





### NET SALES BY CUSTOMER SECTOR, MFIM

	1998	% growth	% share	1997	% share
	1-12			1-12	
Financial Services	798,7	36,4	28,4	585,6	24,1
Services	539,8	15,7	19,2	466,6	19,2
Public Administration	553,0	21,5	19,6	455,1	18,7
Industry	567,7	32,1	20,2	429,6	17,6
Non-allocated	539,0	-10,8	19,2	604,1	24,8
Minority Interest <sup>1)</sup>	-185,1	71,2	-6,6	-108,1	-4,4
	2.813,1	15,6		2.433,0	

The Services customer sector includes post, telecoms, energy, trade and the media industry. Non-allocated net sales in 1997 includes TT-Microtrading Oy.

### NET SALES BY TYPE OF SERVICE, MFIM

	1998	% growth	% share	1997	% share
	1-12			1-12	
Professional Services	1.684,9	35,6	59,9	1.242,4	51,1
Processing and Network Services	680,0	10,7	24,2	614,5	25,2
Software Services	545,3	15,1	19,4	473,6	19,5
Other Services	88,0	-58,2	3,1	210,5	8,6
Minority Interest <sup>1)</sup>	-185,1	71,4	-6,6	-108,0	-4,4
	2.813,1			2.433,0	

<sup>1)</sup> Tieto's share of the net sales of the associated companies under its management (Fidenta Oy, Tietokarhu Oy, Tietoleonia Oy, TKP Tieto Oy)

### NET SALES BY COUNTRY, MFIM

	1998	% growth	% share	1997	% share
	1-12			1-12	
Finland	2.479,6	14,3	88,2	2.169,0	89,1
Sweden	155,8	25,2	5,5	124,4	5,1
Norway	82,7	8,1	2,9	76,5	3,1
Denmark	28,4	32,1	1,0	21,5	0,9
Belgium	19,9	76,1	0,7	11,3	0,5
Germany	13,6	46,2	0,5	9,3	0,4
Latvia	7,2		0,3	0,1	0,0
Other countries	25,9	23,9	0,9	20,9	0,9
	2.813,1			2.433,0	

digital media projects, and products for the social and health services. In the Industry sector, the company took concerted action to increase its presence in the electronics industry, to develop and internationalize the information systems of forest industry companies, and to enhance its own operating and information system.

In Processing and Network Services, the company further integrated its services to make them more customer-centred. Tieto also strengthened its technical consulting capabilities and established Competency Centres for Totalpro consulting, Lotus Notes, electronic messaging and SAP/R3.

The Software Services division gave heavy attention to modifying its products for the adoption of the euro, and to customer training. The Tieto Persona Lön payroll accounting system for large companies was completed in Sweden. The Tieto Economa and Tieto Persona financial and personnel management concepts were launched.

### PERSONNEL

The Group had 4,868 (4,221) employees on average during the year and 5,064 (4,332) at the year end. The increase in personnel after the end of 1997 was 732 (16.9 %). The Group recruited 885 new employees. Mergers added another 301 employees. Employee turnover was 9.3 % (9.5 %).

The parent company had 2,673 (1,815) employees on average and 3,188 (2,543) at the year end. The Finnish business units had 4,573 (3,983) employees at the year end and the units outside Finland 491 (349) employees.

The salaries and other personnel expenses of the Group and parent company are detailed in Note 3 of the notes to the financial statements.

Tieto's most important development investments are allocated to maintaining and enhancing the skills and competencies of its personnel. In recent years, however, personnel development has been hampered by the strong surge in demand created by the advent of the year 2000 and the adoption of the euro. Tieto considers it important, therefore, to anticipate higher investments in personnel competencies once the impact of these demand drivers has levelled off.

Since 1996 the Board of Directors has decided to make an annual provision to cover future development of the company's personnel. In 1998 FIM 18 million was added to this provision and FIM 1.2 million was used. The provision totalled FIM 26.4 million at the end of the year.

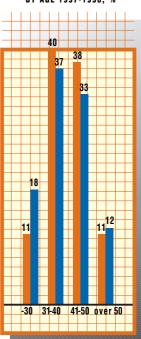
#### PROSPECTS

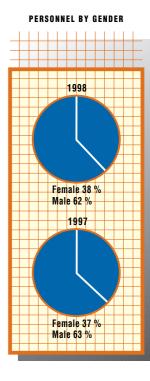
Growth in demand for IT services in Europe currently depends on the pace of economic growth, progress in digitalization, transfer to the euro and the change of millennium. The slowdown in economic growth, coupled with economic turbulence, make it all the more imperative to evaluate IT investments accurately. Nevertheless, the emerging information society and change of millennium are maintaining growth in IT investments.

Tieto's net sales rose faster during the final quarter of 1998 than early in the year and this trend is forecast to continue during 1999. Besides general demand, the company's pace of growth is being maintained by its added capacity and the acquisitions and mergers implemented during 1998. Net sales looks likely to rise by more than 20 % during 1999.

The company's performance this year will be significantly affected by the adequacy of resources and changes in cost levels. Personnel expenses are a central factor in this context. The bonds with warrants offered to all company employees and employee bonuses, both of which form part of the Group's incentive scheme, have proven to be very successful methods of remuneration in conditions of strong demand. The company expects the scheme to dampen employee turnover and increases in fixed costs during the current year as well. Barring serious disturbances in the international economy, the conditions exist for Tieto's continued positive performance. The increase in minority interests will slightly slow down growth of earnings per share.

PERSONNEL BREAKDOWN By Age 1997-1998. %





### PERSONNEL BY DIVISION

(Average during the year)

	1998	% growth	% share	1997	% share
Professional Services	3.125	20,7	64,2	2.590	61,4
Processing and Network Services	808	4,8	16,6	771	18,3
Software Services	763	9,9	15,7	694	16,4
Other Services	107	13,8	2,2	94	2,2
Group Functions	65	-9,7	1,3	72	1,7
	4.868	15,3		4.221	

### PERSONNEL BY COUNTRY

(Average during the year)

	1998	% growth	% share	1997	% share
Finland	4.434	14,4	91,1	3.876	91,8
Sweden	192	19,3	4,0	161	3,8
Norway	118	8,3	2,4	109	2,6
Denmark	34	47,8	0,7	23	0,5
Belgium	21	10,5	0,4	19	0,5
Germany	11	22,2	0,2	9	0,2
Latvia	38		0,8	0	0,0
Other countries	20	-16,7	0,4	24	0,6
	4.868			4.221	

The figures include all the personnel in the associated companies under Tieto's management. Calculating total personnel in relation to Tieto's holdings in these companies, Tieto Group had 4,578 (4,056) employees.

### GROWTH IN PERSONNEL NUMBERS 1997-1998

	1998	1997
Personnel at end of previous year	4.332	3.976
Recruitments	885	730
Mergers	301	27
Employee turnover	-454	-401
Net increase during the year	732	356
Personnel at year end	5.064	4.332

et sales ther operating income (1) ervices and goods (2) ersonnel expenses (3) epreciation (8,9) ther operating expenses (4) hare of associated companies' results	1 Jan31 Dec. 1998           EUR 1000           473,130           2,982           60,966           212,823           28,469           103,787           868	1 Jan31 Dec. 1998 FIM 1000 2,813,104 17,728 362,487 1,265,388 169,268 617,091	1 Jan31 Dec. 1997           FIM 1000           2,432,948           23,098           442,867           1,051,657           166,578	1 Jan31 Dec. 1998 FIM 1000 1,517,135 76,242 149,351 704,656	1,012,70
ther operating income (1) ervices and goods (2) ersonnel expenses (3) epreciation (8,9) ther operating expenses (4)	473,130 2,982 60,966 212,823 28,469 103,787	2,813,104 17,728 362,487 1,265,388 169,268	2,432,948 23,098 442,867 1,051,657	1,517,135 76,242 149,351	FIM 1000 1,012,702 55,510 115,450
ther operating income (1) ervices and goods (2) ersonnel expenses (3) epreciation (8,9) ther operating expenses (4)	2,982 60,966 212,823 28,469 103,787	17,728 362,487 1,265,388 169,268	23,098 442,867 1,051,657	76,242 149,351	55,510
ervices and goods (2) ersonnel expenses (3) epreciation (8,9) ther operating expenses (4)	60,966 212,823 28,469 103,787	362,487 1,265,388 169,268	442,867 1,051,657	149,351	
ersonnel expenses (3) epreciation (8,9) ther operating expenses (4)	212,823 28,469 103,787	1,265,388 169,268	1,051,657		115,45
epreciation (8,9) ther operating expenses (4)	28,469 103,787	169,268		704,656	
ther operating expenses (4)	103,787		166,578		450,38
		617,091		116,704	106,90
hare of associated companies' results	868		524,547	379,820	268,82
		5,162	4,302	-	
perating profit	70,935	421,760	274,699	242,846	126,66
nancial income and expenses (5)	1,003	5,964	7,130	35,550	140,57
rofit before extraordinary items,					
ppropriations and taxes	71,938	427,724	281,829	278,396	267,23
xtraordinary items (6)	2,447	14,550	-	56,850	78,1
hange in depreciation difference *) hange in other appropriations *)		-	-	19,958 -	4,39 10,96
irect taxes (7)	-20,917	-124,367	-93,131	-91,038	-101,76
inority interests	-50	-299	-	-	
rofit for the period	53,418	317,608	188,698	264,166	258,85
) These items cannot be derived directly from he balance sheets owing, among other things, hergers and changes in Group structure.					

BALANCE SHEET						
	GROUP		PAI	PARENT COMP		
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000
ASSETS						
Fixed assets						
Intangible assets (8)	32,632	194,022	193,862		123,518	119,840
Tangible assets (9,11)	93,925	558,455	504,855		395,701	375,417
Investments (10,11,12)	20,636	122,695	78,904		211,849	202,499
Fixed assets, total	147,193	875,172	777,621		731,068	697,756
Current assets						
Inventories	89	527	5,513		135	1,869
Long-term receivables (13,15,21) Loan receivables Deferred tax assets	2,088 960	12,417 5,709	16,751 -		114,325 -	118,509 -
Prepaid expenses and accrued income	603	3,584	-		3,265	-
	3,651	21,710	16,751		117,590	118,509
Current receivables (14,15) Trade receivables Loan receivables Other receivables Group contributions receivable Prepaid expenses and accrued income	63,886 660 357 - 14,640 79,543	379,850 3,926 2,123 - 87,042 472,941	279,546 3,058 2,409 - 65,598 350,611		255,814 10,217 - 56,850 47,632 370,513	158,695 1,087 - 78,019 87,570 325,371
Securities	2,969	17,652	100,232		-	99,958
Cash in hand and at bank	26,988	160,464	193,281		110,117	117,519
Current assets, total	113,240	673,294	666,388		598,355	663,226
	260,433	1,548,466	1,444,009		1,329,423	1,360,982

	G R O U P			P A R	PARENT COMPANY		
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997	
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000	
SHAREHOLDERS' EQUITY AND LIABILITIES							
Shareholders' equity (16)							
Share capital	44,857	266,708	87,986		266,708	87,986	
Share issue	1,600	9,516	-		9,516	-	
Share premium fund Other funds	37,588 650	223,489 3,866	387,867 3,230		223,489	387,867	
Retained earnings	23,420	139,250	242,669		76,039	104,426	
Profit for the period	53,418	317,608	188,698		264,166	258,850	
	161,533	960,437	910,450		839,918	839,129	
Minority interests	240	1,429	-		-	-	
Accumulated appropriations							
Depreciation difference	-	-	-		23,063	41,487	
Provisions for liabilities and charges (17)	4,932	29,321	13,982		29,321	13,982	
Liabilities (18,20,21) Non-current liabilities							
Bonds	1,332	7,922	5,961		7,922	5,961	
Loans from financial institutions	4,251	25,274	32,808		25,274	32,808	
Pension loans	151	898	966		898	966	
Deferred tax liability	665	3,953	13,031		-	-	
Other non-current liabilities	977	5,810	29,893		5,694	-	
Accrued liabilities and deferred income	157 7,533	934 44,791	- 82,659		916 40,704	- 39,735	
	7,000	44,751	02,059		40,704	55,755	
Current liabilities (19,20)							
Loans from financial institutions	335	1,989	1,554		-	1,554	
Advances received Trade payables	1,167 10,452	6,936 62,143	4,510 73,707		1,895 40,242	535 45,936	
Other current liabilities	2,320	13,794	7,482		54,968	150,872	
Accrued liabilities and deferred income	71,921	427,626	349,665		299,312	227,752	
	86,195	512,488	436,918		396,417	426,649	
Liabilities, total	93,728	557,279	519,577		437,121	466,384	
	260,433	1,548,466	1,444,009		1,329,423	1,360,982	

#### FUND STATEMENTS GROUP PARENT COMPANY 31 Dec.1998 31 Dec. 1997 31 Dec. 1997 31 Dec 1998 31 Dec 1998 FIM 1000 EUR 1000 FIM 1000 FIM 1000 FIM 1000 78,058 464,112 344,480 241,647 230,157 Funds arising from operations Change in net working capital -86,318 -5,581 -33,182 44,182 39,157 Net cash flow from operations 72.477 430.930 388.662 280,804 143.839 Investments -11,311 -67,249 -110,810-45,254 -114,278 Share purchases -43,838 -260,650 -260,689 -190,283 -106,694 Other fixed asset purchases -32,540 -82,845 Merged fixed assets Decrease in acquisition cost of merged subsidiaries 34,870 156,465 Merger losses and profits 52,956 -15,700 --12,197 Impact of structural changes on appropriations 1,534 \_ -Net increase/decrease in fixed assets -1,832 -10,894 -23.328 due to changes in Group structure Share disposals 1,334 7,933 7,512 7,714 37,701 77,715 42,065 26,765 Other fixed asset disposals 13,071 84,936 Elimination of the purchase of subsidiary shares 7,323 43,540 94,119 New goodwill on consolidation -4,632 -27,541 -12,366 -Change in associated company shares -2,725 -16,203 4,413 Cash flow from investments, total -253,349 -259,084-86,389 -42,610-86,067Cash flow before financing 57,450 29,867 177,581 129,578 194,737 Financing Increase/decrease in non-current liabilities -6,369 -37,868 22,520 -585 11,396 -4,959 -3,713 Increase/decrease in non-current receivables -834 7,919 919 -95,904 1,135 -13,970 Increase/decrease in current financing 6,747 676 -49,237 Dividends and donations -15,931 -94,721 -49,237 -94,721 Share issue and use of options 4,013 23,860 337 23,860 337 Purchase of own shares -32,379 -192,516 -192.516 78,019 Group contributions received 56,850 Accumulated deferred tax assets 2,447 14,550 Financing, total -47,918 -284,907 -17,785 -302,097 22,832 Adjustments -1,357 -8,071 -9,451 Increase/decrease in liquid assets -19,408 -115,397 102,342 -107,360 80,282 Liquid assets on 1 January 49,365 293,513 191,171 217,477 137,195 Liquid assets on 31 December 29,957 178,116 217,477 293,513 110,117

The items in the funds statement cannot be derived directly from the balance sheet owing, among other things, to the acquisition of new subsidiaries and changes in exchange rates.

### ACCOUNTING PRINCIPLES

### Consolidated financial statements

Included in the consolidated financial statements are the parent company Tieto Corporation and all subsidiaries in which the parent company's direct or indirect holding exceeds 50 % of the voting rights carried by the shares.

Companies acquired during the financial period have been consolidated from their date of acquisition and divested companies up until the date of divestment.

Tieto Corporation holds more than 50 % of the shares, giving voting rights of less than 50 %, of associated companies for which it has management responsibility. Tieto Corporation is responsible for managing the business operations of these companies. Since such associated companies have a considerable impact on the consolidated result, they are consolidated item for item in the Group income statement in proportion to Tieto's holding in them. In the balance sheet, their shares are shown as shares in associated companies according to the equity method.

All other associated companies are consolidated according to the equity method both in the income statement and balance sheet. The Group's profit share of the associated companies is shown as a separate entry before the operating profit. The book values of the shares are shown in the Notes to the Financial Statements.

Intra-group transactions are eliminated in consolidation. Intra-group shareholdings have been eliminated using the acquisition cost method, where only profit arising from the subsidiaries' business transactions after the acquisition date is included in consolidated equity. The excess arising from the elimination of subsidiary acquisition costs is considered as goodwill, which is amortized over five or ten years in the Group. In the elimination of intra-group shareholdings the equity at the time of the purchase is increased by appropriations and reduced by the deferred tax liability.

Internal dividends and non-realized income from inventories and fixed assets are excluded from the result.

In the balance sheet, intra-group receivables and liabilities are eliminated from the appropriate balance sheet items.

The deferred tax in accumulated appropriations, temporary differences and confirmed losses has been noted. The change in deferred tax assets or liabilities is included in the taxes for the period.

Minority interest is separated from consolidated shareholders' equity, appropriations and profit, and entered as a separate item.

#### Foreign currency items

Foreign currency transactions are booked at the rate prevailing on the transaction date. Foreign currency items current at the end of the financial period are valued at the average exchange rates on the balance sheet date. Foreign exchange items are hedged using derivative contracts. In the consolidated financial statements, the income statements of foreign subsidiaries are translated into Finnish markka using the average annual rates calculated on the basis of the average rates at the end of each month. The balance sheets are translated using the Bank of Finland's average rate on the balance sheet date.

Translation differences arising from the application of the acquisition cost method are shown as consolidated equity adjustment items and included under Other Changes in Non-Restricted Equity in the Notes to the Financial Statements.

Exchange gains and losses are entered in the income statement. The exchange rate differences of hedged items are adjusted by the valuation differences of derivative contracts made for hedging purposes.

#### Recognition of sales

Work by personnel is recognized as it is completed, licence sales at handover to the customer, and maintenance fees over the contract period. Loss-making projects are entered in full under expenses.

#### Pension arrangements

In Finland the pensions are handled both through pension insurance institutions and by the Tieto Group's own pension trust and pension fund. Pension liabilities are fully covered.

### Research and development

Research and development costs are expensed annually.

#### Extraordinary items

Significant items not related to the regular business operations of the Group are included under extraordinary items.

### Valuation of fixed assets

Depreciation is charged according to plan, based on the original acquisition cost and the useful economic life of the fixed assets. Losses on the sale of fixed assets are entered as an increase in depreciation according to plan, and sales profits are recorded as other operating income.

Goodwill - from operations 3 - 5	The Group uses the following depreciation periods:	Years
- from operations 3 - 5	Intangible assets (software)	3
	Goodwill	
- from subsidiaries 5 or 10	- from operations	3 - 5
	- from subsidiaries	5 or 10
Other capitalized expenditure 5	Other capitalized expenditure	5
Buildings 25 or 40	Buildings	25 or 40
Data processing equipment 3 - 5	Data processing equipment	3 - 5
Transportation equipment 5	Transportation equipment	5
Other machinery and equipment 5 - 8	Other machinery and equipment	5 - 8
Other tangible assets 10	Other tangible assets	10

The amortization periods of goodwill on consolidation are decided separately in each case to correspond with the estimated effective impact. In cases where the investment has been made in the Group's strategically significant operations, the amortization period is 10 years.

### Valuation of inventories

Inventories are valued at direct acquisition cost using the FIFO principle.

### Notes to the Financial Statements

	GROUP			PARENT COMPANY		
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000
The distribution of net sales is presented in						
the Report of the Board of Directors.						
1. Other operating income						
Profit on sales of fixed assets	1,654	9,833	17,188		9,459	21,290
Rental income	861	5,117	3,516		12,644	11,716
Merger profits Other income	- 467	- 2,778	- 2,394		52,956 1,183	20,930 1,580
	2,982	17,728	23,098		76,242	55,516
	2,002	17,720	20,000		10,212	00,010
2. Services and goods						
Purchases during the period	28,077	166,940	300,707		53,057	63,936
For own use Increase (-) or decrease (+) in inventories	-61 544	-364 3,231	- 2,694		-364 1,428	- -14
External services	32,406	192,680	139,466		95,230	51,528
	60,966	362,487	442,867		149,351	115,450
3. Personnel expenses						
Paid to the Board of Directors and Presidents - salaries	3,608	21,449	19,569		3,326	3,071
- bonuses	410	2,438	2,867		524	536
Other wages and salaries	166,572	990,391	822,238		562,278	356,353
Pension costs	22,050	131,106	113,636		76,173	53,556
Other statutory indirect employee costs	20,183	120,004	93,347		62,355	36,864
The Board of Directors decides the salary and other benefits	212,823	1,265,388	1,051,657		704,656	450,380
of the President and Executive Vice Presidents.						
Pension commitments on behalf of management: The retirement age of the President and one of						
the Executive Vice Presidents is 60 years.						
Loans to Group management These loans are in accordance with the general terms	-	-	135		-	135
applicable to loans to personnel.						
4. Other operating expenses						
Rents entered under other operating expenses	32.940	195.850	164,481		162,945	113,423
				1		

### NOTES TO THE FINANCIAL STATEMENTS

		GROUP		PA	RENT COMP	A N Y
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000
5. Financial income and expenses						
Income from securities and investments treated as equity						
Dividend income from Group companies	-	-	-		-	68,705
Dividend income from associated companies	-	-	-		22,426	28,383
Dividend income from other companies	37	222	191		222	2,991
	37	222	191		22,648	100,079
Avoir fiscal tax credit	193	1,147	3,753		8,807	38,919
	230	1,369	3,944		31,455	138,998
Income from securities and investments treated						
as non-current debt					5 000	0.075
From Group companies From associated companies	-	-	-		5,202	3,975
From other companies	105	- 625	- 665		- 624	- 794
	105	625	665		5,826	4,769
Other interest and financial income	105	025	005		5,620	4,709
From Group companies	_	-	-		245	181
From associated companies	-	-	-		-	-
From other companies	2,517	14,962	9,612		10,921	9,689
	2,517	14,962	9,612		11,166	9,870
Writedowns of investments	-	-	-423		-	-785
Interest and other financial expenses						
From Group companies	-	-	-		-3,288	-7,599
From associated companies From other companies	-1,849	- -10,992	- 6,668		- -9,609	-
		,				-4,676
Financial income and expenses, total	-1,849 1,003	-10,992 5,964	-6,668 7,130		-12,897 35,550	-12,275 140,577
Financial income and expenses, total	1,003	5,904	7,130		35,550	140,577
6. Extraordinary income						
Group contributions received	_	_	-		56,850	78,019
Unrealized tax receivables arising in previous years	2,447	14,550	-		-	
	2,447	14,550	-		56,850	78,019
7. Direct taxes	2,117	11,000			00,000	10,010
For the financial period	21,310	126,706	94,108		92,535	102,247
For previous periods	-227	-1,352	-380		-1,497	-487
Change in deferred tax liabilities/assets	-166	-987	-597		-	-
	20,917	124,367	93,131		91,038	101,760
			,		,	,

### Notes to the Financial Statements

		G R O U P			PARENT COMPANY		
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997	
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000	
8. Fixed assets, intangible assets							
Intangible rights							
Acquisition cost, 1 Jan.	20,296	120,677	111,885		69,033	55,525	
Increases	4,027	23,943	17,098		31,037	22,900	
Decreases	-4,827	-28,699	-8,306		-14,326	-9,392	
Acquisition cost, 31 Dec.	19,496	115,921	120,677		85,744	69,033	
Accumulated depreciation, 1 Jan.	16,348	97,203	82,661		50,728	45,245	
Accumulated depreciation in decreases	-4,662	-27,719	-1,297		-3,480	-2,257	
Depreciation in the period	3,158	18,778	15,839		12,345	7,740	
Accumulated depreciation, 31 Dec.	14,844	88,262	97,203		59,593	50,728	
Book value, 31 Dec.	4,652	27,659	23,474		26,151	18,305	
Goodwill	1,002	21,000	20,111		20,101	10,000	
Acquisition cost, 1 Jan.	14,627	86,966	36,600		142,701	107,223	
Increases	749	4,455	50,366		4,793	38,860	
Decreases	-760	-4,519	-		-7,268	-3,382	
Acquisition cost, 31 Dec.	14,616	86,902	86,966		140,226	142,701	
Accumulated depreciation, 1 Jan.	5,988	35,604	26,520		55,397	31,455	
Accumulated depreciation in decreases	-		- 20,020		-6,068	-	
Depreciation in the period	1,430	8,500	9,084		14,373	23,942	
Accumulated depreciation, 31 Dec.	7,418	44,104	35,604		63,702	55,397	
Book value, 31 Dec. Goodwill on consolidation	7,198	42,798	51,362		76,524	87,304	
Acquisition cost, 1 Jan.	36,913	219,474	207,108				
Increases	4,632	27,541	12,366				
Decreases	4,032	27,341	12,300				
	4 5 4 5	0.47.045	040.474				
Acquisition cost, 31 Dec.	41,545	247,015	219,474				
Accumulated depreciation, 1 Jan.	20,157	119,848	94,742				
Accumulated depreciation in decreases	- 4 440	-	-				
Depreciation in the period	4,442	26,411	25,106				
Accumulated depreciation, 31 Dec.	24,599	146,259	119,848				
Book value, 31 Dec.	16,946	100,756	99,626				
Other long-term expenditure	4.070	00 505					
Acquisition cost, 1 Jan.	4,978	29,595	34,699		23,300	22,444	
Increases	1,399	8,321	602		10,567	6,957	
Decreases	-732	-4,350	-5,706		-4,507	-6,101	
Acquisition cost, 31 Dec.	5,645	33,566	29,595		29,360	23,300	
Accumulated depreciation, 1 Jan.	1,715	10,195	10,435		9,069	11,940	
Accumulated depreciation in decreases	-133	-787	-5,912		-787	-5,912	
Depreciation in the period	810	4,814	5,672		3,407	3,041	
Accumulated depreciation, 31 Dec.	2,392	14,222	10,195		11,689	9,069	
Book value, 31 Dec.	3,253	19,344	19,400		17,671	14,231	
Advance payments and work in progress							
Acquisition cost, 1 Jan.	-	-	-		-	-	
Increases	583	3,465	-		3,172	-	
Acquisition cost, 31 Dec.	583	3,465	-		3,172	-	
Book value of intangible assets, total	32,632	194,022	193,862		123,518	119,840	

# Notes to the Financial Statements

		G R O U P		P A R E N	T COMP	A N Y
	31 Dec.1998	31 Dec.1998	31 Dec. 1997	31	I Dec.1998	31 Dec. 1997
	EUR 1000	FIM 1000	FIM 1000	FI	IM 1000	FIM 1000
9. Fixed assets, tangible assets						
Land						
Acquisition cost, 1 Jan.	9,611	57,142	48,557		46,421	48,422
Increases	-	-	10,812		-	226
Decreases	-754	-4,482	-2,227		-4,470	-2,227
Acquisition cost, 31 Dec.	8,857	52,660	57,142		41,951	46,421
Buildings						
Acquisition cost, 1 Jan.	46,937	279,073	235,032		217,777	216,468
Increases	12,385	73,636	61,071		-	1,309
Decreases	-6,907	-41,069	-17,030		-40,579	-
Acquisition cost, 31 Dec.	52,415	311,640	279,073		177,198	217,777
Accumulated depreciation, 1 Jan.	10,729	63, 789	57,783		58, 134	51,821
Accumulated depreciation in decreases	-1,684	-10,013	-510		-10,013	-
Depreciation in the period	1,244	7,394	6,516		6,160	6,313
Accumulated depreciation, 31 Dec.	10,289	61,170	63,789		54,281	58,134
Book value, 31 Dec.	42,126	250,470	215,284		122,917	159,643
Machinery and equipment	12,120	200,110	210,201		122,011	100,010
Acquisition cost, 1 Jan.	88,125	523,969	498,199		403,029	302,204
Increases	24,625	146,414	131 677		182 974	144 820
Decreases	-21,722	-129,153	-105,907		111,773	-43,995
Acquisition cost, 31 Dec.	91,028	541,230	523,969		474,230	403,029
Accumulated depreciation, 1 Jan.	54,811	325,892	320,713		241,760	188,506
Accumulated depreciation, 1 Jan.	-11,614	-69,054	-98,786		-5,402	-12,539
Depreciation in the period	17,302	102,875	103,965		78,557	65,793
·						
Accumulated depreciation, 31 Dec.	60,499	359,713	325,892		314,915	241,760
Book value, 31 Dec.	30,529	181,517	198,077		159,315	161,269
Other tangible assets	700	4 005	0.000		1 000	1 000
Acquisition cost, 1 Jan.	788	4,685	3,280		1,688	1,688
Increases Decreases	-34	818 -201	1,405		95 -201	-
			4.005			4 000
Acquisition cost, 31 Dec.	892	5,302	4,685		1,582	1,688
Accumulated depreciation, 1 Jan.	365	2,169	1,773		905	834
Accumulated depreciation in decreases	-	-	-		-	71
Depreciation in the period	84	497	396		62	
Accumulated depreciation, 31 Dec.	449	2,666	2,169		967	905
Book value, 31 Dec.	443	2,636	2,516		615	783
Advance payments and work in progress	5.055	04.000	10		7	
Acquisition cost, 1 Jan.	5,355	31,836	12		7,301	-
Increases	10,740	63,860	31,836		65,540	7,301
Transfers	-4,125	-24,524	-12		-1,938	0
Acquisition cost, 31 Dec.	11,970	71,172	31,836		70,903	7,301
Book value of tangible assets, total 31 Dec.	93,925	558,455	504,855		395,701	375,417

# Notes to the Financial Statements

		GROUP		PARENT COMPANY			
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997	
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000	
10 1							
10. Investments Shares in Group companies							
Acquisition cost, 1 Jan.					160,921	182,621	
Increases					21,769	139,277	
Decreases					-34,870	-160,977	
Acquisition cost, 31 Dec.					147,820	160,921	
Writedowns					-174	-174	
Book value, 31 Dec.					147,646	160,747	
Shares in associated companies							
Acquisition cost, 1 Jan.	12,299	73,124	92,272		38,084	52,726	
Increases	6,543	38,906	13,639		22,844	16,739	
Decreases	-	-	-32,788		-140	-31,381	
Acquisition cost, 31 Dec.	18,842	112,030	73,123		60,788	38,084	
Writedowns	-132	-785	-785		-785	-785	
Book value, 31 Dec. Other shares	18,710	111,245	72,338		60,003	37,299	
Acquisition cost, 1 Jan.	1,127	6,702	9,691		4,453	3,633	
Increases	1,106	6,574	3,031 87		4,450	941	
Decreases	-284	-1,690	-3,076		-1,103	-121	
Acquisition cost, 31 Dec.	1,949	11,586	6,702		4,200	4,453	
Writedowns	-23	-136	-136		-	-	
Book value, 31 Dec.	1,926	11,450	6,566		4,200	4,453	
Investments, total 31 Dec.	20,636	122,695	78,904		211,849	202,499	
11. Taxation values of fixed assets							
Land in Finland	5,179	30,790	32,893		18,069	21,169	
Buildings in Finland	30,411	180,815	200,911		130,755	151,709	
Shares and securities		,	,		,	,	
Shares in Finnish Group companies	19,049	113,260	184,793		107,680	184,274	
Shares in Finnish associated companies	15,763	93,722	42,390		93,722	42,390	
Shares in other Finnish companies	2,035	12,099	5,524		8,408	4,473	
Shares in trust funds	-	-	99,823		-	99,823	
If no taxation value is available, the book value is used.							

# NOTES TO THE FINANCIAL STATEMENTS

	Number	Share %	No	minal value	Book value	Equity	Profit/loss
31 December 1998					FIM 1000	FIM 1000	for the year FIM 1000
12 Investments							
12. Investments Subsidiary shares owned by the parent company							
Oy EDI Management Finland Ltd, Finland	1,000	100.0		300	713	1,649	69
Kiint. Oy Tietokilo 1-2, Finland	2,500	100.0		25,000	67,428	25,429	113
SIA Tieto, Latvia	1	100.0	LVL	125	1,123	614	-506
Tieto Danmark A/S, Denmark	1	100.0	DKK	500	53	5,814	1,704
Tieto Eesti AS, Estonia	400	100.0	EEK	640	486	2,462	1,209
Tieto Entra Oy, Finland	150	100.0		3,015	9,015	17,873	8,858
Tieto France S.A.R.L., France	400	100.0	FRF	400	355	658	157
Tieto GmbH, Germany	200	100.0	DEM	200	630	584	-9
Tieto Iberica S.L., Spain	500	100.0	ESP	500	18	-158	-176
Tieto Innovation Oy, Finland	300	100.0		300	300	1,633	75
Tieto Konts Financial Systems SIA, Latvia	32	51.6	LVL	26	8,185	3,264	1,085
Tieto Norge AS, Norway	7,000	100.0	NOK	7,000	11,458	16,303	3,367
Tieto N.V., Belgium	100	100.0	BEF	1,250	171	2,033	-313
Tieto Professional Oy, Finland Tieto Sweden AB, Sweden	9,912	100.0	CEV.	991 2 100	2,866	3,193	10
Tieto Technology Oy, Finland	31,000 173,225	100.0 100.0	SEK	3,100 2,598	4,537 7,328	31,165 8,120	17,340 38
Tieto U.K., Great Britain	20,000	100.0	GBP	2,390	1,068	-641	-178
Tieto Unic Oy (form. Unic Oy), Finland	45,675	100.0	GDI	4,567	26,846	16,098	1,332
Tietoteema Oy, Finland	8,000	100.0		60	3,353	914	660
Totus Oy, Finland	200	100.0		1,000	1,661	1,447	29
Dormant subsidiaries (3 in total)				,	52	44	-
					147,646		
Shares in Group companies owned by the subsidiaries							
AXO Systems AS, Norway	14,003	100.0	NOK	1,400	7,060	2,909	-3
GC Computer AS, Norway	2,000	100.0	NOK	200	3,887	1,249	180
Huldt & Lillevik AS, Norway	70	100.0	NOK	70	938	481	-104
Huldt & Lillevik Kompetanse AS, Norway	2,000	100.0	NOK	1,000	2,480	4,652	1,660
Koulutuskolmio Oy, Finland	60	100.0		15	1,524	1,869	720
New Technology Software AB, Sweden	1,000	100.0	SEK	100	1,880	2,067	1,105
Raxum Oy, Finland	125	100.0		31	5,786	2,000	610
Tieto Datema AB, Sweden	16,000	100.0	SEK	16,000	8,648	13,692	13
Tieto Financial Systems AB, Sweden	3,000	100.0	SEK	3,000	2,485	3,003	1
Tieto Poland Sp. z.o.c., Poland	1	100.0	PLN	4	6 2 5 5 2	0	5
Tieto Technology AB, Sweden	40,000	100.0	SEK	4,000 1,150	3,552	3,181	21 -742
Tieto Technology AS, Norway Tieto Technology A/S, Denmark	115,000 5	100.0 100.0	NOK DKK	1,150 1,000	4,691 5,990	2,403 5,990	-742 1,688
Tieto Tradeware AB, Sweden	9,092	91.6	SEK	909	5,990 4,323	5,990 671	-124
Tietokolmio Oy, Finland	15	100.0	ULIN	15	18,288	11,039	4,423
Tieto Industry AB,	1,000	100.0	SEK	100	1,592	558	-18
(form. TimberSoft AB), Sweden	.,		0211		.,002		.0
Dormant subsidiaries (8 in total)					4,145	7 761	-2
/					77,275		

# NOTES TO THE FINANCIAL STATEMENTS

		Number	Share %Nominal value	Book value	Equity	Profit/loss
31 December 1998				FIM 1000	FIM 1000	for the year FIM 1000
Shares in associated companies,						
other shares and securities						
Associated companies owned and managed						
by the parent company						
by the parent company						
Fidenta Oy	6,000	60.0 <sup>*)</sup>	600	1,200	29,159	24,342
Tietokarhu Oy	8,000	80.0**)	800	1,600	9,353	7,353
Tietoleonia Oy	9,000	60.0 *)	900	1,800	18,801	14,411
TKP Tieto Oy	900	60.0 <sup>*)</sup>	900	14,999	28,917	8,919
				19,599	- , -	- ,
<sup>•)</sup> 40 % of the voting rights						
<sup>**)</sup> 20 % of the voting rights						
Shares in associated companies owned by						
the parent company						
FD Finanssidata Oy	30,000	30.0	3,000	4,500	36,691	4,059
Kiint, Oy Villa Upinniemi	17,500	35.0		5,694		1)
Merita Systems Oy	200	40.0	200	200	844	-10
Nordic Printmail Oy	49	49.0	490	17,150		1)
Oy Samlink Ab	39,563	28.8	3,956	12,854	60,396	4,364
Other shares in associated companies				6		
				40,404		
<sup>1)</sup> Financial statements have not been confirmed						
Other shares and securities owned by						
the parent company						
Bostadsrättsföreningen Almen 10, Solna				481		
Delectia Oy	1,000	16.7	100	100		
Helsinki Stock Exchange Ltd	24,400		150	150		
Helsinki Telephone Company	483			1,568 <sup>2)</sup>		
Jyväskylän Teknologiakeskus Oy	40	8.0	400	400		
Tapiolan Monitoimiareena Oy	14			700		
Tampereen Puhelin Oy	7,000			73 <sup>2)</sup>		
Other shares and securities				728		
				4,200		
<sup>2)</sup> Market capitalization FIM 9,306,000						
Other shares and securities owned by subsidiaries						
As Oy Postipuuntie, Espoo	53		21	270		
Bankserviss SIA	13	10.4		436		
Helsinki Telephone Company	53			149 <sup>3)</sup>		
Kiint, Oy Nukanleikkaaja	799			4,852		
Oy Pickala Golf Ab	1			107		
Vierumäen Kuntorinne Oy	80		8	1,152		
Other shares and securities			0	284		
				7,250		
	I					

<sup>3)</sup> Market value FIM 981,000

The list does not include companies with a book value of less than FIM 100,000 in the balance sheet of Tieto or companies that are inactive. A complete list as required by the Companies Act is included in the company's official financial statements.

# Notes to the Financial Statements

		GROUP		PARENT COMP	ANY
	31 Dec.1998	31 Dec.1998	31 Dec. 1997	31 Dec.1998	31 Dec. 1997
	EUR 1000	FIM 1000	FIM 1000	FIM 1000	FIM 1000
13. Non-current receivables					
Loan receivables from Group companies	-	-	-	102,705	102,939
Receivables from associated companies	-	-	-	-	-
14. Current receivables					
Receivables from Group companies					
Trade receivables	-	-	-	<mark>5,144</mark>	5,463
Loan receivables	-	-	-	10,217	629
Group contributions receivable	-	-	-	56,850	78,019
Prepaid expenses and accrued income	-	-	-	5,030	51,922
Receivables from associated companies	-	-	-	77,241	136,033
Trade receivables	820	4,876	2,778	4,843	2,737
Other receivables	0	2	69	2	69
Prepaid expenses and accrued income	2	11	298	11	290
	822	4,889	3,145	4,856	3,096
15. Prepaid expenses and accrued income					
Net sales	871	5,178	7,793	2,663	5,194
Licence fees	3,205	19,055	21,675	10,856	16,951
Rents	1,198	7,123	1,254	4,205	68
Social costs	2,733	16,251	12,425	13,884	8,360
Dividend receivables	- 10	-	-	-	47,000
Value added tax Corporate tax	19 730	115 4,340	5,715 2,695	-	- 792
Interest	82	4,340	2,095	4,797	
Other	6,404	38,074	13,451	14,492	5,025
	15,242	90,626	65,598	50,897	87,570
16. Changes in shareholders' equity					
Share capital, 1 Jan.	14,798	87,986	87,906	87,986	87,906
Bonus issue	29,613	176,071	-	176,071	-
Use of option rights	446	2,651	80	2,651	80
Share capital, 31 Dec.	44,857	266,708	87,986	266,708	87,986
Share issue, use of option rights	1,600	9,516	-	9,516	-
Share premium fund, 1 Jan.	65,234	387,867	387,610	387,867	387,610
Bonus issue	-29,613	-176,071	-	-176,071	-
Use of option rights	1,967	11,693	257	11,693	257
Share premium fund, 31 Dec.	37,588	223,489	387,867	223,489	387,867
Restricted reserves, 1 Jan.	543	3,230	1,936	_	-
Transfer from retained earnings to restricted reserves	107	636	1,294	-	-
Restricted reserves, 31 Dec.	650	3,866	3,230	-	-

# NOTES TO THE FINANCIAL STATEMENTS

NOTES TO THE FINANCIAL STATEMEN	GROUP PARENT COMPANY								
				F A					
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997			
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000			
Retained earnings, 1 Jan.	72,551	431,367	287,843		363,276	153,663			
Dividend distribution	-15,864	-94,321	-49,227		-94,321	-49,227			
Purchase of own shares Other change	-32,379 -888	-192,516 -5,280	- 4,053		-192,516 -400	- -10			
Retained earnings, 31 Dec.	23,420	139,250	242,669		76,039	104,426			
Profit for the period	53,418	317,608	188,698		264,166	258,850			
	76,838	456,858	431,367		340,205	363,276			
Charabaldara' aquity total	161 500	060 427	010 450		920.019	920 120			
Shareholders' equity, total	161,533	960,437	910,450		839,918	839,129			
Portion of accumulated depreciation and									
appropriations entered in shareholders' equity	4,149	24,667	33,233						
Distributable funds in shareholders' equity	72,689	432,191	393,933		340,205	363,276			
	,	,	000,000		0.10,200	000,210			
17. Provisions									
Personnel training and development scheme	4,512	26,828	10,000		26,828	10,000			
Provision for pension commitments Provision for future guarantee expenses	420	2,493	3,877 105		2,493	3,877 105			
	4,932	29,321	13,982		29,321	13,982			
18. Non-current liabilities	4,552	29,321	13,902		29,321	15,502			
Debts to Group companies	-	-	-		-	-			
Debts falling due after five years	105	005	670		005	070			
Pension loans Other loans	105	625	672 111		625	672			
	105	625	783		625	672			
		020			020	012			
1996 bond with warrants to employees – parent company Loan principal	5.921								
Number of warrants		of which 440.2	255 unexercis	sed					
Interest	5 %								
Subscription period		98 – 31 Jan. 2							
Subscription terms	6 shares 14 June 2		per share in	exchange for (	one warrant				
Loan repayment	14 Julie 2	000							
1998 bond with warrants to employees – parent company									
Loan principal Number of warrants	2.000 200.000								
Interest	4 %								
Subscription period	15 Jun. 2001 – 31 May 2004								
Subscription terms	6 shares for FIM 175.17 per share in exchange for one warrant								
Loan repayment	15 June 2	001							
	1								

# NOTES TO THE FINANCIAL STATEMENTS

		GROUP			PARENT COMPANY		
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997	
	euro 1000	mk 1000	mk 1000		mk 1000	mk 1000	
19. Current liabilities							
Debt owed to Group companies							
Trade payables	_	_	-		2,241	5,079	
Other debt	_	_	-		54,965	148,133	
Accrued liabilities and deferred income	-	-	-		23,415	1,290	
	_		_		80,621	154,502	
Debt owed to associated companies					00,021	101,00	
Trade payables	149	887	2,922		887	2,92	
Accrued liabilities and deferred income	11	66	2,734		66	2,73	
	160	953	5,656		953	5,65	
20. Accrued liabilities and deferred income	100	550	5,000		550	5,05	
Holiday pay and related indirect payroll costs	21,566	128,225	114,471		93,356	72,56	
Other periodized wages and salaries and related	21,500	120,225	114,471		30,000	12,50	
indirect payroll costs	9,611	57,144	29,253		39,057	14,87	
Other periodized social costs	3,259	19,375	11,799		15,537	7,06	
Witholding tax	4,517	26,860	16,525		18,971	9,79	
Rents	660	3,922	308		12,224	- , -	
Value added tax	11,981	71,239	52,812		49,954	31,57	
Corporate tax	6,700	39,839	62,511		35,466	62,34	
Interest	300	1,785	1,092		1,187	1,30	
Other	13,484	80,171	60,894		34,476	28,23	
	72,078	428,560	349,665		300,228	227,75	
21. Deferred tax assets and liabilities		,	,		,		
Deferred tax assets							
From temporary differences	2,367	14,073	-				
Deferred tax liabilities	2,001	11,010					
From appropriations	1,536	9,130	12,000				
From temporary differences	536	3,187	1,031				
22. Contingent liabilities							
For Tieto Group obligations							
Pledges	-	-	62		-		
On behalf of Group companies							
Guarantees	-	-	-		15,534*	) 51,471*	
On behalf of associated companies						, .	
Guarantees	1,009	6,000	60		6,000		
Other Tieto Group obligations							
Rent commitments due in 1999 (1998)	13,240	78,723	68,352		66,290	49,06	
Rent commitments due later	24,811	147,521	154,576		131,955	126,86	
Lease commitments due in 1999 (1998)	12,277	72,995	45,158		60,709	37,10	
Lease commitments due later	18,231	108,396	85,229		95,516	76,70	
Guarantee commitments	58	343	1,680		-	1,68	
Rent commitments	88	524	592		129	78	
Other commitments	1,454	8,643	18		7,918	1	
Leasing commitments are principally three-year leasing							
agreements which do not have redemption clauses.							
*) Does not include the limits guaranteed by the parent							
company, which totalled FIM 26,517,000 (18,995,000)							
on 31 December 1998.							

### RISK MANAGEMENT

### Management of financial risks

Tieto's Group Financing is centrally responsible for handling all the Group's external financial transactions. The subsidiaries and divisions do not make external financial contracts independently. The counterparties to Tieto's financial contracts are leading Nordic banks.

The Treasury Committee prepares capital structure and financing policy issues and other significant matters which require a decision of the Board of Directors. It also supervises and steers the company's financing function in accordance with the guidelines in force. Group Financing operates and makes decisions within permitted limits. Contracts which exceed these limits are decided by Group management or the Board of Directors.

Tieto's policy is to minimize the impact of financial risks on its financial position. Financial risks are monitored and reported regularly. Interest and currency derivatives are used to hedge against risks. Derivatives are only used for hedging.

## Foreign exchange risk

Tieto is subject to relatively minor foreign exchange risks since the company's operations are local in scope; the income and expenses of Group companies are normally generated in the same currency. When dealing with foreign parties, Tieto's first priority is to use internal means of hedging, such as a suitable invoicing currency or currency clauses in contracts. A large proportion of Tieto's foreign exchange transactions are licence purchases denominated in US dollars. These pose short risks, generally less than three months. Larger foreign exchange transactions occur irregularly and for this reason the Group's foreign exchange exchange exposure varies to some extent.

Tieto's estimated transaction exposure at the end of 1998, excluding hedging, totalled FIM 9.7 million. In addition to committed amounts of foreign exchange related to business operations, the transaction exposure included intragroup and external financial transactions. These transactions were normally denominated in Norwegian or Swedish krona. The company's policy is to hedge all significant foreign exchange commitments. At the end of the year 76 % of the transaction exposure was hedged using currency forward contracts.

Tieto's competitive position is not sensitive to exchange rate fluctuations. Customers require all service suppliers to have a local presence and therefore the foreign exchange profile of Tieto's competitors is similar.

The translation exposure is not hedged unless exchange rate changes are likely to have a significant impact on the Group's capital structure, profit distribution, key indicators or credit rating. This exposure is also kept to a minimum by repatriating profits from foreign subsidiaries as completely as possible. At the end of 1998 the translation exposure of Tieto's shareholders' equity was FIM 1,073.9 million, of which 6.7 % was denominated in foreign currency. The most important currencies were the Swedish krona (3.4 %) and the Norwegian krona (1.3 %). A 10 % increase in the value of the euro would reduce non-restricted shareholders' equity at the end of the financial year 1998 by FIM 6.7 million. The translation exposure is not hedged.

#### Management of interest rate risks

Interest rate risk management in Tieto is guided by a gearing target which leads to active decreasing of overcapitalization. Cashflow is extremely strong when business operations are profitable. The accumulation of excess capital is natural if these funds cannot be invested in the business operations at the same pace. Nor does the organic growth of the Group absorb funds. During 1998 overcapitalization was reduced by purchasing the company's own shares for a total of FIM 192.5 million. The Group has approximately FIM 115 million in uncommitted credit lines to balance short-term fluctuations in cashflow and to secure liquidity.

The decrease in overcapitalization reduces negative gearing close to zero, which means that the company can regulate its interest rate risk position by balancing the fixed interest periods of the interestbearing items in the balance sheet.

If Tieto raised a loan which would make its gearing permanently positive, the company would aim to match the average fixed interest period of net debt to the average depreciation period of the fixed assets tied to its business operations.

At the end of the year, gearing was -12.0 %, interest-bearing receivables were FIM 194.5 million and interest-bearing liabilities were FIM 55.7 million, including FIM 23.6 million in liabilities denominated in Norwegian krona. Tieto's investment policy is to invest its liquid assets for periods of less than 12 months. At the year end the average fixed interest period of the company's loans was 6 months.

The interest rate risk exposure did not pose any major risk, nor was it hedged using derivatives during 1998. A one percentage point parallel increase of the yield curve would reduce annual net financial expenses by approximately FIM 1.7 million based on the year end balance sheet. Interest rate risk management also takes account of interest on financial leasing contracts. From the beginning of 1999 financial leasing will be treated as fixed assets in the balance sheet.

		G R O U P		PARENT COMPANY			
	31 Dec.1998	31 Dec.1998	31 Dec. 1997		31 Dec.1998	31 Dec. 1997	
	EUR 1000	FIM 1000	FIM 1000		FIM 1000	FIM 1000	
Derivative contracts							
Currency derivatives							
Forward contracts							
Value of underlying instruments	4.226	25.125	6.232		25.125	6.232	
Market value of currency forward contracts	23	137	-20		137	-20	

# CALCULATION OF KEY RATIOS

Return on investment, % (ROI)	=	Profit before extraordinary items + financial expenses	x 100
	-	Balance sheet total - interest-free liabilities (12-month average)	X 100
		Profit before extraordinary items – direct taxes	
Return on equity, % (ROE)	=	Shareholders' equity + minority interests (12-month average)	x 100
		Interest-bearing debt + advance payments -	
Cooring 0/		cash at hand and in bank - securities included in current assets	x 100
Gearing, %	=	Shareholders' equity + minority interests	x 100
Equity ratio, %	_	Shareholders' equity + minority interests	x 100
	-	Balance sheet total - advance payments received	X 100
Quick ratio	_	Financial assets	
QUICK TATIO	=	Current liabilities - advance payments received	
Interest-bearing net debt	=	Interest-bearing debt - cash in hand and at bank –	
interest-bearing net debt	-	securities included in current assets	
		Profit before extraordinary items	
		-/+ minority interest in year-end profit/loss	
		– direct taxes	
Earnings per share	=	Profit (numerator)	
		Adjusted 12-month average of shares	
Shareholders' equity/share	=	Shareholders' equity + accumulated appropriations	
		Adjusted number of shares at the year end	
Price/earnings ratio (P/E)	=	Share price at the year end	
	-	Earnings per share	

Five Years in Figures					
In Finnish markka	1998	1997	1996	1995	1994
From the income statement					
Net sales, FIM million	2,813.1	2,433.0	2,054.9	1,148.7	979.8
Operating profit, FIM million	421.8	274.7	182.0	86.8	64.8
As % of net sales	15.0	11.3	8.9	7.6	6.6
Profit before extraordinary items, FIM million	427.3	281.8	194.3	96.0	63.3
As % of net sales	15.2	11.6	9.5	8.4	6.5
Profit before appropriations and taxes, FIM million	442.3	281.8	194.3	96.0	63.3
As % of net sales	15.7	11.6	9.5	8.4	6.5
Profit before extraordinary items, after taxes, FIM million	303.4	188.7	123.4	75.0	48.7
Balance sheet total, FIM million	1,548.5	1,444.0	1,280.0	1,426.6	631.8
Return on investment (ROI, %)	43.7	31.8	25.6	25.0*)	18.1
Return on shareholders' equity (ROE), %	32.4	22.3	17.0	21.4*)	16.3
From the balance sheet					
Gearing, %	-12.0	-23.1	-17.6	-27.6	-16.5
Interest-bearing net debt, FIM million	-122.4	-214.9	-143.8	-195.8	-91.6
Equity ratio, %	62.4	63.2	61.3	47.4	53.8
Quick ratio	1.29	1.42	1.31	1.04	1.67
Investments					
Land and buildings, FIM million	112.8	101.0	-	0.3	-
Data processing equipment, FIM million	89.9	114.1	69.3	41.3	40.1
Other investments, FIM million	125.2	114.4	118.2	699.5	43.4
Total investments, FIM million	327.9	329.5	187.5	741.1	83.5
As % of net sales	11.7	13.5	9.1	64.5	8.5
Personnel					
Average during the financial year	4,868	4,221	3,577	1,996	1.740
On 31 December	5,064	4,332	3,976	3,305	1.740
$^{*}$ ) Key ratios calculated without the effect of Unic group and VTKK group.					

# Key Figures by Quarter

In Finnish markka	1998	1998	1998	1998	1998	1997	1997	1997	1997	1997
	1-3	4-6	7-9	10-12	1-12	1-3	4-6	7-9	10-12	1-12
Net sales, FIM million	676.1	687.0	649.2	800.8	2813.1	594.5	609.8	554.4	674.3	2433.0
Operating profit, FIM million	88.4	92.3	115.9	125.2	421.8	56.3	61.3	65.1	92.0	274.7
Net financial items, FIM million	2.7	1.0	1.2	1.0	5.9	4.1	0.9	0.5	1.6	7.1
Profit before extraordinary items, FIM million	91.1	93.3	117.1	126.2	427.7	60.4	62.2	65.6	93.6	281.8
Earnings per share, FIM	1.24	1.26	1.56	1.71	5.76	0.71	0.82	0.95	1.10	3.58
Earnings (excl. goodwill amortization) per share, FIM	1.39	1.41	1.71	1.88	6.39	0.89	0.96	1.09	1.25	4.19
Equity per share, FIM	16.73	17.96	17.52	18.42	18.42	14.34	15.08	16.06	17.26	17.26
Return on equity (ROE), %	7.3	7.2	8.9	9.5	32.4	5.2	5.1	6.1	6.6	22.3
Return on investment (ROI), %	9.7	9.8	12.1	13.0	43.7	7.4	7.5	7.3	10.1	31.8
Equity ratio, %	61.5	65.1	64.8	62.4	62.4	58.6	60.6	63.9	63	63.2
Interest-bearing net debt, FIM million	-194.4	-160.8	-63.6	-122.4	-122.4	-125.4	-101.4	-130.6	-214.9	-214.9
Gearing, %	-19.2	-15.4	-4.6	-12.0	-12.0	-13.4	-9.0	-12.7	-23.1	-23.1
Investments, FIM million	62.9	92.9	69.2	102.9	327.9	65.5	164.6	29.4	29.4	329.5
Personnel at year end	4,711	4,860	4,990	5,064	5,064	4,099	4,266	4,324	4,332	4,332
Personnel on average	4,675	4,775	4,972	5,046	4,868	4,058	4,199	4,310	4,315	4,221
Net sales per employee, FIM 1,000 *)	154	153	139	169	614	153	151	134	163	600
Personnel expenses per employee, FIM 1,000 *)	73	70	60	73	276	68	66	57	69	259
Operating profit per employee, FIM 1,000 *)	20	21	25	26	92	14	15	16	22	68

\*) Calculated using personnel figures of associated companies under Tieto management in proportion to Tieto's holding in these companies.

# FIVE YEARS IN FIGURES

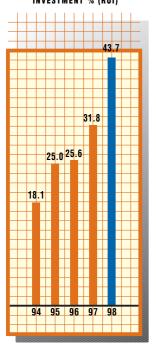
FIVE TEAKS IN FIGURES	-				
In euro	1998	1997	1996	1995	1994
From the income statement					
Net sales, EUR million	473.1	409.2	345.6	193.2	164.8
Operating profit, EUR million	70.9	46.2	30.6	14.6	10.9
As % of net sales	15.0	11.3	8.9	7.6	6.6
Profit before extraordinary items, EUR million	71.9	47.4	32.7	16.1	10.6
As % of net sales	15.2	11.6	9.5	8.4	6.5
Profit before appropriations and taxes, EUR million	74.4	47.4	32.7	16.1	10.6
As % of net sales	15.7	11.6	9.5	8.4	6.5
Profit before extraordinary items, after taxes, EUR million	51.0	31.7	20.8	12.6	8.2
Balance sheet total, EUR million	260.4	242.9	215.3	239.9	106.3
Return on investment (ROI, %)	43.7	31.8	25.6	25.0 <sup>*)</sup>	18.1
Return on shareholders' equity (ROE), %	32.4	22.3	17.0	21.4 <sup>*)</sup>	16.3
From the balance sheet					
Gearing, %	-12.0	-23.1	-17.6	-27.6	-16.5
Interest-bearing net debt, EUR million	-20.6	-36.1	-24.2	-32.9	-15.4
Equity ratio. %	62.4	63.2	61.3	47.4	53.8
Quick ratio	1.29	1.42	1.31	1.04	1.67
Investments					
Land and buildings, EUR million	19.0	17.0	-	0.1	-
Data processing equipment, EUR million	15.1	19.2	11.7	6.9	6.7
Other investments, EUR million	21.1	19.2	19.9	117.6	7.3
Total investments, EUR million	55.1	55.4	31.5	124.6	14.0
As % of net sales	11.7	13.5	9.1	64.5	8.5
Personnel					
Average during the financial year	4,868	4,221	3,577	1,996	1,740
On 31 December 1998	5,064	4,332	3,976	3,305	1,740
$^{\star}$ ) Key ratios calculated without the effect of Unic group and VTKK group.					

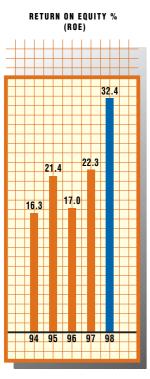
# Key Figures by Quarter

In euro	1998	1998	1998	1998	1998	1997	1997	1997	1997	1997
	1-3	4-6	7-9	10-12	1-12	1-3	4-6	7-9	10-12	1-12
Net sales, EUR million	113.7	115.5	109.2	134.7	473.1	100.0	102.6	93.2	113.4	409.2
Operating profit, EUR million	14.9	15.5	19.5	21.1	70.9	9.5	10.3	10.9	15.5	46.2
Net financial items, EUR million	0.5	0.2	0.2	0.2	1.0	0.7	0.2	0.1	0.3	1.2
Profit before extraordinary items, EUR million	15.3	15.7	19.7	21.2	71.9	10.2	10.5	11.0	15.7	47.4
Earnings per share, EUR	0.21	0.21	0.26	0.29	0.97	0.12	0.14	0.16	0.19	0.60
Earnings (excl. goodwill amortization) per share, EUR	0.23	0.24	0.29	0.32	1.07	0.15	0.16	0.18	0.21	0.70
Equity per share, EUR	2.81	3.02	2.95	3.10	3.10	2.41	2.54	2.70	2.90	2.90
Return on equity (ROE), %	7.3	7.2	8.9	9.5	32.4	5.2	5.1	6.1	6.6	22.3
Return on investment (ROI), %	9.7	9.8	12.1	13.0	43.7	7.4	7.5	7.3	10.1	31.8
Equity ratio, %	61.5	65.1	64.8	62.4	62.4	58.6	60.6	63.9	63	63.2
Interest-bearing net debt, EUR million	-32.7	-27.0	-10.7	-20.6	-20.6	-21.1	-17.1	-22.0	-36.1	-36.1
Gearing, %	-19.2	-15.4	-4.6	-12.0	-12.0	-13.4	-9.0	-12.7	-23.1	-23.1
Investments, EUR million	10.6	15.6	11.6	17.3	55.1	11.0	27.7	4.9	4.9	55.4
Personnel at year end	4,711	4,860	4,990	5,064	5,064	4,099	4,266	4,324	4,332	4,332
Personnel on average	4,675	4,775	4,972	5,046	4,868	4,058	4,199	4,310	4,315	4,221
Net sales per employee, EUR 1,000 *)	25.8	25.7	23.4	28.4	103.3	25.7	25.5	22.5	27.4	100.9
Personnel expenses per employee, EUR 1,000 *)	12.3	11.8	10.1	12.3	46.5	11.5	11.1	9.5	11.7	43.6
Operating profit per employee, EUR 1,000 *)	3.4	3.5	4.2	4.4	15.5	2.4	2.6	2.6	3.7	11.4

<sup>•</sup>) Calculated using personnel figures of associated companies under Tieto management in proportion to Tieto's holding in these companies.

RETURN ON Investment % (roi)





### SHARE CAPITAL AND SHARES

An extraordinary meeting of Tieto Corporation shareholders on 25 June 1998 decided to launch a bonus issue, to halve the nominal share price, to state the share capital in euro, to abolish the nominal value of the share, and to amend the Articles of Association accordingly. After the bonus issue and halving of the nominal share price the total number of Tieto Corporation shares increased six-fold.

Tieto Corporation's issued and registered share capital on 31 December 1998 totalled FIM 266,707,890 million (53,341,578 shares). The bonus issue, 1993 bond with warrants to company management and the 1996 bond with warrants to company employees raised the share capital by FIM 178,722,290 million. This figure included the exercising of 550,218 bond warrants totalling FIM 2,651,090 million.

Subscriptions based on the warrants attached to the 1996 bond with warrants made between 15-31 December 1998 were recorded in the Trade Register on 5 January 1999. After this increase the share capital totalled EUR 45,151,570.96 and the total number of shares was 53,691,810. Based on the warrants attached to the 1996 and 1998 bonds with warrants, the total number of shares may increase further:

- by 885.540 from 1 December 1998

- by 1,755,990 from 1 December 2000, and

- by 1,200,000 from 15 June 2001.

The share capital increases are presented in the table Share Capital Increases 1994 – 1998.

#### SHARE LISTING

Tieto Corporation shares are listed on the HEX Helsinki Exchanges.

#### **BOARD AUTHORIZATIONS**

The Board of Directors has no authorizations to issue shares.

#### BOARD AUTHORIZATIONS TO PUR-CHASE OWN SHARES

The Annual General Meeting authorized the Board of Directors to purchase the company's own shares in order to develop Tieto's capital structure and reduce its negative gearing. The authorization permits the Board to purchase an amount of shares whose aggregate nominal value or the number of votes which they carry does not exceed 5 % of Tieto's share capital of the total number of votes. These shares may be purchased using only distributable funds. This authorization is valid until 12 March 1999.

On 26 August 1998 Tieto's Board of Directors decided to start purchasing the company's share to a total value of FIM 200 million. The Board decided to purchase the shares through public trading on the Helsinki Exchanges at the market value of the shares. Shares would not be purchased one week before or after publication of the third-quarter interim report, release of the option rights attached to the 1996 bond with warrants or publication of the 1998 financial statements. Share purchasing began on 7 September 1998 and by 31 December 1998 1,191,080 shares of nominal value FIM 5,955,400 (2.2 % of the stock and voting rights) had been purchased for FIM 192.5 million. The Board of Directors will propose to the following Annual General Meeting that these shares be annulled.

# 1996 BOND WITH WARRANTS TO COMPANY EMPLOYEES

The bonus issue and halving of the share price altered the terms of the 1996 bond with warrants to company employees. In compliance with the terms of the bond, the subscription ratio was amended to keep unchanged the relative number of shares which could be subscribed based on the bond warrants as a proportion of the total share capital. Each option right entitles its holder to subscribe for six Tieto shares for FIM 27.17 per share.

FIM 5,921,300.00 of the bond remains outstanding. Altogether 3,511,980 shares may be subscribed based on the warrants. Of this total the number of unsubscribed shares amounts to 2,641,530. The subscription period is 1 December 1998-31 December 2002, nevertheless such that half of the shares may not be subscribed until 1 December 2000.

Subscription of shares based on the A warrants (totalling 292,665) began on 1 December 1998. By 31 December 1998, 145,075 warrants had been exercised to subscribe for 870,450 shares. These shares carry dividend rights for 1998.

# 1998 BOND WITH WARRANTS TO COMPANY EMPLOYEES

The Annual General Meeting on 12 March 1998 decided to offer bonds with warrants not exceeding FIM 2 million to all Tieto Corporation employees. This bond was subscribed by 50.9 % of Tieto's personnel.

The bond has a maturity of 3 years and carries 4 % interest. 20,000 bond certificates were issued, each with a nominal value of FIM 100 and carrying 10 warrants. Each warrant entitles its holder to subscribe for 6 Tieto Corporation shares for FIM 175.17 per share between 15 June 2001 and 31 May 2004. Hence, altogether 1,200,000 new shares may be subscribed. These shares carry dividend rights for the financial period during which the shares were subscribed.

These bonds with warrants form part of Tieto's personnel incentive scheme which aims to ensure that employees may also benefit from the company's success as shareholders through an increase in corporate value.

#### SHAREHOLDERS

There were 4,671 shareholders on 1 February 1999, compared to 2,615 one year before. Nominee-registered and foreign shareholders amounted to 45.3 % (47.9 %).

The Board of Directors, President and Executive Vice Presidents owned a total of 0.06 % of the share capital and number of votes. Based on the bonds with warrants, they can increase their aggregate holding to 0.55 % of the shares. The President owns 18,000 Tieto shares. The 1996 bond with warrants entitle him to subscribe for a further 120,000 shares.

## SHARE PRICE DEVELOPMENT

AND TRADING

The Tieto share rose 122.2 % during 1998 compared to an increase of 68.5 % for the the HEX index of the Helsinki Exchanges.

The share price of the Tieto share on the last day of the year was FIM 227. The highest quoted price was FIM 229 and the lowest was FIM 99. The average share price was FIM 165.

Altogether 26,402,953 Tieto shares were traded on the Helsinki Exchanges during the year, representing turnover of FIM 4,355.7 million. The Tieto share was the eighth most traded on the Helsinki Exchanges during the year.

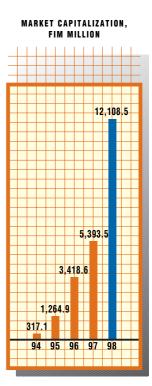
At the end of the financial period the market capitalization of the share capital was FIM 12,108.5 million.





# SHARE PRICE DEVELOPMENT 1992-1998, FIM



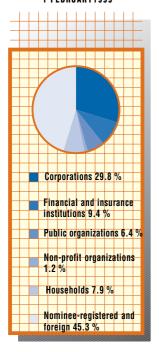


# INCREASES IN SHARE CAPITAL 1994 - 1998

	/conversion o and price, d (nominal)	Subscription period	Increase in share capital, FIM	New share capital, FIM	Right to dividend	New shares (adjusted)
Privileged convertible bond 1989 – 1995, personnel	6.80 (40.80) B	1 Feb30 Nov. 1994	855,500	63,175,000	financial period 1995	513,300 (85,550) B
Privileged convertible bond 1989 – 1995, personnel	6.80 (40.80)	1 Feb30 Nov. 1995	60,600	63,235,600	financial period 1996	36,360 (6,060)
Privileged new issue 1995, the Finnish State	20.83 (125.00)	29 Dec.1995	24,000,000	87,235,600	financial period 1996	14,400,000 (2,400,000)
Privileged bond with warrants 1993 – 1998, management	7.02 (42.10)	1 Feb30 Nov. 1996	670,000	87,905,600	financial period 1996	402,000 (67,000)
Privileged bond with warrants 1993 – 1998, management	7.02 (42.10)	1 Feb30 Nov. 1997	80,000	87,985,600	financial period 1997	48,000 (8,000)
Bond with warrants 1993 – 1998, management	7.02 (42.10)	1 Feb31 May 1998	50,000	88,035,600	financial period 1998	30,000 (5,000)
Bonus issue and halving of the share's nominal price	(2 for 1)		176,071,200	264,106,800	financial period 1998	44,017,800
Privileged bond with warrants 1996 – 2002, personnel, Option A	27.17	1 Dec. 1998- 31 Jan. 2002	837,990	264,944,790	financial period 1998	167,598
Privileged bond with warrants 1996 – 2002, personnel, Option A	27.17	1 Dec. 1998- 31 Jan. 2002	1,418,400	266,363,190	financial period 1998	283,680
Privileged bond with warrants 1996 – 2002, personnel, Option A	27.17	1 Dec. 1998- 31 Jan. 2002	344,700	266,707,890	financial period 1998	68,940
Privileged bond with warrants 1996 – 2002, personnel, Option A	27.17	1 Dec. 1998- 31 Jan. 2002	1,751,160	268,459,050	financial period 1998	350,232

# SHARES AND SHAREHOLDERS

#### OWNERSHIP STRUCTURE 1 FEBRUARY1999



# SHAREHOLDERS ON 1 FEBRUARY1999

	%	
	of shares	
Corporations	29.8	
Financial and insurance institutions	9.4	
Public organizations	6.4	
Non-profit organizations	1.2	
Households	7.9	
Nominee-registered and foreign	45.3	
Total	100.0	

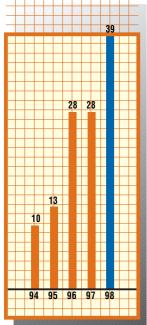
# PRINCIPAL SHAREHOLDERS ON 1 FEBRUARY 1999

		No.	% of shares
Nominee registered		24,316,422	45.3
Nominee registered			45.3 26.8
Sonera Corporation		14,400,000	
Pohjola Group	(000 000)	2,602,600	4.8
Mutual Life Insurance Company Suomi	(930,000)		
Pohjola Group Insurance Oyj	(585,000)		
General Insurance Company Pohjola	(585,000)		
Life Insurance Company Pohjola	(502,600)		
Tieto Corporation		1,191,080	2.2
Mutual Pension Insurance Company Ilmarinen		858,160	1.6
The Local Government Pensions Institution		767,180	1.4
PT's pension fund s.r.		534,000	1.0
Mutual Life Insurance Company Tapiola		528,000	1.0
Mutual Enterprise Insurance Fennia		370,980	0.7
Mutual Life Insurance Company Varma-Sampo		300,600	0.6
Mutual Insurance Company Pension Fennia		226,800	0.4
TT Tieto Oy, Employees Pension Fund		202,340	0.4
Tallberg Carl-Johan		126,000	0.2
OP-Delta Trust Fund		94,500	0.2
Aurum Life Insurance Company		90,120	0.2
Finnish Cultural Trust Fund		90.000	0.2
Alfred Berg Finland Trust Fund		83,280	0.2
Others		6,909,748	12.8
Total		53,691,810	100.0

# OWNERSHIP STRUCTURE ON 1 FEBRUARY1999

Number of shares	Shar		Shares		
	No.	%	No.	%	
1 – 100	1,152	24.6	76,042	0.1	
101 – 500	1,432	30.7	382,451	0.7	
501 – 1,000	760	16.3	552,100	1.0	
1,001 – 5,000	1,103	23.6	2,412,928	4.5	
5,001 - 100,000	205	4.4	3,915,514	7.3	
100,001 -	19	0.4	46,307,815	86.3	
Pending list			44,960	0.1	
Total	4,671	100.0	53,691,810	100.0	





	1998	1997	1996	1995	1994
Share capital development					
Share capital at year end, FIM	266,707,890	87,985,600	87,905,600	87,235,600	63,175,000
Number of shares	53,341,578	8,798,560	8,790,560	8,723,560	6,317,500
Adjusted number of shares at year end	53,341,578	52,791,360	52,743,360	52,341,360	37,905,000
Adjusted average for the year	52,568,723	52,749,144	52,613,526	37,986,990	37,435,296
Per share data					
Earnings/share, FIM	5.76	3.58	2.31	1.91	1.25
Earnings (excl. amortization of goodwill) per share, FIM	6.39	4.19	2.88	2.23	1.58
Earnings per share					
(incl. dilution by bonds with warrants), FIM	5.48				
Shareholders' equity per share, FIM	18.42	17.26	14.51	12.75	8.31

# Share price development and trading

Highest price (adjusted), FIM	229.0	111.67	64.82	24.67	17.50
Lowest price (adjusted), FIM	99.0	61.67	24.17	10.83	11.67
Average price (adjusted), FIM	164.97	78.15	38.73	16.53	14.03
Turnover, No.		2,712,073	3,161,283	5,008,509	1,453,706
Turnover of new share, No.				2,820	75,550
Turnover (adjusted), No.	26,402,953	16,272,438	18,967,698	30,051,054	8,722,236
Turnover (adjusted) of new share, No.				16,920	453,300
Market capitalization, FIM million	12,108.5	5,393.5	3,418.6	1,264.9 1	317.1
Market capitalization of new share, FIM million					6.0

<sup>1)</sup> The unlisted new shares at the year end (2,406,060 shares) are included at the quoted share price.

### Dividend

Dividend paid, FIM 1,000	152,252 <sup>1)</sup>	94,321	49,227	24,638	16,203
Nominal dividend, FIM	2.90	10.72	5.60	3.90	2.60
Adjusted dividend, FIM	2.90	1.79	0.93	0.65	0.43
Payout ratio, %	50.4	50.0	40.4	34.1	34.7

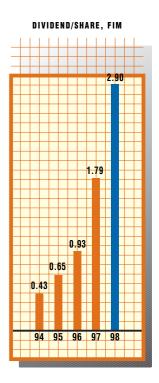
<sup>1)</sup> Proposal of the Board of Directors

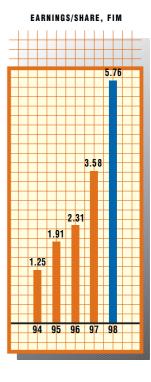
# Share price weighted ratios

Price/earnings ratio (P/E)	39	28	28	13	10
Dividend yield, %	1.3	1.8	1.4	2.7	3.6

The effect of the 1998 share split are included in the adjusted figures where applicable.

The shares repurchased by the company (1,191,080 shares) are taken into account as a deduction when calculating the adjusted average share price for the year. The Board of Directors will propose to the Annual General Meeting that these shares be annulled.





# PROPOSAL OF THE BOARD OF DIRECTORS

	FIM	EUR
The Group's retained earnings from previous financial years total	139,250,000.00	23,420,000.00
The profit for the financial year totals	317,608,000.00	53,418,000.00
- including items transferred from appropriations		
to shareholders' equity in accordance with the		
Accounting Act, totalling	-24,667,000.00	-4,149,000.00
Distributable funds	432,191,000.00	72,689,000.00
Distributable funds in the parent company	340,205,571.35	57,218,469.62
The Board of Directors proposes that the distributable funds mentioned above be used as follows:		
- a dividend of FIM 2.90/EUR 0.49 per share		
be paid to shareholders	152,252,117.00	25,606,967.86
- the remainder be carried forward	187,953,454.35	31,611,501.76

Espoo, February 11, 1999

Pekka Vennamo J		Jorma Hämäläinen		
Marita Kaatrala-Pentikäinen	Asmo Kalpala	Kalevi Kontinen		

Kaj-Erik Relander

Eeva Luoto

Matti Lehti President and CEO

# AUDITORS' REPORT

## TO THE SHAREHOLDERS OF TIETO CORPORATION

We have audited the accounting, the financial statements and the corporate governance of Tieto Corporation for the financial year 1998. The financial statements, which include the report of the Board of Directors, consolidated and parent company income statements, balance sheets and notes to the financial statements, have been prepared by the Board of Directors and the Managing Director. Based on our audit we express our opinion on these financial statements and on corporate governance.

We have conducted the audit in accordance with Finnish Standards on Auditing. Those standards require that we perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining on a test basis evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. The purpose of our audit of corporate governance is to examine that the members of the Board of Directors and the Managing Director have legally complied with the rules of the Companies' Act.

In our opinion the financial statements, which disclose a net income in the consolida-ted income statement of 317.608 thousand FIM, 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 the consolidated and parent company's result of operations and financial position. The financial statements with the consolidated financial statements can be adopted and the members of the Board of Directors and the Managing Director of the parent company can be discharged from liability for the period audited by us. The proposal by the Board of Directors regarding the distribution of the distributable equity is in compliance with the Companies' Act.

In our opinion the interim reports published during the financial year have been prepared in accordance with applicable regulations.

Espoo, February 11, 1999

TILINTARKASTAJIEN OY - ERNST & YOUNG Authorized Public Accountant Firm

Sven-Erik Guarnieri Authorized Public Accountant Tomi Englund Authorized Public Accountant

# CORPORATE GOVERNANCE

# TASKS AND RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND CHAIRMAN

The tasks and responsibilities of the Annual General Meeting, the Board of Directors and the President are stipulated by the Companies Act. No special tasks have been assigned in addition to the tasks required by law.

Of the members of the Board of Directors, Mr Matti Lehti is the President and CEO of the company.

The tasks and responsibilities of the Board members conform to the relevant legislation and are not confirmed separately.

## ELECTION OF THE BOARD AND PRESIDENT

The Board of Directors is elected by the Annual General Meeting. Board members are elected for a period of one year from the meeting.

The President is appointed by the Board of Directors.

## NUMBER OF BOARD MEETINGS

The Board of Directors convened 20 times during the year.

# MANAGEMENT REMUNERATION AND OTHER BENEFITS

The remuneration of the members of the Board of Directors is decided by the Annual General Meeting. The salary, fees and other benefits received by the President are decided by the Board of Directors.

No remuneration is paid to the President or the personnel's representative for membership of the Board of Directors.

Members of the Board of Directors may be paid separate fees, in addition to their Board fees, for separate consultancy assignments.

The salaries, fees and benefits paid to the members of the Board of Directors, the President and the Executive Vice Presidents totaled FIM 3,850,000 in 1998. Members of the Board were also paid consultancy fees.

The profit-related bonuses paid to the President and the Executive Vice Presidents and their pension commitments are shown under Note 3 in the Notes to the Financial Statements.

The President's holdings in the company are shown under Shares and Shareholders.

### Pekka Vennamo

born 1944, MSc (Eng. 1<sup>st</sup> part) Member since 1997 Sonera Corporation, President and CEO, 1998-1999

Telecom Finland Ltd, Chairman of the Board of Directors, 1994 - 1998 PT Finland Ltd, President and CEO, 1994 - 1998 Post and Telecommunications, Director General, 1989 - 1993 Minister of Transport and Telecommunications, 1987 - 1989 Minister at the Ministry of Finance, 1983 -1987 Confederation of Finnish Industry and Employers, Member of the Board

## Jorma Hämäläinen

born 1937, MSc Suomi Mutual Life Assurance Company, President Member since 1995

The Pohjola Group, Senior Vice President - Life Assurance, 1989 - 1997 The Pohjola Group, Director – Life Assurance, 1980 - 1989 WSOY, Member of the Supervisory Board Employees' Group Life Assurance Pool, Chairman of the Board of Directors Suomi Mutual Life Assurance Company, Member of the Board of Directors

### Marita Kaatrala-Pentikäinen

born 1943, MSc Kaatrala-Consulting Oy, Managing Director Member since 1990

TT-Innovation Oy, Managing Director, 1984 - 1990 Mec-Rastor Oy, Senior Consultant, 1976 - 1984 SFK Finance, Telecomia Venture I Fund, Member of the Investment Board

### Asmo Kalpala

born 1950, MSc (Econ.) Tapiola Insurance Group, Chairman and President Member since 1996

Tapiola Insurance Group, Chairman of the Board Tapiola Mutual Pension Insurance Company, Managing Director, 1987 - 1997 Tapiola Mutual Life Assurance Company, Managing Director, 1987 - 1994 Tapiola General Mutual Insurance Company, Managing Director, 1987 - 1994 Metsä-Serla Oy, Senior Vice President - Financial Management, 1987 Metsä Group, Director - Financial Management, 1984 - 1986 Tapiola Insurance Group, Director - Credits, 1983 - 1984 Federation of Finnish Insurance Companies, Deputy Chairman of the Board Metsä-Serla Group, Member of the Board YIT Corporation, Chairman of the Supervisory Board

# BOARD OF DIRECTORS

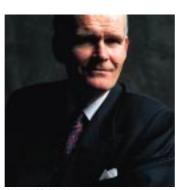




Jorma Hämäläinen



Marita Kaatrala-Pentikäinen



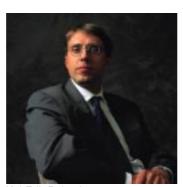
Asmo Kalpala



Kalevi Kontinen



Eeva Luoto



Kaj-Erik Relander



Matti Lehti

#### Kalevi Kontinen

born 1941, DEng. MeritaNordbanken, Executive Vice President and Member of the Group Executive Board Member since 1990

Merita Bank Ltd, Member of the Board of Directors UBF Ltd, Member of the Board of Directors, 1984 - 1995 Kontinen Consulting, independent consultant, 1981 – 1984 Tietotehdas Oy, Deputy Managing Director, 1980 – 1981 University of Helsinki, Docent of Data Processing, 1974 - 1983 Oy Datatie Ab, Member of the Supervisory Board

HEX Oy, Deputy Chairman of the Board of Directors

### Kaj-Erik Relander

born 1962, MSc (Econ.), MBA Sonera Corporation, Executive Vice President Member since 1998

SITRA, The Finnish National Fund for Research and Development, Director of Business Development, 1989 - 1994 SITRA, Project Manager, 1988 - 1989 SITRA, Venture Capital Industry Analyst, 1987 - 1988 Helsinki School of Economics and Business Administration, Student Economic Committee, Member of the Board Helmet Capital Fund Management Oy, Member of the Board of Directors Oy Maxrona Ab, Member of the Board of Directors

# Eeva Luoto

born 1947, Diploma of Business Studies Tieto Corporation, Government Services, Secretary Personnel representative since 1998

Various office and organizational posts Chairperson, Tieto's trade union TTAY ry

## Matti Lehti

born 1947, PhD (Econ.) Tieto Corporation, President and CEO Member since 1988

Rautakirja Oy, Deputy Managing Director, 1986 – 1989 Rautakirja Oy, Manager of the Wholesale Group and Deputy to the Managing Director, 1983 - 1985 Rautakirja Oy, Manager of the Wholesale Group, 1981 – 1982 Oy Mec-Rastor Ab, Manager - Business Development Group, 1980 – 1981 Jaakko Pöyry Group, Member of the Board of Directors

Patria Industries Oy, Member of the Board of Directors Helsinki School of Economics and Business Administration, Vice Chairman of the Board of Directors Setec Oy, Member of the Board of Directors Foundation for Economic Education, Member of the Board of Directors Employers' Confederation of Service Industries, Member of the Board of Directors

# ТІЕТО

Divisions and Business Units

# PROCESSING AND NETWORK SERVICES

Juhani Lano Executive Vice President

**Business Control** Pirkko Anttilainen

**Personnel and personal growth** Jaana Utti

**Customized Services** Pekka Hirvonen

> Forest Industry Pekka Liutu

Base Industry Seppo Mellas

**Energy** Harri Pajunen

**Post and Telecom** Tapani Kuusela

Trade and Services Heikki Mikonmäki

**Public Administration** Jarmo Hyyryläinen

**Finance** Juhani Soininen

**Centralized Services** Sakari Lehtola

**Competence Centres** Veli Pirttiaho

New Ventures Juhani Strömberg

International Operations Leo Höykinpuro

### ► GROUP ORGANIZATION

President and CEO Matti Lehti

**Financial Administration** Tuija Soanjärvi

**Personnel Administration** Juhani Virtanen

Development Arto Sahla

**Technology** Ari Hirvonen

Internal Audit Leena Helenius

Legal Matters Jouko Lonka

**Communications** Eevariitta Jurvainen

### ► FINANCIAL SYSTEMS

Veli Pohjolainen Executive Vice President

**Finance** Seppo Haapalainen

Business Support Hannele Mäenpää

**Technology** Pentti Unkuri

Fidenta Oy Ulla-Maija Keränen

**Tietoleonia Oy** Anja Ahola

**TKP Tieto Oy** Juhani Karjasilta

Entra Data AB Ulf Tangen

Tieto Entra Oy (Banking and Insurance) Jukka Rosenberg

#### International Operations:

Baltics and Russia Jaakko Parkkinen

Tieto Konts SIA Maris Ozolins

#### ► AUDITORS

Authorized Public Accountants Tilintarkastajien Oy - Ernst & Young

Tomi Englund, MSc(Econ), LL.M, APA

**Deputies** Risto Järvinen, Lic.Econ., APA

Kristian Hallbäck, MSc(Econ), APA

# SERVICES

Esko Mäkinen

**Finance and Administration** Timo Salmela

**Energy and Tele** Ari Vanhanen

Retail and Wholesale Timo Puranen

Services and Transportation Timo Hammar

**Post** Ari Karppinen

**Telecom** Timo Cavén

Oy EDI Management Finland Ltd Seppo Auvinen

**Tieto Innovation Oy** Kari Hakola

International Antti Virta

# ► MANAGEMENT GROUP

Pentti Heikkinen Pentti Huusko Juhani Lano Matti Lehti Esko Mäkinen Hannu Niilo-Rämä Veli Pohjolainen Arto Sahla Tuija Soanjärvi Juhani Virtanen

# PUBLIC ADMINISTRATION

# Pentti Heikkinen

Business Administration Erkki Nieminen

**Government Service** Olavi Kujala

**Tietokarhu Oy** Anja Vainio

**Regional Government Service** Juhani Kaisanlahti

Information Service Ulla Lehtiniemi

# Public International

Eeva-Liisa Mauno

## ► INDUSTRY

Pentti Huusko

**Finance** Jaana Vuorinen

Administration and Development Risto Fagerholm

Enterprise Solutions Rolf Lindén

Forest Hannu Vähäsaari

**Industria** Harri Ovaska

International Operations Heimo Kontula

**Consulting** Timo Salin

**Resource Planning Systems** Sakari Ruotsalainen

## ► SOFTWARE SERVICES

#### Hannu Niilo-Rämä

**Controller** Monica Ek-Lindblom

International Product Development Carl-Johan Lindfors

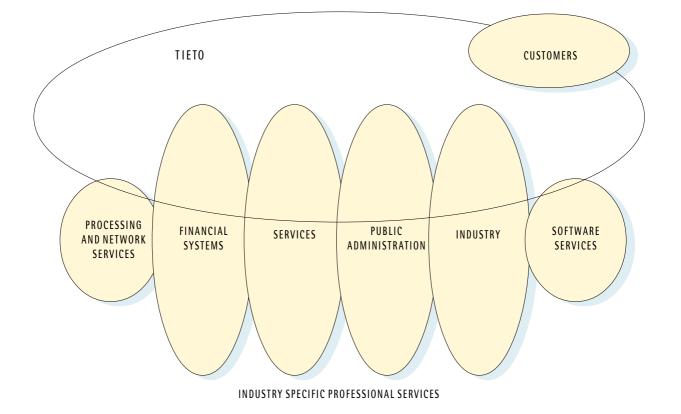
International Business Development Jørgen Bojsen

**Financial Management** Tero Ansio (Finland) Urban Deljerud (Sweden) Stein Raestad (Norway)

### Payroll and HRM

Pertti Kettunen (Finland) Urban Deljerud (Sweden) Tore Berg ja Stein Raestad (Norway) Peter Heilmann (Denmark)

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### • FINLAND

#### **Tieto Corporation**

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Directors and administration, Customised Services, Centralised Services International Operations, Competence Centres, New Ventures

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and

Design

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#### Tietokarhu Oy

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### Tieto Unic Oy

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#### S-113 59 Stockholm tel. +46 8 32 48 10

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## Huldt & Lillevik Kompetanse AS

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#### Tieto Technolgoy A/S

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### • L A T V I A

#### Tieto Konts Sia

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Tieto Poland Sp. z o.o.

ul. Kobuza 30 02-841 Warszawa POLAND tel. +48 22 643 90 22

# • S P A I N

#### Tieto Iberica S.L.

c/San Vincente 29.2B 28220 MADRID SPAIN tel. +34 91 639 8060 f. +34 91 639 8060

# •COUNTRY COMPANIES

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### Tieto Eesti AS

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#### Tieto Eesti AS

Harju tn.6 EE-0001 TALLINN tel. +372 6 310 680 f. +372 6 310 681

#### Tieto Norge AS

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#### Tieto N.V.

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### Tieto U.K. Ltd

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### Tieto France Sarl

Immeuble le Mathis 204 Avenue de Colmar F-67100 STRASBOURG tel. +33 38865 7711 f. +33 38865 8889

### Tieto GmbH

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# • OTHER ADDRESSES:

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CONTACTS OF ALL TIETO LOCATIONS ARE UPDATED ON THE WEB PAGES AT THE ADDRESS: www.tieto.com



INFORMATION TECHNOLOGY PARTNER IN A WORLD OF NETWORKS

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