Nokia's Financial Statements 1998



Table of Contents

- **3** Review by the Board of Directors
- 7 Consolidated Profit and Loss Account, IAS
- 8 Consolidated Balance Sheet, IAS
- **9** Consolidated Cash Flow Statement, IAS
- **10** Notes to the Consolidated Financial Statements
- 22 Profit and Loss Account, Parent Company, FAS
- 22 Cash Flow Statement, Parent Company, FAS
- 23 Balance Sheet, Parent Company, FAS
- **24** Notes to the Financial Statements of the Parent Company
- 27 Nokia Shares and Shareholders
- **32** Nokia 1994–1998, IAS (MFIM)
- **34** Nokia 1994–1998, IAS, Proforma (MEUR)
- 36 Nokia 1994–1998, IAS (MFIM), Key ratios and economic indicators
- **37** Nokia 1994–1998, IAS, Proforma (MEUR), Key ratios and economic indicators
- **38** Proposal by the Board of Directors to the Annual General Meeting
- **39** Auditors' Report
- **40** U.S. GAAP
- **42** Calculation of Key Ratios

Review by the Board of Directors

Nokia's net sales in 1998 increased by 51% compared to 1997 and totaled FIM 79 231 million (FIM 52 612 million in 1997). Sales in Nokia Telecommunications grew by 39% to FIM 26 103 million (FIM 18 826 million in 1997) and in Nokia Mobile Phones by 74% to FIM 47 984 million (FIM 27 643 million in 1997). Sales decreased in Other Operations by 17% to FIM 6 029 million (FIM 7 239 million in 1997).

Operating profit (IAS, International Accounting Standards) grew by 75% and totaled FIM 14 799 million (FIM 8 454 million 1997). Operating margin improved to 18.7% (16.1% in 1997). Operating profit in Nokia Telecommunications increased to FIM 5 706 million (FIM 4 053 million in 1997) and in Nokia Mobile Phones to FIM 9 158 million (FIM 3 837 million in 1997). Other Operations showed an operating loss of FIM 65 million (profit of FIM 564 million in 1997) primarily due to lower profitability at Nokia Industrial Electronics as well as substantial investments into future business opportunities at Nokia Ventures Organization.

Net financial expenses totaled FIM 234 million (FIM 137 million 1997). Profit before tax and minority interests totaled FIM 14 603 million (FIM 8 371 million in 1997). Taxes amounted to FIM 4 380 million (FIM 2 274 million in 1997). Profit from continuing operations was FIM 9 992 million (FIM 5 998 million in 1997).

Basic earnings per share from continuing operations was FIM 17.56 (adjusted for share split FIM 10.59 in 1997). Net profit was FIM 10 408 million (FIM 6 259 million in 1997). Total capital expenditures in 1998 amounted to FIM 4 527 million (FIM 2 402 million in 1997). Net debt to equity ratio (gearing) was -36% at the end of the year (-35% at the end of 1997).

Enhancing global market position

Nokia continued to enhance its global market position in the growing telecommunications industry. Based on the number of products manufactured, as well as other relevant market information, Nokia believes it became the world's largest mobile phone manufacturer in 1998. Nokia also continued to be the world's largest GSM 1800 infrastructure supplier and one of the two largest GSM 900 suppliers.

In 1998 Europe accounted for 58% of Nokia's net sales (59% in 1997), the Americas 21% (18% in 1997) and Asia Pacific 21% (23% in 1997). The 10 largest markets were the U.S., China, the

UK, Germany, France, Italy, Finland, Austria, Sweden and Australia, together representing 68% of total sales.

Strengthening research and development

Nokia announced a number of investment plans to prepare for further growth of the company. The company made major investments in 1998 to strengthen research and development. At the end of 1998, Nokia had 44 R&D centers in 12 countries and a total of more than 13 000 employees working within R&D, approximately 30% of its total personnel. Nokia's investments in research and development increased by 50% (by 30% in 1997) and totaled FIM 6 838 million (FIM 4 560 million in 1997), representing 8.6% of net sales (8.7% of net sales in 1997).

Expanding manufacturing capacity

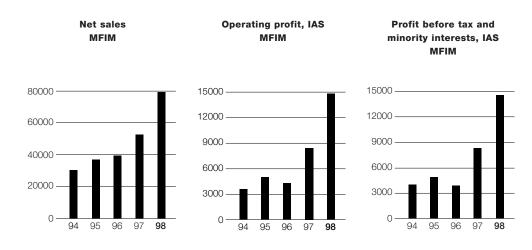
Other major investments included continued expansion of both infrastructure and terminal manufacturing capacities at Nokia's main manufacturing sites. During the year, Nokia also announced that it will build a new mobile phone factory in Hungary and form a new joint venture to produce and manufacture products for fixed access networks in China and to build a new factory to manufacture GSM base stations in China.

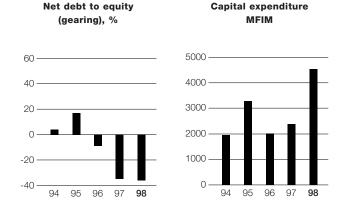
To increase flexibility and to focus on the company's key core areas, Nokia outsourced part of its production, including the manufacture of multimedia terminals in Sweden and the production of certain fixed and radio access products in Finland to the U.S.-based SCI Systems Inc. Nokia also sold LK-Products, a company manufacturing telecommunications components to the UK-based Filtronic plc. In addition, Nokia outsourced production of its professional mobile radio handsets and certain printed circuit boards in Finland to Enviset, and entered into agreements to increase outsourcing of mobile phone accessories and subassembly production.

At the end of 1998, Nokia's global production chain included 12 infrastructure manufacturing facilities in 6 countries and 12 terminal manufacturing facilities in 8 countries.

Investing in people

Nokia continued to invest in further building the competencies of its personnel and in recruiting of new personnel worldwide. Dur-





ing 1998, Nokia increased its personnel by a total of 9 819 new employees (6 626 in 1997), excluding the businesses sold in 1998. The average number of personnel for 1998 was 41 091 (35 490 for 1997). At the end of 1998, Nokia employed 44 543 people worldwide (36 647 at year-end 1997).

Nokia continued to offer competitive compensation and benefit programs to its employees. The company has a number of global bonus and compensation programs complementing local programs. For 1998, the 66% increase in earnings per share resulted in the maximum 5% bonus, based on annual base salary, for Nokia's personnel participating in the global Nokia Connecting People Bonus plan.

Increasing know-how

During 1998, Nokia made a number of strategically important acquisitions, signed cooperation agreements and entered strategic partnerships.

Believing that global and open standards help to create markets for high volume products, Nokia is a leading founder of major industry initiatives including Wireless Application Forum (WAP), Symbian and Bluetooth. Nokia will continue to introduce solutions and products based on open standards and technologies in 1999 and beyond. In December Nokia strengthened its

position in IP technologies with the acquisition of Canada-based Vienna Systems, specialist in IP telephony.

To enhance its own broadband access-related R&D, Nokia signed a cooperation agreement with Diamond Lane Communications Corporation, one of the first companies commercially offering DSL (Digital Subscriber Line) data access. With the Computer Sciences Corporation, Nokia created a global alliance to enhance its system integration offering to network operators.

In June Nokia acquired the GSM terminal research and development unit of Matra Nortel Communications in Germany to enhance its telematics products related R&D. Nokia expects to introduce the first Nokia-developed car telematics solutions in the vehicles of several leading car manufacturers during 1999. In September Nokia acquired the Swedish software company UID to strengthen its development of multimedia terminals.

Building the way to third generation communications

In 1998 ETSI (European Telecommunications Standards Institute) selected WCDMA (Wideband Code Division Multiple Access) as the air interface solution for Europe's 3rd generation mobile communications. Nokia continued to develop and promote WCDMA air interface to provide wideband wireless multimedia capabilities over evolving GSM core networks.

In early September Nokia announced a successfully completed call with a Nokia-made third generation terminal based on NTT DoCoMo's trial specification. Nokia also continued to develop other major second and third generation technologies and announced plans to test a third generation mobile system in China.

Implementing new structure

Effective July 1, 1998, Nokia is organized into three business groups: Nokia Telecommunications, Nokia Mobile Phones and Nokia Communications Products. In addition to the business groups, Nokia Ventures Organization is responsible for Nokia's new start-up businesses and technologies and Nokia Research Center for corporate R&D. Nokia Communications Products, Nokia Ventures Organization, Nokia Research Center as well as Group general expenses are reported under Other Operations for 1998

Net sales by business group Jan. 1-Dec. 31	1998 MFIM	%	1997 MFIM	%
Nokia Telecommunications Nokia Mobile Phones Other Operations Inter-business group eliminations	26 103 47 984 6 029 -885	33 61 8 -2	18 826 27 643 7 239 -1 096	36 52 14 -2
Nokia Group	79 231	100	52 612	100
Operating profit by business group Jan. 1-Dec. 31	1998 MFIM	% of net sales	1997 MFIM	% of net sales
Nokia Telecommunications Nokia Mobile Phones Other Operations	5 706 9 158 -65	21.9 19.1 -1.1	4 053 3 837 564	21.5 13.9 7.8
Nokia Group	14 799	18.7	8 454	16.1

Introducing euro

Nokia supports the wide use of the euro from the beginning of the transition period commencing January 1, 1999. The euro zone, formed by the 11 EMU (Economic Monetary Union) member states, is one of the largest markets in the world, which Nokia believes is leading to a more stable operating environment supporting further economic growth.

Beginning with its first quarter 1999 results, Nokia will publish its financial information in euros.

Nokia Telecommunications

Net sales of Nokia Telecommunications for 1998 increased by 39% to FIM 26 103 million (FIM 18 826 million in 1997). Sales growth was especially strong in Europe and China. Nokia's infrastructure order inflow was FIM 30 billion (FIM 23 billion in 1997), an increase of 30%. Operating profit increased 41% to FIM 5 706 million (FIM 4 053 million in 1997) and operating margin was 21.9% (21.5% in 1997).

Nokia continued to build on its position as one of the world's leading suppliers of both mobile and fixed networks and strengthened its market-leading position in the provision of mobile datacom infrastructure. The delivery of fixed datacom products and solutions worldwide also increased.

To meet operators' increasing capacity requirements, Nokia launched a High Capacity GSM system including new microwave radio technologies. The new solutions include the Nokia DX200 "i-series" switching products, which can bring significant savings in network operations. The Nokia MSCi (Mobile Switching Center) offers the world's highest GSM switching capacity and is capable of handling 400 000 subscribers. The Nokia MetroSite base station sub-system solution offers an increase in network capacity up to ten times that of conventional networks.

During the year Nokia further strengthened its position in GSM. A total of 12 new GSM customers signed agreements with Nokia, and the number of operators to which Nokia supplies GSM technology increased to 78 operators in 37 countries. Nokia is the world leader in the supply of GSM 1800 networks. In GSM 900 growth was strongest in China and Europe. Nokia signed a breakthrough agreement in the Latin American market, supplying a complete GSM 900 network in Venezuela. In 1998 Nokia introduced a number of new innovative products, including the Nokia High Speed Data solution and the GSM Intranet Office.

In Professional Mobile Radio (PMR) systems Nokia signed new supply agreements, including the agreements with Astrid in Belgium and Dolphin in the UK, strengthening its leading position in digital Terrestrial Trunked Radio (TETRA) systems.

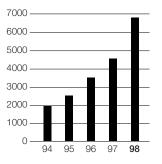
Nokia continued to build on its position in the fixed network market in which operators continue to develop their broadband strategies as they face increasing demand to offer datacom services, driven by the growth of the Internet. During the year, Nokia further developed its data networking capabilities, targeting the fixed and mobile operators, as well as Internet Service Providers (ISPs). Following the acquisition of Ipsilon at the end of 1997 Nokia has grown its global IP application customer base to over 300, including 30 ISPs at the end of 1998.

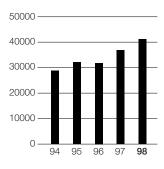
In 1998 operators worldwide continued to expand their transmission networks. Sales of Nokia's SDH transmission system Synfonet increased bringing the number of Nokia's SDH customers to approximately 140 in 30 countries. In 1998, Nokia made another breakthrough in Latin America, supplying transport and access networks to eight of the largest cities in Brazil.

In 1998 Nokia Telecommunications complemented its global production and R&D development chain, announcing that it will build its second base station manufacturing plant in China and a

Research and development, MFIM

Average personnel





Average personnel	1998	1997
Nokia Telecommunications	19 280	15 710
Nokia Mobile Phones	16 064	12 631
Other Operations	5 747	7 149
Nokia Group	41 091	35 490
Finland	20 978	19 342
Other European countries	9 381	8 532
Americas	5 924	4 152
Asia-Pacific	4 791	3 464
Other countries	17	-
Parent Company	1 112	810
Research and		
development, MFIM	1998	1997
Nokia Telecommunications	3 353	2 556
Nokia Mobile Phones	3 103	1 714
Other Operations	382	290
Nokia Group	6 838	4 560

new joint venture to manufacture fixed access network products also in China. In addition, Nokia Telecommunications expanded its production in various other factories, established new R&D centers in Japan and Hungary and increased investments to further develop third generation, GSM and IP technologies.

Nokia Mobile Phones

Net sales of Nokia Mobile Phones for 1998 increased by 74% to FIM 47 984 million (FIM 27 643 million in 1997). Operating profit increased by 139% to FIM 9 158 million (FIM 3 837 million in 1997) and operating margin was 19.1% (13.9% in 1997).

In early December Nokia manufactured its 100 millionth phone. More than 60% of these 100 million phones have been sold during the past two years. In 1998 Nokia sold a total of 40.8 million mobile phones, of which more than 80% were digital.

Nokia's largest mobile phone market was the U.S., followed by China.

Nokia strengthened its mobile phone market position worldwide. With high consumer demand for the company's comprehensive product portfolio, Nokia believes it became the world's leading mobile phone manufacturer in 1998.

According to Nokia's estimates, the global mobile phone subscriber base increased by over 100 million new users and totaled over 306 million at the end of 1998. In 1998 the market for mobile phones was approximately 163 million units sold worldwide, of which the upgrade market represented close to 40%.

The growing subscriber base and the expanding upgrade market have made mobile phones the world's largest consumer electronics industry in terms of unit sales, leading into increasingly segmented market situation. To exploit this development, Nokia added several new digital models to its mobile phone product portfolio in 1998.

At the beginning of the year, Nokia started volume deliveries of the Nokia 6110, 6130 and 6190 models for GSM launched late 1997. In February Nokia started the deliveries of the Nokia 2170, a CDMA 1900 handset for the U.S. market. In the second quarter Nokia started deliveries of the dual mode (AMPS 800/TDMA 800) Nokia 6120 and the trimode (AMPS 800/TDMA 800/TDMA 1900) Nokia 6160 versions in the Americas.

To address the mass consumer market, Nokia introduced the Nokia 5110 and 5130 models for GSM 900 and 1800 respectively, with Xpress-on™ color covers in March 1998. Volume deliveries of these products began in May. Nokia also introduced the second generation Nokia 9110 Communicator, a mobile phone with integrated data communications, and the Nokia 8810 premium lifestyle phone, both for GSM 900. Deliveries of the Nokia 8810 started in August and Nokia will start volume deliveries of the Nokia 9110 Communicator on February 1, 1999.

In April Nokia launched an inductive loopset for the Nokia 6100 and 5100 series phones allowing a person who is hard of hearing easier use of a mobile phone. In May Nokia began deliveries of a new mobile phone model for the Japanese PDC standard, incorporating a voice activation feature.

In August Nokia introduced the Nokia 5190, a GSM 1900 model, and in September the Nokia 5120 dual mode and the Nokia 5160 trimode models for the American market. In September Nokia started deliveries of the Nokia 6150 dual band (GSM 900/1800) model.

Nokia also introduced a number of new analog mobile phones, including the Nokia 650, the world's smallest phone for NMT 450 standard, a new Nokia RinGo model for ETACS networks and the Nokia 282 to the American market.

To meet the anticipated strong demand for the Nokia mobile phones in the rapidly growing handset market, Nokia announced an investment of close to FIM 1 billion in a new mobile phone manufacturing and distribution center in Komárom, Hungary, which is expected to be fully operational in early 2000, and in production capacity expansions at its mobile phone plant in Salo, Finland. Nokia also decided on a production capacity expansion program of approximately FIM 1 billion during 1999 for its mobile phone factory in Bochum, Germany.

Other Operations

Net sales of Other Operations for the year 1998 decreased by 17% to FIM 6 029 million (FIM 7 239 million in 1997). Other Operations showed an operating loss of FIM 65 million (operating profit of FIM 564 million in 1997).

Nokia Multimedia Terminals' sales remained at the same level as a year ago as a result of slow market growth in Germany. Nokia signed several new multimedia terminal delivery agreements during the year, and introduced its second generation products for satellite, cable and terrestrial networks. In April Nokia announced the outsourcing of its multimedia terminals manufacturing to the U.S.-based SCI Systems Inc.

Nokia Industrial Electronics' sales decreased in 1998. Excluding the impact of divested businesses, sales were 10% lower than a year ago. Nokia introduced several new display products during the year and extended its flat panel product range to include 14.1", 15.1" and 18" monitors.

In 1998 Nokia sold LK-Products, a company manufacturing telecommunications components to the UK-based Filtronic plc., and its car electronics business in Motala, Sweden to the Swedenbased Autoliv AB. In October Nokia announced that it will move all Finland-based display manufacturing to its factories in Hungary and Mexico.

Changes in share capital

Nokia's share capital increased in 1998 by FIM 14 730 630 to a total of FIM 1 513 991 410, as a result of the issue of 5 892 252 new A shares upon exercise of warrants issued to key personnel in 1994, 1995 and 1997. The total number of shares outstanding at December 31, 1998 was 605 596 564. As the result of the new share issues, Nokia received a total of FIM 637 618 130 additional shareholders' equity in 1998.

On December 31, 1998 Group companies owned 27 626 768 Nokia K shares and 4 534 232 Nokia A shares. The shares have an aggregate nominal value of FIM 80 402 500, represent 5.3% of the total number of shares and 16.1% of the total voting rights.

Outlook

Nokia's strategic intent is to strive for leadership in the most attractive global communications segments through speed in anticipating and fulfilling evolving customer needs, quality in products and processes and openness with people and to new ideas and solutions. Based on its resources including technological know-how, market position and continuous building of competencies, Nokia is well positioned to achieve its future goals.

Dividend

The Nokia Board of Directors will propose to the Annual General Meeting on March 17, 1999 that a dividend of FIM 5.75 per share (FIM 3.75 per share for 1997, split adjusted) be paid on K and A shares.

Consolidated Financial Statements according to International Accounting Standards (IAS)

Consolidated Profit and Loss Account, IAS

Financial year ended December 31	Notes*	1998 MFIM	1997 MFIM	1998 MEUR
Net sales		79 231	52 612	13 326
Cost of goods sold		-49 342	-33 999	-8 299
Research and development expenses		-6 838	-4 560	-1 150
Selling, general and administrative expenses		-8 252	-5 599	-1 388
Operating profit	2, 3, 4, 5, 6, 7	14 799	8 454	2 489
Share of results of associated companies	, , , , , , , ,	38	54	6
Financial income and expenses	8	-234	-137	-39
Profit before tax and minority interests		14 603	8 371	2 456
Tax	9	-4 380	-2 274	-737
Minority interests		-231	-99	-39
Profit from continuing operations		9 992	5 998	1 680
Discontinued operations	10		261	-
Profit from ordinary activities before cumulative				
effect of change in accounting policies		9 992	6 259	1 680
Cumulative prior year net effect of change				
in accounting policies		416	-	70
Net profit		10 408	6 259	1 750
		1998	1997	1998
Earnings per share	Notes*	FIM	FIM	EUR
Continuing operations				
Basic		17.56	10.59	2.95
Diluted		17.03	10.40	2.86
Net Profit				
Basic	23	18.29	11.05	3.08
Diluted	23	17.74	10.86	2.98

^{*} Notes are shown on pages 10 to 21.

Consolidated Balance Sheet, IAS

December 31	Notes*	1998 MFIM	1997 MFIM	1998 MEUR
ASSETS				
Fixed assets and other non-current assets				
Intangible assets	11	2 880	2 061	484
Property, plant and equipment	12	7 912	6 240	1 331
Investments in associated companies	13	539	335	90
Investments in other companies	13	445	454	75
Long-term loan receivables		59	160	10
Deferred tax assets	20	1 163	-	196
Other non-current assets		202	195	34
		13 200	9 445	2 220
Current assets				
Inventories	14	7 684	7 314	1 292
Receivables	15	21 588	12 732	3 631
Short-term investments		12 874	9 363	2 165
Bank and cash		4 314	2 884	726
		46 460	32 293	7 814
Total assets		59 660	41 738	10 034
		4000	4007	4000
December 31	Notes*	1998 MFIM	1997 MFIM	1998 MEUR
SHAREHOLDERS' EQUITY AND LIABILITIES				
Shareholders' equity	16			
Share capital		1 514	1 499	255
Share issue premium		5 405	4 776	909
Treasury shares		-654	-654	-110
Other reserves		722	766	121
Retained earnings		23 392	15 137	3 934
		30 379	21 524	5 109
Minority interests		376	195	63
Long-term liabilities	17			
Long-term interest-bearing liabilities		1 530	1 348	257
Deferred tax liabilities	20	522	-	88
Other long-term liabilities		377	295	64
		2 429	1 643	409
Current liabilities				
Short-term borrowings	22	4 157	3 008	699
Current portion of long-term debt	17	361	285	61
Accounts payable and accrued liabilities	21	21 496	14 541	3 615
Advance payments		462	542	78
		26 476	18 376	4 453
Total shareholders' equity and liabilities		59 660	41 738	10 034

^{*} Notes are shown on pages 10 to 21.

Consolidated Cash Flow Statement, IAS

Financial year ended December 31 Notes*	1998 MFIM	1997 MFIM	1998 MEUR
Cash flow from operating activities			
Operating profit	14 799	8 454	2 489
Adjustments, total 28	2 977	2 552	501
Operating profit before change in net working capital	17 776	11 006	2 990
Change in net working capital 28	-2 680	877	-451
Cash generated from operations	15 096	11 883	2 539
Interest received	795	703	134
Interest paid	-1 246	-1 031	-210
Other financial income and expenses	-20	280	-3
Income taxes paid	-4 596	-1 634	-773
Net cash from operating activities	10 029	10 201	1 687
Cash flow from investing activities			
Acquisition of Group companies, net of acquired cash	-450	-505	-76
Investments in other shares	-305	-47	-51
Additions in capitalized R&D costs	-1 079	-949	-182
Capital expenditures	-4 527	-2 402	-761
Discontinued operations, net of disposed cash	-	86	-
Proceeds from disposal of shares in Group companies, net of disposed cash	506	5	85
Proceeds from sale of treasury shares	-	81	-
Proceeds from sale of other shares	93	227	16
Proceeds from sale of fixed assets	1 085	506	182
Dividends received		26	7
Net cash used in investing activities	-4 638	-2 972	-780
Cash flow from financing activities			
Share issue	643	72	108
Capital investment by minority shareholders	95	-	16
Proceeds from (+), payments of (-) long-term liabilities	391	-1 027	66
Proceeds from (+), payments of (-) short-term borrowings	1 638	-980	275
Proceeds from (+), payments of (-) long-term receivables	-49	107	-8
Proceeds from (+), payments of (-) short-term receivables	-869	248	-146
Dividends paid	-2 221	-1 061	-374
Net cash used in financing activities	-372	-2 641	-63
Net increase in cash and cash equivalents	5 019	4 588	844
Cash and cash equivalents at beginning of period	12 169	7 659	2 047
Cash and cash equivalents at end of period	17 188	12 247	2 891

The above figures cannot be directly traced from the balance sheet without additional information as a result of acquisitions and disposals of subsidiaries and net foreign exchange differences arising on consolidation.

The schedule shown below reconciles cash and cash equivalents at the end of the previously reported period to cash and cash equivalents reported for the beginning of the current period.

Reconciliation

As previously reported for 1997 and 1996, respectively	12 247	7 545	2 060
Foreign exchange adjustment	-78	114	-13
	12 169	7 659	2 047
Net increase in cash and cash equivalents	5 019	4 588	844
As reported for 1998 and 1997	17 188	12 247	2 891

^{*} Notes are shown on pages 10 to 21.

Notes to the Consolidated Financial Statements

1. Accounting principles

Basis of presentation

The consolidated financial statements of Nokia Corporation ("Nokia" or "the Group"), a Finnish limited company with domicile in Helsinki, are prepared in accordance with International Accounting Standards (IAS). The notes to the financial statements also conform with Finnish Accounting legislation.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Solely for the convenience of the reader, the consolidated financial statements as of and for the year ended December 31, 1998 have been converted into euros (EUR) at the rate of 5.94573 Finnish markka (FIM) per euro, the conversion ratio announced on December 31, 1998.

Accounting convention

The financial statements are presented in Finnish markkas and are prepared under the historical cost convention.

Principles of consolidation

The consolidated financial statements include the accounts of the parent company, Nokia Corporation, and each of those companies in which it owns, directly or indirectly through subsidiaries, over 50% of the voting rights. The accounts of certain companies in which Nokia has management control are also consolidated. Certain real estate and housing companies, as well as small companies which had no operations during the financial year, have, however, been left out of the consolidated financial statements. The effect of these companies on the Group's result and shareholders' equity is immaterial. The companies acquired during the financial period have been consolidated from the date the responsibility for their operations was transferred to the Group. Similarly the result of a Group company divested during an accounting period is included in the Group accounts only to the date of disposal.

All inter-company transactions are eliminated as part of the consolidation process. Minority interests are presented separately in arriving at the profit from continuing operations. They are also shown separately from shareholders' equity and liabilities in the consolidated balance sheet.

Acquisitions of companies are accounted for using the purchase method. Goodwill represents the excess of the purchase cost over the fair value of assets less liabilities of acquired companies. Goodwill is amortized on a straight-line basis over its expected useful life. Useful lives vary between two and five years depending upon the nature of the acquisition, unless a longer period not exceeding 20 years can be justified. Expected useful lives are reviewed at each balance sheet date and where these differ significantly from previous estimates, amortization periods are changed accordingly.

The Group's share of profits and losses of associated companies is included in the consolidated profit and loss account in accordance with the equity method of accounting. The Group's share of post acquisition reserves (retained earnings and other reserves) is added to the cost of associated company investments in the consolidated balance sheet.

Profits realized in connection with the sale of fixed assets between the Group and associated companies are eliminated in proportion to share ownership. Such profits are deducted from the Group's equity and fixed assets and released in the Group accounts over the same period as depreciation is charged.

Investments in other companies (voting rights less than 20%) and also some joint ventures in start-up phase are stated at cost; provision is made when there has been an other than temporary decline in value.

Transactions in foreign currencies

Transactions in foreign currencies are recorded at the rates of exchange prevailing at the dates of the transactions. For practical reasons, a rate that approximates the actual rate at the date of the transaction is often used. At the end of the accounting period the unsettled balances on foreign currency receivables and liabilities are valued at the rates of exchange prevailing at the year-end. Foreign exchange gains and losses related to normal business operations are treated as adjustments to cost of goods sold. Foreign exchange gains and losses associated with financing are entered as a net amount under financial income and expenses.

Foreign Group companies

In the consolidated accounts all items in the profit and loss accounts of foreign subsidiaries are translated into Finnish markka at the average exchange rates for the accounting period. The balance sheets of foreign Group companies are translated into Finnish markka at the rates of exchange ruling at the year-end. Exchange differences arising from the application of the purchase method are treated as an adjustment affecting consolidated share-holders' equity. Differences resulting from the translation of profit and loss account items at the average rate and the balance sheet items at the closing rate are taken to retained earnings. On the disposal of a foreign group company, the cumulative amount of the translation difference is recognized as income or as expense in the same period in which the gain or loss on disposal is recognized.

The Group's policy is to hedge a portion of foreign subsidiaries' shareholders' equity to reduce the effects of exchange rate fluctuations on the Group's net investments in foreign Group companies. Exchange gains and losses resulting from the hedging transactions are offset against the translation differences arising from consolidation and recorded in shareholders' equity.

Derivative financial instruments

The Group enters into derivative financial instruments such as forward foreign exchange and option contracts to hedge its exposure against foreign currency fluctuations on certain assets, liabilities and probable transactions denominated in foreign currencies. In accordance with its Treasury policy, Nokia does not currently hold or issue derivative financial instruments for trading purposes. Any deferred gains and losses arising from hedging transactions are shown as a part of the cost of goods sold when the sale or purchase transactions are recognized. Derivative contracts used for hedging foreign exchange exposure have high correlation with the items being hedged, both at inception and throughout the hedge period; and are designated to the underlying exposure. The majority of derivative financial instruments hedging foreign exchange exposures have a duration of less than a year. Written options are only used as part of combination strategies.

Foreign exchange gains and losses on forward contracts are calculated by valuing the forward contract with the spot exchange

rate prevailing on the reporting date and comparing that with the original amount calculated by using the spot rate prevailing at the beginning of the contract. The interest rate differential of the forward contract is accrued over the life of the contract as part of the financial income or expenses.

Premiums paid for purchased foreign exchange options are included in other current receivables and premiums received for written options are included in other current payables in the balance sheet. Option contracts are valued at the balance sheet date by using the Garman & Kohlhagen option valuation model. Foreign exchange gains or losses on the option contracts i.e. the difference between the premium paid or received and the market value of the options at the reporting date is shown as a part of the cost of goods sold when the sale or purchase transaction is recognized.

The Group enters into derivative financial instruments such as interest rate swaps, forwards, futures and options to hedge its exposure to interest rate risk. Interest payable and receivable under interest rate swaps is accrued and recorded as an adjustment to the interest income or expense related to the designated asset or liability. Amounts received or paid on cash settlement, representing the gain or loss, of interest rate forward contracts are deferred and recognized over the life of the underlying financial instrument as an adjustment to interest income or expense. Premiums paid for purchased interest rate options are included in other current receivables and premiums received for written options are included in other current payables in the balance sheet. Premiums are amortized to interest income or expense over the life of the agreements. Amounts receivable and payable under the agreements are recognized as yield adjustments over the life of the contract.

Revenue recognition

Sales are recorded upon shipment of products and customer acceptance, if any, or performance of services, net of sales taxes and discounts. Revenues from large long-term contracts are recognized on the percentage of completion method. Provisions are made to cover anticipated losses on contracts.

Research and development

Research and development costs are expensed in the financial period during which they are incurred, except for certain development costs which are capitalized when it is probable that a development project will be a success, and certain criteria, including commercial and technological feasibility, have been met. Capitalized development costs are amortized on a systematic basis over their expected useful lives. The amortization period is between 2 and 5 years.

Maintenance, repairs and renewals

Maintenance, repairs and renewals are generally charged to expense during the financial period in which they are incurred. However, major renovations are capitalized and depreciated over their expected useful lives.

Pensions and coverage of pension liabilities

The Group companies have various pension schemes in accordance with the local conditions and practices in the countries in which they operate. The schemes are generally funded through payments to insurance companies or to trustee-administered funds as determined by periodic actuarial calculations. Any deficits or benefits requiring additional contributions are funded through payments allocated over a period of years not exceeding the expected remaining working lives of the participating employees.

The Group has met minimum funding requirements for the countries in which it maintains pension schemes.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation.

Depreciation is recorded on a straight-line basis over the expected useful lives of the assets, based on the following useful lives:

Building 20–33 years Machinery and equipment 3–10 years

Land and water areas are not depreciated.

Gains and losses on the disposal of fixed assets are included in operating profit/loss.

Leasing

Operating lease payments are treated as rentals. Assets acquired under finance leases are treated as fixed assets, and the present value of the related lease payments is recorded as a liability.

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined on a first in first out (FIFO) basis. Net realizable value is the amount that can be realized from the sale of the inventory in the normal course of business after allowing for the costs of realization.

In addition to the cost of materials and direct labor, an appropriate proportion of production overheads is included in the inventory values.

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and balances with banks and short term investments.

Income taxes

Current taxes are based on the results of the Group companies and are calculated according to local tax rules.

Beginning January 1, 1998, deferred income tax is provided, using the liability method, for all temporary differences arising between the tax basis of assets and liabilities and their carrying values for financial reporting purposes. Currently enacted tax rates are used to determine deferred income tax.

Under this method the Group is required, in relation to an acquisition, to make provision for deferred taxes on the difference between the fair values of the net assets acquired and their tax base.

The principal temporary differences arise from intercompany profit in inventory, depreciation on property, plant and equipment, untaxed reserves and tax losses carried forward. Deferred tax assets relating to the carryforward of unused tax losses are recognized to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilized.

Discontinued operations

A discontinued operation results from the sale or abandonment of an operation that represents a separate, major line of business and of which the assets, net profit or losses and activities can be distinguished physically, operationally and for financial reporting purposes. The profit effect of discontinued operations, net of tax, is separately disclosed. The gain or loss on discontinuance represents the estimated proceeds less the net assets of the discontinued operation after allowance has been made for any losses expected to occur prior to disposal.

Dividends

Dividends proposed by the Board of Directors are not recorded in the financial statements until they have been approved by the shareholders at the Annual General Meeting.

Earnings per share

The Group calculates both basic and diluted earnings per share in accordance with the new IAS 33, Earnings per Share. Under

IAS 33 the weighted average number of shares used to calculate basic EPS is the same as that previously reported for the calculation of earnings per share. The weighted average number of shares used to calculate diluted earnings per share is adjusted to take into consideration the dilutive effect of the stock warrants and options outstanding during the year. EPS for 1997 has been restated to conform with the 1998 presentation.

Changes in International Accounting Standards

Beginning January 1, 1999, the Group will adopt all IAS standards required to be adopted including revised IAS 19, Employee Benefits, and recognize liabilities for defined benefit plans using the projected unit credit method.

2. Segment information	Telecom- munications	Mobile Phones	Other Operations	Elimi- nations	Group total
Net sales					
1998, MFIM	26 103	47 984	6 029	-885	79 231
1997, MFIM	18 826	27 643	7 239	-1 096	52 612
Operating profit/loss, IAS					
1998, MFIM	5 706	9 158	-65	-	14 799
1997, MFIM	4 053	3 837	564	-	8 454
Capital expenditure					
1998, MFIM	1 291	2 899	337	-	4 527
1997, MFIM	1 037	886	479	-	2 402
Identifiable assets, IAS					
1998, MFIM	17 378	22 055	39 630	-19 403	59 660
1997, MFIM	14 426	12 659	26 608	-11 955	41 738

Net sales by market area	1998 MFIM	1997 MFIM
Finland	2 763	2 557
Other European countries	41 011	26 914
Americas	16 740	9 520
Asia-Pacific	16 873	12 105
Other countries	1 844	1 516
Total	79 231	52 612

4. Personnel expenses	MFIM	MFIM
Wages and salaries	9 557	6 338
Pension expenses	825	656
Other social expenses	1 258	836
Personnel expenses as per		
profit and loss account	11 640	7 830

1000

1997

Remuneration of the members of the Boards of Directors,
Group Executive Board, President and Chief Executive Officer, and Presidents and Managing
Directors*

67
64
* Salaries include incentives
15
5

3. Percentage of completion method

Profit on large long-term contracts is recognized when sale is recorded on part-delivery of products or part performance of services, provided that the outcome of the contract can be assessed with reasonable certainty. Most of the Group's net sales arise from businesses other than those of a long-term project nature.

Project deliveries occur in Nokia Telecommunications' Network Systems division, where part of its net sales (6.2 billion FIM in 1998 and 6.6 billion FIM in 1997) was of a long-term project nature.

Pension commitments for the management:

The retirement age of the management of the Group companies is between 60–65 years. For the Chief Executive Officer of the Parent Company the retirement age is 60 years.

The Group maintains pension plans for its operations throughout the world. Most of these programs have defined retirement, disability, death and termination income benefits. The retirement income benefits are generally a function of years of employment and final salary with Nokia and are generally coordinated with local national pensions. The Group's policy for funding these plans is to satisfy local statutory funding requirements for tax deductible contributions. The Group also maintains some fully insured schemes, multiemployer pension arrangements and defined contribution pension arrangements.

5. Selling and marketing expenses, administration expenses and other operating income and expenses

	1998 MFIM	1997 MFIM
Selling and marketing expenses	-5 381	-4 148
Administration expenses	-2 744	-1 323
Other operating expenses	-557	-548
Other operating income	430	420
Total	-8 252	-5 599

Other operating income for 1998 includes a gain of 177 MFIM arising from the sale of the 100%-owned subsidiary LK-Products to the UK-based Filtronic plc. In 1997 other operating income included a gain of 129 MFIM that arose from the sale of the audioelectronics business.

6. Acquisitions

In December 1998 Nokia acquired Vienna Systems Corporation, an Internet Protocol telephony company based in Canada. The purchase price was 429 MFIM paid in cash. The fair value of net assets acquired was 10 MFIM giving rise to goodwill of 419 MFIM.

In December 1997 Nokia acquired all of the issued share capital, including outstanding share options, of Ipsilon Networks Inc., a telecommunications research and development company based in California at a total purchase cost of 570 MFIM, of which 485 MFIM was satisfied in cash and 85 MFIM in Nokia A shares. The fair value of net assets acquired was 80 MFIM, largely comprising cash and cash equivalents and giving rise to goodwill of 490 MFIM. Net losses for 1997, which have been consolidated in the financial statements from the date of acquisition, mainly comprise goodwill amortization.

7. Depreciation	1998 MFIM	1997 MFIM
Depreciation by asset category		
Intangible assets		
Capitalized R&D costs	707	559
Intangible rights	148	100
Goodwill	118	346
Other intangible assets	34	7
Property, plant and equipment		
Buildings and constructions	110	138
Machinery and equipment	1 799	1 523
Other tangible assets	112	89
Total	3 028	2 762
Depreciation by function		
Cost of goods sold	940 I	805
R&D	1 328	1 021
Selling, marketing and		
administration	474	359
Other operating expenses	168	231
Goodwill	118	346
Total	3 028	2 762

8. Financial income and expenses	1998 MFIM	1997 MFIM
Income from long-term investmen	ts	
Dividend income	39	26
Interest income	6	4
Other interest and financial incom	ne	
Interest income from		
short-term investments	967	727
Other financial income	6	42
Exchange gains and losses	-40	106
Interest expenses and other		
financial expenses		
Interest expenses	-1 176	-1 006
Other financial expenses	-36	-36
Total	-234	-137

9. Income taxes	1998 MFIM	1997 MFIM
Current tax	-4 473	-2 274
Deferred tax	93	-
Total	-4 380	-2 274
Finland	-2 974	-1 846
Other countries	-1 406	-428
Total	-4 380	-2 274

The differences between income tax expense computed at statutory rates (28% in Finland in 1998) and income tax expense provided on earnings are as follows at December 31:

1998 MFIM

4 195
-73
33
287
42
269
96
91
-428
-116
-16
4 380

Certain of the Group's subsidiaries income tax returns for periods ranging from 1992 through 1997 are under examination by tax authorities. The Group does not believe that any significant additional taxes will arise as a result of the examinations.

10. Discontinued operations

In February 1996, Nokia announced its intention to exit the TV business. In June of that year, Nokia announced the sale of its television production and related technology units in Turku, Finland, to the Semi-Tech (Global) Company. The transaction also included the sale of machinery and equipment of the Nokia Bochum television factory in Germany, where manufacturing was

terminated in September, Nokia's international television sales activities in Europe, and the television related R&D center in Germany. The financial impact of the decision to withdraw from the television business was reported in the 1995 accounts as discontinued operations. The results of these operations during the year 1996 did not effect the Group's financial performance in 1996. In 1997 Nokia completed the exit from the TV business, resulting in a 261 MFIM positive release of the excess provision in the 1997 financial statements

	1998	1997
11. Intangible assets	MFIM	MFIM
Capitalized R&D costs		
Acquisition cost Jan. 1	2 787	2 534
Additions	1 080	929
Disposals	-3	-676
Accumulated		
depreciation Dec. 31	-2 144	-1 439
Net carrying amount Dec. 31	1 720	1 348_
Intangible rights		
Acquisition cost Jan. 1	640	476
Additions	227	212
Disposals	-53	-48
Translation differences	-1	-
Accumulated		
depreciation Dec. 31	-468	-375
Net carrying amount Dec. 31	345	265
Goodwill		
Acquisition cost Jan. 1	1 585	1 093
Additions	477	492
Accumulated		
depreciation Dec. 31	-1 470	-1 350
Net carrying amount Dec. 31	592	235
Other intangible assets		
Acquisition cost Jan. 1	327 1	218
Additions	90	120
Disposals	-21	-11
Translation differences	-2	-
Accumulated		
depreciation Dec. 31	-171	-114
Net carrying amount Dec. 31	223	213

MFIM 383	MFIM
383	202
383	202
	393
70	33
-44	-61
-8	18
401	383
2 517	2 013
390	515
-155	-51
-19	40
-544	-600
2 189	1 917
-	2 517 390 -155 -19

Machinery and equipment		
Acquisition cost Jan. 1	8 628	6 960
Additions	2 472	1 871
Disposals	-1 013	-301
Translation differences	-68	98
Accumulated		
depreciation Dec. 31	-5 886	-5 070
Net carrying amount Dec. 31	4 133	3 558
Other tangible assets		
Acquisition cost Jan. 1	438	501
Additions	214	111
Disposals	-130	-202
Translation differences	-9	28
Accumulated		-
depreciation Dec. 31	-221	-212
Net carrying amount Dec. 31	292	226
Advance payments and fixed		
assets under construction		
Acquisition cost Jan. 1	156	414
Additions	971	359
Disposals	-43	-93
Transfers	.5	, ,
Land and water areas	_	-2
Buildings and constructions	-9	-378
Machinery and equipment	-173	-144
Other tangible assets	-1	-6
Translation differences	-4	6
Net carrying amount Dec. 31	897	156
	1998	1997

13. Investments	MFIM	MFIM
Associated companies		
Acquisition cost Jan. 1	336	414
Additions	245	2
Disposals	-34	-102
Share of results	-7	21
Translation differences	-1	1
Net carrying amount Dec. 31	539	336

Shareholdings in associated companies include listed investments of MFIM 133. At the balance sheet date the fair value of these investments, based on quoted market prices, was MFIM 503.

Other companies		
Acquisition cost Jan. 1	453	487
Additions	61	45
Disposals	-47	-81
Write-downs	-24	-
Translation differences	2	2
Net carrying amount Dec. 31	445	453

Shareholdings in other companies include listed investments of MFIM 299. At the balance sheet date, the fair value of these investments was MFIM 739.

14. Inventories	MFIM	MFIM
Raw materials, supplies		
and other	2 818	2 520
Work in progress	2 677	2 545
Finished goods	2 189	2 249
Total	7 684	7 314

15. Receivables	1998 MFIM	1997 MFIM
Accounts receivable	16 681	9 748
Short-term loan receivables	953	363
Prepaid expenses and		
accrued income	3 954	2 621
	21 588	12 732

Current receivables falling due after one year amounted to MFIM 475 in 1998 (363 MFIM in 1997). Prepaid expenses and accrued income mainly consist of VAT receivables and other accruals.

16. Shareholders' equity

	Share capital	Share issue premium	Treasury shares	Other reserves	Retained earnings	Total
Group, MFIM						
Balance at Dec. 31, 1996	1 498	4 624	-657	674	9 786	15 925
Share issue	1	71				72
Dividend					-1 048	-1 048
Profit from sale of treasury shares		81				81
Sale of treasury shares			3		3	6
Translation differences				133	72	205
Other increase/decrease, net				-41	65	24
Net profit					6 259	6 259
Balance at Dec. 31, 1997	1 499	4 776	-654	766	15 137	21 524
Share issue	15	629				644
Dividend					-2 249	-2 249
Translation differences				-42	39	-3
Other increase/decrease, net				-2	57	55
Net profit					10 408	10 408
Balance at Dec. 31, 1998	1 514	5 405	-654	722	23 392	30 379

Exchange differences that arose from loans and financial instruments hedging investments in foreign subsidiaries in 1998 amounted to MFIM 85 (MFIM 11 in 1997) and were offset against the translation differences arising from consolidation. In 1998 the cumulative translation differences on subsidiaries' post acquisition equity amounted to MFIM 111 (MFIM 35 in 1997) and on acquired equity to MFIM 980 (MFIM 975 in 1997).

Beginning in 1998 untaxed reserves (net of deferred taxes) are included as part of retained earnings. Prior to January 1, 1998, untaxed reserves were disclosed as a separate component of shareholders' equity. The 1997 components of shareholders' equity have been restated to conform with the 1998 presentation.

Distributable earnings	MFIM
Retained earnings	23 392
- Non-distributable items	-921
Distributable earnings Dec. 31, 1998	22 471
	·

Retained earnings under IAS and Finnish Accounting Standards (FAS) are substantially the same.

Distributable earnings are calculated based on the Finnish legislation.

17. Long-term liabilities Repayment Outstanding date beyond Dec. 31, 1998 5 years MFIM **MFIM** Long-term loans are repayable as follows: Bonds 854 424 Convertible bonds Loans from financial institutions 529 2 Pension loans 30 30 113 Other long-term finance loans 111 Other long-term liabilities 899 899 2 429 1 466

The long-term liabilities as of December 31, 1998 mature as follows:

	MFIM	
1999	361	12.9%
2000	533	19.2%
2001	280	10.0%
2002	-	-
2003	150	5.4%
Thereafter	1 466	52.5%
	2,790	

The currency mix of the Group long-term liabilities as at December 31, 1998

FIM	GBP	DEM	Others
32.8 %	19.9 %	17.4 %	29.9 %

Long-term loan portfolio includes a fixed-rate loan with a face amount of 50 million British pound sterling that matures in 2004. The loan is callable by the creditor on a three-month notice basis beginning in 1994, although the Group does not anticipate that the creditors will request for repayment prior to the final maturity.

The Group has committed credit facilities totaling USD 900 million and short-term uncommitted facilities.

At December 31, 1998, no Group borrowings were collateralized by mortgages. Assets (principally securities) were pledged with a net book value of MFIM 33.

At December 31, 1998 and 1997 the weighted average interest rate of loans from financial institutions was 5.7% and 6.5%, respectively.

18. Bonds	Million		Interest	1998 MFIM	1997 MFIM
1989–2004	50.0	GBP	11.375%	424	445
1993-2003	150.0	FIM	Floating	150	150
1996-1999	100.0	FIM	5.300%	-	100
1996-2001	300.0	FIM	7.000%	280	300
				854	995
) CH2			1998	1997

19. Convertible bonds	Million		Interest	MFIM	MFIM
Bonds issued with warrants					
1994–1999	0.07	FIM	2.000%	-	0.1
1995-2000	1.45	FIM	0.000%	1.5	1.5
1997–2000	2.38	FIM	0.000%	2.4	2.4
				3.9	4.0

	1998
20. Deferred taxes	MFIM
In companies' balance sheet	
Tax losses carried forward	104
Temporary differences	553
* *	657
On consolidation	
Intercompany profit in inventory	409
Property, plant and equipment	37
Other	15
	461
Appropriations	
Untaxed reserves	-477
	-477
Net deferred tax asset	641

of which deferred tax assets MFIM 1 163 and deferred tax liabilities MFIM 522.

Beginning in January 1, 1998 the Group adopted revised IAS 12, Income taxes. The cumulative prior year net effect (MFIM 416) has been included in the cumulative prior year net effect of change in accounting policies in the consolidated profit and loss account for 1998. See note 1. Accounting principles.

Deferred income tax liabilities have not been established for withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries, as such earnings are permanently reinvested.

At December 31, 1998 the Group had loss carryforwards of MFIM 665 for which no deferred tax asset was recognised due to uncertainty of utilisation of these losses. The majority of these losses have no expiry date.

21. Accounts payable and accrued liabilities	1998 MFIM	1997 MFIM
Accounts payable and accrued liabilities consist of the		
following at December 31: Accounts payable	8 070	4 865
Accrued expenses and prepaid income	13 426	9 676
	21 496	14 541

Accrued expenses and prepaid income mainly consist of VAT liabilities, personnel expenses, discounts and other accruals.

22. Short-term borrowings

Short-term borrowings consist primarily of borrowings from banks. The weighted average interest rate at December 31, 1998 and 1997 is 6.4% and 7.2%, respectively. The weighted average interest rate of short-term borrowings derived from different foreign currency denominated loan amounts.

1000

1007

23. Earnings per share

	1998	1997
Numerator/MFIM		
Basic/Diluted:		
Income available to		
common shareholders	10 408	6 259
Denominator/1000 shares		
Basic:		
Weighted average shares	569 170	566 564
Effect of dilutive securities:		
warrants	17 480	10 019
Diluted:		
Adjusted weighted average		
shares and assumed		
conversions	586 650	576 583

Under IAS 33 the weighted average number of shares used to calculate basic EPS is the same as that previously reported for the calculation of earnings per share. The weighted average number of shares used to calculate diluted earnings per share has been adjusted to take into consideration the dilutive effect of the warrants outstanding during the period. For comparability, diluted EPS has also been calculated for 1997.

24. Commitments and contingencies	1998 MFIM	1997 MFIM
Mortgage backed liabilities Loans from financial institutions Mortgages		19 19
Collateral for own commitments Mortgages Assets pledged	34 53	34 104
Collateral given on behalf of Group companies Mortgages Assets pledged	1	1 4
Collateral given on behalf of other companies Mortgages	3	3
Pension liabilities not booked as expenses or liabilities	1	2
Contingent liabilities on behalf of Group companies Other guarantees	1 683	1 198
Contingent liabilities on behalf of associated companies Guarantees for loans	4	6
Contingent liabilities on behalf of other companies Guarantees for loans Other guarantees	498 2	341

25. Leasing contracts

The Group leases office, manufacturing and warehouse space under various non-cancellable operating leases. Certain contracts contain renewal options for various periods of time.

The future costs for finance lease contracts exceeding one year and for non-cancellable leasing contracts are as follows:

1998	Finance lease	Operating lease
Leasing payments, MFIM		
1999	10	567
2000	6	480
2001	3	420
2002	-	351
2003	-	282
and thereafter	-	634
Total	19	2 734

Rental expense amounted to MFIM 629 and MFIM 533 in 1998 and 1997, respectively.

26. Loans granted to top management	1998 MFIM	1997 MFIM
Loans granted to top management	3	3

The loan period is generally between 5 and 10 years. The interest rates vary between 3–8% depending on the level of interest rate in the respective country.

27. Associated companies	1998 MFIM	1997 MFIM
Share of results of associated companies	38	54
Dividend income	14	16
Share of shareholders' equity of associated companies	540	310
Receivables from associated companies Current receivables	1	68
Liabilities to associated companies Current liabilities	1	2

28. Notes to cash	1998	1997
flow statement	MFIM	MFIM
Adjustments for:		
Depreciation	3 028	2 762
Other operating income		
and expenses	-51	-210
Adjustments, total	2 977	2 552
Change in net working capital Short-term trade receivables,	1	
increase (-), decrease (+) Inventories, increase (-),	-9 353	-1 616
decrease (+)	-614	-718
Interest-free short-term		
liabilities, increase (+),		
decrease (-)	7 286	3 211
Change in net working capital	-2 681	877

29. Financial risk management

The continuously evolving financial environment together with a rapidly changing business environment creates a challenging environment for Nokia's Treasury function. The overall objective of Nokia's Treasury is to identify, evaluate and hedge financial risks in close co-operation with the business groups. The international organization of Nokia's Treasury enables the company to provide Group companies with financial services according to local needs and requirements. This process involves utilizing global financial markets. Treasury aims at minimizing the adverse effects caused by fluctuations in the financial markets on the profitability of the underlying businesses and thus on the financial performance of Nokia. Furthermore, the Treasury function aims at minimizing the number of external treasury transactions required at Group level.

Treasury operations are controlled by policies approved by the top management. Treasury Policy provides principles for overall financial risk management in Nokia. Operating Policies cover specific areas such as foreign exchange risk, interest rate risk, use of derivative financial instruments and investing excess liquidity. Business Groups have detailed Standard Operating Procedures covering for example foreign exchange exposure management.

MARKET RISK

Foreign exchange risk

Nokia operates globally and is thus exposed to foreign exchange risk arising from various currency combinations. Foreign currency denominated assets and liabilities together with firm and probable purchase and sale commitments give rise to foreign exchange exposure. Foreign exchange exposures are managed against various local currencies, since Nokia has an increasing amount of production and sales outside Finland. Due to the rapid growth in the Group, currency combinations may also change within the financial year. The principal transaction exposure in 1998 was against Finnish markka, since a significant proportion of production and personnel expenses is incurred in Finland, whilst only approximately 3% of the turnover was denominated in Finnish markka. The most significant sales currencies were USD, DEM and GBP. In general, the appreciation of the base currency of Nokia relative to other currencies has an adverse effect on Nokia's sales and operating profit in the medium to long term, while depreciation of the base currency has a positive effect in the medium to long term.

According to the foreign exchange policy guidelines of the Group, material open foreign exchange exposures are hedged. Exposures are mainly hedged with derivative financial instruments such as forward foreign exchange contracts and foreign exchange options. The majority of financial instruments hedging foreign exchange risk have a duration of less than a year.

Nokia uses Value-at-Risk methodology (VaR) to assess the foreign exchange risk. The VaR figure represents the potential losses for a portfolio from adverse changes in market factors, for a specified time period and confidence level based on historical data. Historical volatilities and correlations are calculated over the preceding year and Monte Carlo simulation is used, which takes into account the non-linear value changes of certain derivative instruments. The VaR based net foreign exchange transaction risk figure after hedging transactions in Nokia Group with a one week horizon and 99 % confidence level was FIM 65.7 million at December 31, 1998 (FIM 31.6 million in 1997). The average VaR figure in 1998 was FIM 47.6 million. The VaR figure fluctuated between FIM 28.5 million and FIM 65.7 million in 1998.

Since Nokia has subsidiaries outside Finland, the Finnish markka denominated value of the equity of Nokia is also exposed to fluctuations in exchange rates. The equity changes caused by movements in foreign exchange rates are shown as a translation difference in the Group consolidation. Nokia uses foreign

exchange contracts and foreign currency denominated loans to hedge its equity exposure arising from foreign net investments. Exchange gains and losses resulting from the hedging transactions are offset against the translation differences arising from consolidation and are recorded in shareholders' equity. The Board of Directors provides the framework for hedging decisions. Actual decisions on the currency pairs to be hedged are supported by portfolio theory based quantitative methods. Foreign exchange translation risk is also measured by probability based Value-at-Risk methodology. The VaR based risk figure of the total net translation exposure using a one week target horizon and 99% confidence level was FIM 52.3 million as at December 31, 1998 (FIM 51.7 million in 1997). Translation risk was managed applying the same principles as during the previous year.

Interest rate risk

The Group is exposed to interest rate risk either through market value fluctuations of balance sheet items i.e. price risk or changes in the interest expenses or revenues i.e. re-investment risk. Interest rate risk mainly arises through interest-bearing liabilities and assets. Estimated future changes in cash flows and balance sheet structure also expose the Group to interest rate risk. Group companies are responsible for managing their short term interest rate exposure. Long term interest rate exposure of the Group is monitored and managed by Corporate Treasury. Due to the current balance sheet structure of Nokia, emphasis is placed on managing the interest rate risk of investments.

The Group hedges its interest rate exposure by using derivative financial instruments, such as interest rate swaps, forwards and options. The maturities of interest rate swaps are usually less than five years. Interest rate risk is managed by using duration based sensitivity analysis and by constantly monitoring the market value of the financial instruments. Investment portfolios are benchmarked against market rates in order to facilitate internal performance measurement.

The net interest rate sensitivity of the fixed income investments, loan portfolio and interest rate derivatives of Nokia was at the end of 1998 FIM -90 million for a 1% parallel interest rate rise (FIM +7 million in 1997). Corresponding sensitivity for a 1% parallel interest rate decline was FIM +89 million (FIM -10 million in 1997). Risks are actively monitored by the treasury units and the treasury management. The increase in the sensitivity to interest rate changes was mainly due to higher liquidity and to longer internal benchmark of the investment portfolio compared with the previous year.

Equity price risk

Nokia has some investments in publicly traded companies. The market value of the equity investments at December 31, 1998 was FIM 739 million (FIM 438 million in 1997). A 10 % adverse move in equity prices would have decreased the market value of the investments by FIM 74 million (FIM 44 million in 1997). Currently there are no outstanding derivative financial instruments designated as hedges of these equity investments.

CREDIT RISK

Financial instruments contain an element of risk that the counterparties may be unable to meet the terms of the agreements. However, the Group minimizes this risk by limiting its counterparties to major banks and financial institutions.

Direct credit risk represents the risk of loss resulting from counterparty default in relation to on-balance sheet products. The fixed income and money market investments are made based on high credit quality. The outstanding investments are also constantly monitored by treasury management. Treasury management does not expect the counterparties to default given their high credit ratings.

Vendor financing has become increasingly important means of competing in the international trade of telecommunication networks during the past years. Nokia has maintained conservative financing policy in this area and aimed at close cooperation with banks and financial institutions to support clients in their financing of infrastructure investments. The outstanding liabilities on long-term customer financing were December 31, 1998 FIM 1,537 million out of which FIM 1,057 million were receivables and FIM 480 million contingent liabilities. Risks related to long term customer receivables are systematically monitored and no credit losses have occurred.

LIOUIDITY RISK

One of the main objectives of the Treasury function is to guarantee that the liquidity of the company remains sufficient. This objective calls for efficient cash management, liquidity of investments and prudent investment policy. The fixed income and money market investments made by Nokia are liquid.

Due to the dynamic nature of the underlying business Group Treasury aims at maintaining flexibility in funding by keeping committed and uncommitted credit lines available. Nokia's international creditworthiness facilitates the efficient use of international capital and loan markets. Standard and Poor's credit rating agency raised the long rating of Nokia to A in 1998.

The ratings of Nokia from credit rating agencies as at December 31, 1998 were:

Short	Standard & Poor's	A-1
	Moody's	P-1
Long	Standard & Poor's	A

The most significant existing funding programs include:

- Local commercial paper programs in Finland, totalling FIM 1 100 million
- Euro Commercial Paper (ECP) -program, totalling USD 500 million
- US Commercial Paper (USCP) -program, totalling USD 500 million
- Revolving Credit Facility of USD 350 million, matures in 2004
- Revolving Credit Facility of USD 500 million, matures in 2003 None of the above programs has been used to a significant degree in 1998.

Notional amounts of derivative financial instruments 1)

	MFIM 1998	MFIM 1997
Foreign exchange forward contracts 2,3)	92 979	57 228
Currency options bought	4 405	7 945
Currency options sold	5 210	8 299
Interest rate forward and		
futures contracts 2)	-	5 695
Interest rate swaps	400	575
Interest rate options bought	-	187
Interest rate options sold	-	

The notional amounts of derivatives summarized here do not represent amounts exchanged by the parties and, thus are not a measure of the exposure of Nokia caused by its use of derivatives.

²⁾ Notional amounts outstanding include positions, which have been closed off.

³⁾ As at December 31, 1998 notional amount includes contracts amounting to FIM 7.9 billion used to hedge the shareholders' equity of foreign subsidiaries (December 31, 1997 FIM 5.2 billion).

30. Fair value of financial instruments

The following table presents the carrying amounts and fair values of the Group's financial instruments outstanding at December 31, 1998 and 1997. The carrying amounts in the table are included in the balance sheet under the indicated captions, except for derivatives, which are included in accounts receivable and accounts payable and accrued liabilities. The fair value of a financial instrument is defined as the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

MFIM	Carrying amount	1998 Fair value	Carrying amount	1997 Fair value
Financial assets				
Cash and cash equivalents	17 188	17 277	12 247	12 260
Receivables	17 691	17 691	10 637	10 637
Investments in other shares	445	885	453	548
Other non-current assets	202	202	195	195
Financial liabilities				
Accounts payable	7 831	7 831	5 188	5 188
Short-term borrowings	4 158	4 158	3 008	3 008
Long-term interest-bearing liabilities	1 530	1 683	1 348	1 473
Off-balance-sheet instruments				
Currency options purchased 1, 2)	133	133	41	41
Currency options written 2)	-95	-95	-45	-45
Forward foreign exchange contracts 1,2)	875	875	-152	-152
Interest rate swaps 3)	7	33	10	30
Interest rate FRA's and futures	-	-	-	2

¹⁾ The carrying amount and fair value of forward foreign exchange contracts and currency options include unrealized gains and losses relating to hedges of firm and anticipated commitments, which have been deferred.

Estimation of fair values

Receivables, accounts payable, short-term borrowings

The carrying amounts are a reasonable estimate of the fair values because of the short maturity of such instruments.

Cash and cash equivalents, investments and other non-current assets

The carrying amounts of cash and certain other financial assets approximate fair values. The fair value of publicly traded instruments is based on quoted market values. All other instruments have been valued using discounted cash flow analyses.

Long-term interest-bearing liabilities

The fair value of fixed rate and market-based floating rate longterm debt is estimated using the expected future payments discounted at market interest rates. The carrying amount of nonmarket based floating rate long-term loans, including pension loans, approximates fair value. Currency option and forward foreign exchange contracts

The carrying amounts of currency option contracts and forward foreign exchange contracts are based on quoted market rates at year-end balance sheet dates. Therefore, the carrying amounts approximate fair value.

Interest rate and currency swaps

Fair value of swap instruments have been estimated by using discounted cash flow analyses.

Forward rate agreements, interest rate option and futures contracts

Fair value of FRA's, interest rate option and futures contracts have been estimated based on quoted market rates at year-end balance sheet dates.

²⁾ Forward foreign exchange contracts and currency options used to hedge the shareholders' equity of foreign subsidiaries are not included.

³⁾ The carrying amount of interest rate swaps includes accrued interest.

31. Principal Nokia Group companies on December 31, 1998

		Net sales MFIM	Number of shares	Parent holding %	Group majority %	Total nominal value in 1 000 units	Book value FIM 1 000
Nok	ia Telecommunications						
FI	Nokia Telecommunications Oy	18 319	226 000	100.0	100.0	226 000 FIM	376 000
GB	Nokia Telecommunications Ltd	4 429	20 000 000		100.0	20 000 GBP	169 700
CN	Beijing Nokia Mobile						
	Telecommunications Ltd	4 033	2		50.0	10 000 USD	44 992
Nok	ia Mobile Phones						
FI	Nokia Matkapuhelimet Oy	28 560	665	60.2	100.0	33 250 FIM	106 704
US	Nokia Mobile Phones Inc.	15 210	1 300	00.2	100.0	1 USD	760 387
DE	Nokia Mobile Phones						
	Produktionsgesellschaft mbH	8 037	2		100.0	90 DEM	274
KR	Nokia TMC Limited	5 449	232 080	100.0	100.0	2 320 800 KRW	164 703
Oth	er Operations						
FI	Nokia Display Products Oy	3 060	30 000	100.0	100.0	30 000 FIM	30 000
SE	Nokia Satellite Systems AB	1 541	1 103	100.0	100.0	1 103 SEK	186 233
HU	Nokia Monitor Magyarorzag KFT	1 076	1 103		100.0	1 105 SEK	11 099
FI	Salcomp Oy	832	47 653		100.0	47 653 FIM	49 208
NL	Nokia Finance International B.V.	032	229	99.6	100.0	229 NLG	1 119 197
TAL	INORIA I IIIAIICC IIICIIIAIIOIIAI D.V.		22)	77.0	100.0	22) NLG	1 11/ 1//

Shares in listed companies Group holding more than 5%	Group holding %	Group voting %
Nextrom Holding S.A.	25.0	50.0
Nokian Renkaat Oyj/Nokian Tyres plc	24.2	24.2
Filtronic plc.	7.5	7.5
Geoworks Inc.	6.2	6.2

A complete list of all shareholdings is included in Nokia's Statutory Accounts.

Profit and Loss Account, Parent Company, FAS

Cash Flow Statement, Parent Company, FAS

Net sales 273 211 Cost of goods sold - - Gross margin 273 211 Research and development expenses -27 -280 Administrative expenses -157 -75 Other operating expenses -21 -83 Other operating income 69 141 Operating loss (Notes* 2, 3) -263 -86 Financial income and expenses -20 -77 Income from long-term investments -20 -77 Dividend income from Group companies -20 -77 Interest income from Ofrou p companies -20 -77 Interest income from Ofroup companies -22 -84 Interest income from Group companies -23 -389 Interest income from Ofroup companies -253 -389 Interest income from other companies -253 -389 Interest income from Ofroup companies -253 -389 Interest expenses to Group companies -29 -271 Interest expenses to Group companies -27	Financial year ended December 31	1998 MFIM	1997 MFIM
Research and development expenses Administrative expenses Other operating expenses Other operating income Operating loss (Notes* 2, 3) Operating loss (Notes* 2, 3) Financial income and expenses Income from long-term investments Dividend income from Group companies Dividend income from Group companies Interest income from Other companies Interest income from Group companies Interest income from other companies Other interest and financial income Interest income from other companies Other financial income Interest expenses and other Other financial income from other companies Interest expenses to Group companies Interest expenses and other financial expenses Interest expenses to other companies Interest expenses to Other companies Other financial expenses Interest expenses to Other companies Interest expenses Interest expenses to Other companies Interest expenses Interest expenses Interest expenses Interest expenses to Other companies Interest expenses Interest expenses Interest expenses to Other companies Interest income from Interest income Interest income Interest income Interest income Interest income Interest	- 100 000-00	273	211
Administrative expenses Other operating expenses Other operating expenses Other operating income Operating loss (Notes* 2, 3) Operating loss (Notes* 2, 3) Financial income and expenses Income from long-term investments Dividend income from Group companies Dividend income from Group companies Interest income from Operating of the dividence of t	Gross margin	273	211
Financial income and expenses Income from long-term investments Dividend income from Group companies Interest income from other companies Interest income from other companies Interest income from other companies Interest income from Group companies Other financial income from other companies Interest expenses and other financial expenses Interest expenses to Group companies Interest expenses to other companies Interest expenses to other companies Other financial expenses Interest expenses to other companies Interest expenses to other companies Other financial expenses Interest expenses to other companies Interest expenses to other companies Interest expenses to other companies Interest expenses Interest expen	Administrative expenses Other operating expenses Other operating income	-157 -21 69	-75 -83 141
Income from long-term investments Dividend income from Group companies Dividend income from Group companies Interest income from other companies Interest income from other companies Interest income from Group companies Interest income from other companies Other financial income from other companies Exchange gains and losses Interest expenses and other financial expenses Interest expenses to Group companies Interest expenses to other companies Interest expenses to other companies Other financial expenses Interest expenses to Group companies Interest expenses to Other companies Other financial expenses Interest expenses to Other companies Interest expenses to Other Companies Other financial expenses Interest expenses to Other Companies Interest expenses Interest expenses Interest expenses Interest expenses to Other Companies Interest expenses Interest expenses Interest expenses Interest expenses to Other Companies Interest expenses Interest expens	Operating loss (Notes* 2, 3)	-263	-86
other companies Exchange gains and losses Interest expenses and other financial expenses Interest expenses to Group companies Interest expenses to other companies Other financial expenses Interest expenses to other companies Interest expenses I	Income from long-term investments Dividend income from Group companies Dividend income from other companies Interest income from Group companies Interest income from other companies Other interest and financial income Interest income from Group companies	44 52 3 253	42 84 3 389
Interest expenses to Group companies Interest expenses to other companies Other financial expenses Other financial expenses Other financial expenses Other financial expenses Financial income and expenses, total Profit before extraordinary items, appropriations and taxes Extraordinary items (Note 4) Extraordinary expenses Group contributions Extraordinary items, total Profit before appropriations and taxes 31 392 Appropriations Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year from previous years -87 -95 -475 -475 -475 -43 -43 -461 -43 -43 -43 -43 -43 -43 -43 -43 -43 -4	Other financial income from other companies Exchange gains and losses Interest expenses and other	94	
Profit before extraordinary items, appropriations and taxes Extraordinary items (Note 4) Extraordinary expenses Group contributions Extraordinary items, total Profit before appropriations and taxes Appropriations Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year from previous years 20 721 375 -43 -43 -43 6 009 5 966 Profit before appropriations 31 392 6 341 Appropriations Difference between actual and planned depreciation, increase (-)/decrease (+) -347 Income taxes for the year from previous years -3 016 -1 709 -15 16	Interest expenses to Group companies Interest expenses to other companies Other financial expenses	-220 -11	-475 -14
Extraordinary expenses Group contributions Extraordinary items, total Profit before appropriations and taxes Appropriations Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year from previous years -43 6 009 5 966 2 5 431 2 5 -330 3 47 - 3 016 - 1 709 - 15	Profit before extraordinary items,	20 721	375
Appropriations Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year from previous years 31 392 6 341 25 -330 -3016 -1709 -15 16	Extraordinary expenses Group contributions		6 009
Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year from previous years -3 016 -1 709 -15 16	and taxes	31 392	6 341
Net profit 28 386 4 665	Difference between actual and planned depreciation, increase (-)/decrease (+) Movements on untaxed reserves, increase (-)/decrease (+) Income taxes for the year	-3 016	347
	Net profit	28 386	4 665

Adjustments, total (Note 17) Operating loss before change in net working capital Change in net working capital (Note 17) Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Net cash from operating activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets	40 64 08 56 35
Operating loss Adjustments, total (Note 17) Operating loss before change in net working capital Change in net working capital (Note 17) Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses -3 633 -73 -73 -74 -75 -75 -75 -75 -75 -75 -75 -75 -75 -75	9 77 86 63 40 64 08 56 35
Adjustments, total (Note 17) Operating loss before change in net working capital Change in net working capital (Note 17) Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other cash from operating activities Net cash flow from investing activities Investments in shares Capital expenditures Proceeds from sale of fixed assets 4	9 77 86 63 40 64 08 56 35
Operating loss before change in net working capital	77 86 63 40 64 08 56 35
net working capital Change in net working capital (Note 17) Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other cash from operating activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets -100 -100 -100 -100 -100 -100 -100 -1	86 63 40 64 08 56 35
Change in net working capital (Note 17) Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Other fina	86 63 40 64 08 56 35
Cash generated from operations Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses -3 633 -73 -73 -73 -74 -75 -75 -75 -75 -75 -75 -75 -75 -75 -75	63 40 64 08 56 35
Interest received Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other cash from operating activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets 304 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75	40 64 08 56 35
Interest paid Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other cash from operating activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets -371 -56 -67 -87 -87 -87 -98 -98 -99 -99 -90 -90 -90 -90 -90 -90 -90 -90	08 56 35
Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other financial income and expenses Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Other cash flow from operating activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets Intervential income and expenses Interventi	56 35
Income taxes paid Cash flow before extraordinary items Extraordinary income and expenses Net cash from operating activities Cash flow from investing activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets -3 525 -83 -83 -73 -73 -73 -73 -73 -73 -73 -73 -73 -7	35
Extraordinary income and expenses 6 009 2 22 Net cash from operating activities 2 376 1 48 Cash flow from investing activities Investments in shares -194 -25 Capital expenditures -95 -15 Proceeds from sale of shares and discontinued operations, net 52 18 Proceeds from sale of fixed assets 4	
Net cash from operating activities Cash flow from investing activities Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets 2 376 1 48 -29 -194 -29 -195 -118 -29 -195 -196 -197 -197 -198 -29 -198 -29 -198 -29 -199 -199 -199 -199 -199 -199 -199	24
Cash flow from investing activities Investments in shares -194 -29 Capital expenditures -95 -13 Proceeds from sale of shares and discontinued operations, net 52 18 Proceeds from sale of fixed assets 4	
Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets -194 -25 -13 -15 -15 -15 -15 -15 -15 -15 -15 -15 -15	89
Investments in shares Capital expenditures Proceeds from sale of shares and discontinued operations, net Proceeds from sale of fixed assets -194 -25 -13 -15 -15 -15 -15 -15 -15 -15 -15 -15 -15	
Capital expenditures -95 -13 Proceeds from sale of shares and discontinued operations, net 52 18 Proceeds from sale of fixed assets 4	90
Proceeds from sale of shares and discontinued operations, net 52 Proceeds from sale of fixed assets 4	
discontinued operations, net 52 Proceeds from sale of fixed assets 4	
Proceeds from sale of fixed assets 4	86
	14
Dividends received 284 25	51
Net cash from investing activities 51	23
Cash flow from financing activities	
	72
Proceeds from (+), payments of (-)	´-
long-term liabilities -325 -42	26
Proceeds from (+), payments of (-)	_
short-term borrowings 792 -73	14
Proceeds from (+), payments of (-)	
	23
Proceeds from (+), payments of (-)	
short-term receivables -259 -1 16	60
<u>Dividends paid</u> <u>-2 261</u> <u>-1 06</u>	61
Net cash used in financing activities -927 -2 76	66
Net increase (+)/decrease (-)	
in cash and cash equivalents 1 500 -1 25	54
Cash and cash equivalents at	
beginning of period 2 202 3 4	56
Code and and anticological	—
Cash and cash equivalents at end of period 3 702 2 20	
	02.

^{*} Notes are shown on pages 24 to 26.

Balance Sheet, Parent Company, FAS

December 31	1998 MFIM	1997 MFIM	December 31	1998 MFIM	1997 MFIM
ASSETS			SHAREHOLDERS' EQUITY AND LIABILITIES		
Fixed assets and other non-current assets			Shareholders' equity (Note 8)		
Intangible assets (Note* 5)			Share capital	1 514	1 499
Intangible rights	11	17	Share issue premium	5 323	4 695
Other intangible assets	18	15	Contingency reserve	-	127
	29	32	Retained earnings (Note 9)	5 318	2 788
Tangible assets (Note 6)			Net profit for the year (Note 9)	28 386	4 665
Land and water areas	137	85		40 541	13 774
Buildings and constructions	429	432			
Machinery and equipment	134	153			
Other tangible assets	3	3			
Advance payments and fixed assets	4.0		Accumulated appropriations (Note 10)		
under construction	10		A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
T	713	673	Accumulated depreciation in	4.42	4.67
Investments Investments in subsidiaries (Note 7)	4 567	4 581	excess of plan	443	467
Investments in subsidiaries (Note 7) Investments in associated	4 36/	4 361			
companies (Note 7)	184	184			
Investments in other shares (Note 7)	453	316	Liabilities		
Long-term loan receivables from	T33	310	Liabilities		
Group companies	223	748	Long-term liabilities (Note 11)		
Long-term loan receivables from	223	/ 10	Bonds (Note 12)	854	995
other companies	17	50	Convertible bonds (Note 13)	4	4
Other non-current assets	163	165	Loans from financial institutions	-	267
	5 607	6 044		858	1 266
Current assets			Short-term liabilities		
			Current finance liabilities		
Inventories and work in progress			from Group companies	3 163	2 527
Finished goods	8	9	Loans from financial institutions	230	-
			Current maturities of long-term loans	352	268
Receivables			Advance payments from other companies	21	23
Trade debtors from Group companies	165	337	Trade creditors to Group companies	19	89
Trade debtors from other companies	5	4	Trade creditors to other companies	19	17
Short-term loan receivables			Accrued expenses and prepaid		400
from Group companies	35 547	10 168	income to Group companies	12	109
Short-term loan receivables	2.5		Accrued expenses and prepaid	0.00	1 (12
from other companies	35	9	income to other companies	866	1 642
Prepaid expenses and accrued income	121	212		4 682	4 675
from Group companies Prepaid expenses and accrued income	121	213	Taral liabilities	5 5 4 0	5 941
from associated companies	1		Total liabilities	5 540	J 241
Prepaid expenses and accrued income	1	1			
from other companies	591	490			
110111 other companies	36 465	$\frac{470}{11\ 222}$			
	JU 403	11 222			
Short-term investments	3 457	1 639			
Bank and cash	245	563			
	46 524	20 182		46 524	20 182

^{*} Notes are shown on pages 24 to 26.

Notes to the Financial Statements of the Parent Company

1. Accounting principles

The Parent company Financial Statements are prepared according to Finnish Accounting Standards – FAS. See Group note no. 1.

Appropriations

In Finland companies are permitted to reduce or increase taxable income by net charges or by income representing adjustments to untaxed reserve accounts, provided that such amounts are reflected in the Group companies' financial statements.

2. Personnel expenses	1998 MFIM	1997 MFIM
Wages and salaries	240	172
Pension expenses	38	30
Other social expenses	48	29
Personnel expenses as per profit and loss account	326	231
Remuneration of the members of the Board of Directors and the Chief Executive Officer*	8	6
and the onici Executive Officer		
* Salaries include incentives	1	1

Pension commitments for the management:
For the Chief Evecutive Officer of the Parent Comp

For the Chief Executive Officer of the Parent Company the retirement age is 60 years.

Personnel average	1998	1997
R&D Administration	886 226	620 190
Administration	1 112	810

3. Depreciation	1998 MFIM	1997 MFIM
Depreciation by asset category		
Intangible assets		
Intangible rights	8	7
Other intangible assets	1	2
Property, plant and equipment		
Buildings and constructions	16	12
Machinery and equipment	46	38
Total	71	59
D :: 1 (::		
Depreciation by function	22	20
R&D	23	20
Selling, marketing and		
administration	48	39
Total	71	59

4. Extraordinary items

Extraordinary expenses include expenses arising from discontinued operations and write-offs of Group company shares. Extraordinary income includes group contributions.

5. Intangible assets	1998 MFIM	1997 MFIM
Intangible rights		
Acquisition cost Jan. 1	34	23
Additions	4	12
Disposals	-8	-1
Accumulated	10	17
depreciation Dec. 31 Net carrying amount Dec. 31	-19 11	-17 17
Net carrying amount Dec. 31		
Other intangible assets		20
Acquisition cost Jan. 1	21	20
Additions	5 -2	1
Disposals Accumulated	-2	-
depreciation Dec. 31	-6	-6
Net carrying amount Dec. 31	18	15
, 0		
	1998	1997
6. Tangible assets	MFIM	MFIM
Land and water areas		
Acquisition cost Jan. 1	85	85
Additions	57	4
Disposals	-5	4
Net carrying amount Dec. 31	137	85
Buildings and constructions	1	
Acquisition cost Jan. 1	486	180
Additions	12	308
Disposals		-2
Accumulated depreciation Dec. 31	-69	-54
Net carrying amount Dec. 31	429	432
Machinery and equipment	1	
Acquisition cost Jan. 1	235	125
Additions	30	130
Disposals	-19	-20
Accumulated depreciation Dec. 31		-82
Net carrying amount Dec. 31	134	153
Other tangible assets	1	
Acquisition cost Jan. 1	11	10
Additions	-	2
Disposals	-2	-1
Accumulated depreciation Dec. 31 Net carrying amount Dec. 31	3	-8 3
Advance payments and fixed assets under construction Acquisition cost Jan. 1	-	317
Additions Transfers	10	72
1141131613	_	-2
Land and water areas		
Land and water areas Buildings and constructions	-	-296
Land and water areas Buildings and constructions Machinery and equipment	-	

10

Net carrying amount Dec. 31

	1998	1997
7. Investments	MFIM	MFIM
Investments in subsidiaries		
Acquisition cost Jan. 1	4 581	4 658
Additions	21	324
Disposals	-35	-333
Write-downs		-68
Net carrying amount Dec. 31	4 567	4 581
Investments in associated companies	1	
Acquisition cost Jan. 1	184	222
Additions	-	2
Disposals	-	-40
Net carrying amount Dec. 31	184	184

Shareholdings in associated companies include listed investments of MFIM 133. At the balance sheet date, the fair value of these investments, based on quoted market prices, was MFIM 503.

	1998 MFIM	1997 MFIM
Investments in other shares		
Acquisition cost Jan. 1	316	378
Additions	174	12
Disposals	-37	-74
Net carrying amount Dec. 31	453	316

Shareholdings in other companies include listed investments of MFIM 408. At the balance sheet date, the fair value of these investments was MFIM 654.

8. Shareholders' equity	Share capital K share	Share capital A share	Share issue premium	Contin- gency reserve	Retained earnings	Total
Parent Company, MFIM						
Balance at Dec. 31, 1996	499	999	4 624	127	3 848	10 097
Share issue		1	71			72
Dividend					-1 048	-1 048
Reserved for public worthy						
causes decided by the Board					-12	-12
Other increase/decrease, net	-106	106				-
Net profit					4 665	4 665
Balance at Dec. 31, 1997	393	1 106	4 695	127	7 453	13 774
Share issue		15	628			643
Dividend					-2 249	-2 249
Reserved for public worthy						
causes decided by the Board					-13	-13
Other increase/decrease, net	-76	76		-127	127	-
Net profit					28 386	28 386
Balance at Dec. 31, 1998	317	1 197	5 323		33 704	40 541

MFIM

2002 2003

Thereafter

9. Distributable earnings

Retained earnings from previous years	5 318
Net profit for the year	28 386
Retained earnings, total	33 704
- Non-distributable items	-20 425
Distributable earnings Dec. 1, 1998	13 279

A decision to merge Nokiterra Oy (subsidiary company) to Nokia Oyj (parent company) was made in January 1999. As a result of this Nokia Oyj will receive 32 140 342 treasury shares. The book value of the treasury shares amounts to MFIM 20 425, which will reduce the distributable earnings of Nokia Oyj.

10. Accumulated appropriations

Deferred tax liability for the accumulated appropriations computed using the tax rate of 28% totalled MFIM 124.

11. Long-term liabilities	Outstanding Dec. 31, 1998 MFIM	Repayment date beyond 5 years MFIM
Long-term loans are repayable as follows: Bonds Convertible bonds	854 4	424
	858	424
The long-term liabilities as of Dec mature as follows:	tember 31, 1998 MFIM	
1999 2000 2001	352 4 280	29.1% 0.3% 23.1%

12.4%

35.1%

150

424

1 210

12. Bonds	Million		Interest	1998 MFIM	1997 MFIM
1989–2004	50.0	GBP	11.375%	424	445
1993-2003	150.0	FIM	Floating	150	150
1996–1999	100.0	FIM	5.300%	-	100
1996-2001	300.0	FIM	7.000%	280	300
				854	995

13. Convertible bonds	Million		Interest	1998 MFIM	1997 MFIM
Bonds issued with warrants					
1994–1999	0.07	FIM	2.000%	-	0.1
1995-2000	1.45	FIM	0.000%	1.5	1.5
1997–2000	2.38	FIM	0.000%	2.4	2.4
				3.9	4.0

14. Commitments and contingencies	1998 MFIM	1997 MFIM
Collateral for own commitments Assets pledged	20	20
Collateral given on behalf of Group companies Assets pledged		4
Collateral given on behalf of other companies Mortgages	3	3
Contingent liabilities on behalf of Group companies Guarantees for loans Other guarantees	691 671	794 532
Contingent liabilities on behalf of associated companies Guarantees for loans	4	6
Contingent liabilities on behalf of other companies Guarantees for loans	445	307

17. Notes to cash flow statement	1998 MFIM	1997 MFIM
Adjustments for:		
Depreciation	71	58
Other operating income		
and expenses	-79	-49
Adjustments, total	-8	9
Change in net working capital	1	
Short-term trade		
receivables, increase (-),		
decrease (+)	408	-352
Inventories, increase (-),		
decrease (+)	1	-2
Interest-free short-term		
liabilities, increase (+),		
decrease (-)	-298	268
Change in net working capital	111	-86

15. Leasing contracts

At December 31, 1998 the leasing contracts of the Parent Company amounted to MFIM 241, of which MFIM 38 will fall due in 1999.

19. Nokia shares and shareholders

See Group note no. 31.

See Nokia Shares and Shareholders, p. 27-31.

18. Principal Nokia Group companies on December 31, 1998

16. Loans granted to top management

There were no loans granted to top management at 31.12.1998.

Nokia Shares and Shareholders

Shares and voting rights

Nokia has two classes of shares, A shares and K shares. A General Meetings, each K share is entitled to ten (10) votes and each A share to one (1) vote. The A shares are entitled to a fixed annual dividend of 10 per cent of the nominal value before the K shares are entitled to receive dividends. Should it be impossible in any year to distribute such dividend, the A shares are entitled to receive the remainder in the following year before any dividend can be distributed on the K shares. Should a dividend higher than 10 per cent of the nominal value be distributed on the K shares, a supplementary dividend is distributed on the A shares so that the dividend will be of equal size for both share classes.

The shareholders of Nokia resolved at the Annual General Meeting held on March 24, 1998 to split the nominal value of each class of Nokia shares on a two-for-one basis. With effect from April 16, 1998 the nominal value was reduced from FIM 5 to FIM 2.50.

The minimum share capital stipulated in the Articles of Association is FIM 957 million and the maximum share capital FIM 3 828 million. The share capital may be increased or reduced within these limits without amending the Articles of Association. On December 31, 1998 the share capital of the Parent Company was FIM 1 513 991 410 and the total number of votes 1 748 873 269.

The Articles of Association contain a provision permitting the holders of K shares or, with regard to shares registered in the name of a nominee, the custodian registered as administrator of such shares in a book-entry register, to convert their shares to an equivalent number of A shares, within the limits set for the minimum and maximum numbers of shares in each class of shares.

By December 31, 1998, a total of 201 755 383 K shares had been converted into A shares.

The shares of the Parent Company are distributed into K shares and A shares as follows:

	units	FIM each	FIM
K shares A shares	127 030 745 478 565 819	2.50 2.50	317 576 862.50 1 196 414 547.50
Total Dec. 31, 1998	605 596 564	2.50	1 513 991 410.00

On December 31, 1998 shares included 32 161 000 shares owned by the Group companies of which 27 626 768 were K shares and 4 534 232 A shares with an aggregate nominal value of FIM 80 402 500. The shares represent 5.3 per cent of the total number of shares and 16.1 per cent of the total number of voting rights.

Authorizations

At the end of 1998, the Board of Directors had no unused authorizations to issue shares, convertible bonds or bonds with warrants.

Convertible bonds and bonds with warrants

The Annual General Meeting held on April 7, 1994 approved the issue of up to 200 2 per cent bonds with warrants due April 15, 1999, for up to an aggregate principal amount of FIM 200 000 to certain members of Nokia's management (Nokia Stock Option Plan 1994). Each bond has a principal amount of FIM 1 000 and carries 1 000 warrants, each of which is exercisable at FIM 374 for eight A shares from December 1, 1998 to January 31, 2000. The bonds were issued on April 15, 1994. If exercised in full, the warrants would be exercisable for a total of 1 600 000 A shares, whereby the share capital would be increased by a maximum amount of FIM 4 000 000 representing less than one per cent of the outstanding share capital of Nokia. The stock option plan covers approximately 50 persons who are entitled to purchase a maximum average number of 32 000 shares.

The Annual General Meeting held on March 30, 1995 approved the issue of up to 1 450 non-interest bearing bonds with warrants due May 31, 2000, for up to an aggregate principal amount of FIM 1 450 000 to certain members of the management of the Nokia Group (Nokia Stock Option Plan 1995). Each bond has a principal amount of FIM 1 000 and carries 2 000 A warrants and 2 000 B warrants. Each A warrant confers the right to subscribe for two A shares during the period from December 1, 1997 to January 31, 2001, and each B warrant during the period from December 1, 1999 to January 31, 2001, respectively. The bonds were issued on May 31,1995. If exercised in full, the warrants would be exercisable for a total of 11 600 000 A shares, whereby the share capital would be increased by a maximum amount of FIM 29 000 000 representing approximately 1.9 per cent of the outstanding share capital of Nokia. The subscription price for two A shares is FIM 168. The stock option plan covers approximately 350 persons who are entitled to purchase a maximum average number of 33 200 shares.

The Annual General Meeting held on March 25, 1997 approved the issue of up to 4 750 non-interest bearing bonds with warrants due April 16, 2000, for up to an aggregate principal amount of FIM 2 375 000 to key personnel of the Nokia Group (Nokia Stock Option Plan 1997). Each bond has a principal amount of FIM 500 and carries 500 A warrants, 500 B warrants and 1 000 C warrants. Each warrant confers the right to subscribe for two A shares. The A warrants may be exercised from December 1, 1997 to January 31, 2003, the B warrants from November 1, 1999 to January 31, 2003 and the C warrants from November 1, 2001 to January 31, 2003. The bonds were issued on April 16, 1997. If exercised in full, the warrants would be exercisable for a

¹⁾ At the Annual General Meeting held on March 30, 1995, Nokia's shareholders resolved to rename Nokia shares as A shares, previously preferred shares, and K shares, previously common shares. In connection with that it was resolved to reduce the nominal value of each class of shares from FIM 20 to FIM 5 through a four-to-one stock split. The split was effected on April 24, 1995.

Share capital and shares, Dec. 31 ¹⁾	1998	1997	1996	1995	1994
Share capital, MFIM					
K (common) 2)	318	393	499	547	721
A (preferred) 2)	1 196	1 106	999	951	777
Total	1 514	1 499	1 498	1 498	1 498
Share capital, MEUR	ı		1	l I	
K (common)	54	66	84	92	121
A (preferred)	201	186	168	160	131
Total	255	252	252	252	252
Shares	1		I	ı ı	
(1 000, nominal value FIM 2.50)					
K (common)	127 031	157 374	199 426	218 754	288 396
A (preferred)	478 566	442 330	399 674	380 346	310 704
Total	605 597	599 704	599 100	599 100	599 100
Shares owned by the Group at year-end (1 000)	32 161	32 161	32 562	30 362	29 962
Number of shares excl. shares					
owned by the Group at year-end (1 000)	573 436	567 543	566 538	568 738	569 138
Average number of shares excl. shares					
owned by the Group during the year (1 000)	569 170	566 564	567 122	569 134	545 858
Number of registered shareholders 3)	30 339	28 596	26 160	27 466	24 770
Key Ratios Dec. 31, IAS (calculations on p. 42)	1998	1997	1996	1995	1994
Earnings per share, from continuing operations, basic Earnings per share, FIM	17.56	10.59	5.37	7.18	5.49
Earnings per share, EUR	2.95	1.78	0.90	1.21	0.92
Latinings per share, Lore		1.70	0.70	1,21	
P/E ratio			2.4.0		
K (common)	35.3	18.4	24.8	12.0	15.9
A (preferred)	35.3	18.3	24.9	11.9	15.9
(Nominal) dividend per share, FIM	5.75 ⁴⁾	3.75	1.75	1.50	1.25
Total dividends, MFIM	3 482 4)	2 249	1 048	899	749
Payout ratio	0.33	0.35	0.33	0.21	0.23
(Nominal) dividend per share, EUR	0.97 4)	0.63	0.29	0.25	0.21
Total dividends, MEUR	586 4)	378	176	151	126
Dividend yield, per cent		<u></u>			<u> </u>
	0.9	1.9	1.3	1.7	1.4
K (common)					
	0.9	1.9	1.3	1.8	1.4
A (preferred)					
A (preferred) Shareholders' equity per share, FIM	52.98	37.92	28.12	24.27	21.82
K (common) A (preferred) Shareholders' equity per share, FIM Market capitalization, MFIM 59 Shareholders' equity per share, EUR					

All figures are split adjusted.
 See footnote 1 on page 27.
 Each nominee register is included in the figure as only one registered shareholder.
 Proposed by the Board of Directors.
 Shares owned by the Group are excluded.

total of 19 000 000 A shares whereby the share capital would be increased by a maximum amount of FIM 47 500 000 representing approximately 3.1 per cent of the outstanding share capital of Nokia and 0.9 per cent of votes. The subscription price for two A shares is FIM 307. The stock option plan covers approximately 2 000 persons who are entitled to purchase a maximum average number of 9 500 shares.

Shares subscribed under the bonds will rank for dividend for the financial year in which subscription occurs. Other shareholder rights will commence on the date on which the share subscription is entered in the Finnish Trade Register. Pursuant to the warrants issued an aggregate maximum number of 26 307 748 new A shares may be subscribed for representing 1.5 per cent of votes. During the year 1998, the exercise of 2 933 562 warrants attached to the bonds resulted in the issue of 5 892 252 new A shares and the increase of share capital of the Parent Company with FIM 14 730 630.

There were no other bonds with warrants and no convertible bonds outstanding during the year 1998.

Splits of the nominal value of Nokia shares

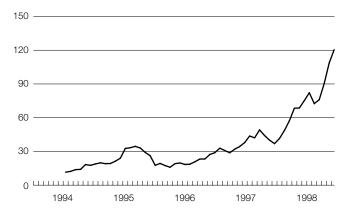
	Nominal value before (FIM)	Split ratio	Nominal value after (FIM)	Effective date
1986	100	5:1	20	January 2, 1987
1995	20	4:1	5	April 24, 1995
1998	5	2:1	2.5	April 16, 1998

Share prices, FIM (Helsinki Exchanges)	1998	1997	1996	1995	1994
K share Low/high Average ¹⁾ Year-end	184/638 489 620	130/273 176 195	73/134 94 133	69/170 111 86	36/89 60 87
A share Low/high Average ¹⁾ Year-end	185/638 378 620	131/274 196 194	73/134 95 134	69/170 110 85	36/89 62 87
Share prices, USD (New York Stock Exchange)	1998	1997	1996	1995	1994
ADS Low/high Average ¹⁾ Year-end	34/125 68 120	28/51 37 35	16/29 20 29	16/38 24 20	11/19 16 19

¹⁾ Calculated by weighing average price of each day with daily trading volumes.

Nokia A share price in Helsinki, FIM

Nokia ADS price in New York, USD



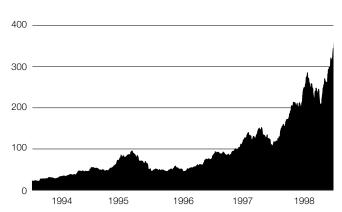
Share Issues 1994-1998 1)

Type of issue	Subscription date	Subscription price	Number of new A shares	Date of payment	Net proceeds MFIM	New share capital MFIM	Share capital after issue MFIM
Global Offering	July 1, 1994 and July 6, 1994	FIM 52.3 and USD 9.8	48 000 000	July 11, 1994	2 490.3	120	1 498
Nokia Stock Option Plan 1994	1998	FIM 46.75	33 504	1998	1.6	0.1	1 499
Nokia Stock Option Plan 1995	1997 1998	FIM 84.00 FIM 84.00	290 800 3 788 000	1997 1998	24.4 318.2	0.7 9.5	1 498 1 509
Nokia Stock Option Plan 1997	1997 1998	FIM 153.50 FIM 153.50	313 552 2 070 748	1997 1998	48.1 317.9	0.8 5.2	1 499 1 514

1000 shares	1998	1997	1996	1995	1994
K share turnover	63 777	49 658	135 234	199 742	308 328
Total number of K shares	127 031	157 374	199 426	218 754	288 396
Per cent of total number of K shares	50	32	68	91	107
A share turnover	1 282 039	1 303 052	1 520 758	1 285 426	693 072
Total number of A shares	478 566	442 330	399 674	380 346	310 704
Per cent of total number of A shares	268	295	380	338	223

¹⁾ Prices and numbers of shares have been recalculated to correspond the nominal value of FIM 2.50 of the shares.

Nokia market capitalization in 1994–1998, FIM billion



²⁾ Based on the outstanding number of shares on December 31, 1998.

Largest registered shareholders on December 31, 1998

Registered shareholders represent 23.5 per cent of the total number of shares of the Parent Company.

					Number	Per cent
				Per cent	of voting	of voting
	K shares	A shares	Total	of shares	rights	rights
Nokiterra Oy	27 626 768	4 513 574	32 140 342	5.3	280 781 254	16.1 1)
Pohjola Group Insurance Corporation	8 100 000	707 262	8 807 262	1.5	81 707 262	4.7
UPM-Kymmene Corporation	6 284 968		6 284 968	1.0	62 849 680	3.6
Ilmarinen Mutual Pension						
Insurance Company	5 176 400	590 700	5 767 100	1.0	52 354 700	3.0
Suomi Mutual Life Assurance Company	4 350 000	580 400	4 930 400	0.8	44 080 400	2.5
Industrial Insurance Company Ltd	4 350 000	550 000	4 900 000	0.8	44 050 000	2.5
The Local Government Pensions Institution	3 120 888	1 084 800	4 205 688	0.7	32 293 680	1.8
Svenska Litteratursällskapet i Finland rf	3 775 864	8 272	3 784 136	0.6	37 766 912	2.2
Varma-Sampo Mutual Pension						
Insurance Company	2 581 000	8 100	2 589 100	0.4	25 818 100	1.5
Pohjola Life Assurance Company Ltd	2 107 000	228 000	2 335 000	0.4	21 298 000	1.2
Industrial Insurance Company Ltd The Local Government Pensions Institution Svenska Litteratursällskapet i Finland rf Varma-Sampo Mutual Pension Insurance Company	4 350 000 3 120 888 3 775 864 2 581 000	550 000 1 084 800 8 272 8 100	4 900 000 4 205 688 3 784 136 2 589 100	0.8 0.7 0.6	44 050 000 32 293 680 37 766 912 25 818 100	2.5 1.8 2.2

The number of registered shareholders was 30 339 on December 31, 1998. Each nominee register (17) is included in this figure as only one registered shareholder.

Shares and warrants owned by Board of Directors and Group Executive Board

Members of the Board of Directors and Group Executive Board owned an aggregate of 9 280 K shares and 99 760 A shares representing 0.02 per cent of the aggregate number of shares and 0.02 per cent of the aggregate voting rights as well as a number

of warrants representing 4.5 per cent of the total number of warrants issued on December 31, 1998. If exercised in full said warrants would be exercisable for 1 381 600 A shares representing rights 0.23 per cent of the total number of shares and 0.08 per cent of the total voting as of December 31, 1998.

Shares registered in the name of a nominee on December 1998

	K shares	A shares	Total	Per cent of shares	Number of voting rights	Per cent of voting rights
Merita Bank Ltd	17 867 269	431 247 084	449 114 353	74.2	609 919 774	34.9
Other nominees	508 047	13 701 581	14 209 628	2.3	18 782 051	1.1

Breakdown of share ownership on December 31, 1998

By number of shares owned	Number of shareholders	Per cent of shareholders	Total number of shares	Per cent of share capital	Average holding
1–500	19 523	64.2	3 113 486	0.5	159
501-1 000	3 919	13.0	2 939 315	0.5	750
1 001-10 000	6 127	20.2	17 673 038	2.9	2 884
10 001–100 000	698	2.3	16 535 219	2.7	23 689
Over 100 000	72	0.3	102 011 525	16.9	1 416 827
Total	30 339	100.0	142 272 583	23.5	4 676
Shares registered in the name of a nominee			463 323 981	76.5	
Total			605 596 564	100.0	

By shareholder category, per cent	K shares	A shares	Total
1. Foreign shareholders ²⁾	15.0	93.1	76.7
2. Non-financial corporations ³⁾	29.8	1.4	7.3
3. Households	12.2	2.9	4.9
4. Financial and insurance institutions	17.9	1.0	4.6
5. Non-profit organisations	13.2	0.7	3.3
6. General government	11.9	0.9	3.2
Total	100.0	100.0	100.0

¹⁾ No voting right can be exercised through shares owned by Nokia Group.

²⁾ Includes the shares registered in the name of a nominee and the shares owned by Nokia Inc.

³⁾ Includes the shares owned by Nokiterra Oy.

Nokia 1994-1998, IAS (MFIM)

	1998	1997	1996	1995	1994
Profit and loss account, MFIM					
Net sales	79 231	52 612	39 321	36 810	30 177
Cost and expenses	-64 432	-44 158	-35 055	-31 798	-26 581
Operating profit	14 799	8 454	4 266	5 012	3 596
Share of results of associated companies	38	54	37	85	22
Financial income and expenses	-234	-137	-405	-164	384
Profit before tax and minority interests	14 603	8 371	3 898	4 933	4 002
Tax	-4 380	-2 274	-856	-769	-932
Minority interests	-231	-99	2	-77	-75
Profit from continuing operations	9 992	5 998	3 044	4 087	2 995
Discontinued operations	_	261	219	-2 340	-
Profit from ordinary activities before					
cumulative effect of change in accounting policies	9 992	6 259	3 263	1 747	2 995
Cumulative prior year effect (after tax)					
of change in accounting policies	416	-	-	485	_
Profit before extraordinary items	10 408	6 259	3 263	2 232	2 995
Extraordinary items	_	-	-	-	944
Net profit	10 408	6 259	3 263	2 232	3 939
Balance sheet items, MFIM Fixed assets and other non-current assets	13 200	9 445	8 409	9 047	7 943
Current assets	46 460	32 293	24 866	23 714	19 906
Inventories	7 684	7 314	6 423	9 982	6 803
Accounts receivable and prepaid expenses	21 588	12 732	10 898	9 518	7 835
Cash and cash equivalents	17 188	12 247	7 545	4 214	5 268
Shareholders' equity	30 379	21 524	15 925	13 806	12 418
Minority shareholders' interests	376	195	29	422	555
Long-term liabilities	2 429	1 643	2 414	2 578	3 557
Long-term interest-bearing liabilities	1 530	1 348	2 117	2 121	3 071
Deferred tax liabilities	522	-	-	-	-
Other long-term liabilities	377	295	297	457	486
Current liabilities	26 476	18 376	14 907	15 955	11 319
Short-term borrowings	4 157	3 008	3 404	4 332	2 453
Current portion of long-term loans	361	285	555	187	278
Accounts payable and accrued liabilities	21 496	14 541	10 610	9 388	8 086
Advance payments	462	542	338	396	502
Discontinuity/restructuring provision	-	-	-	1 652	-
Total assets	59 660	41 738	33 275	32 761	27 849

	1998	1997	1996	1995	1994
Net sales by business group, MFIM					
Nokia Telecommunications	26 103	18 826	13 333	10 341	6 906
Nokia Mobile Phones	47 984	27 643	21 579	16 052	10 702
Other Operations*	6 029	7 239	5 197	11 156	13 119
Inter-business group eliminations	-885	-1 096	-788	-739	-550
Nokia Group	79 231	52 612	39 321	36 810	30 177
Net sales by market area, MFIM					2 4 4 2 1
Finland	2 763	2 557	2 440	3 227	3 449
Other European countries	41 011	26 914	20 587	20 807	17 758
Americas	16 740	9 520	6 334	4 715	4 061
Asia-Pacific	16 873	12 105	8 788	7 138	3 821
Other countries	1 844	1 516	1 172	923	1 088
Total	79 231	52 612	39 321	36 810	30 177
Operating profit/loss, MFIM					
Nokia Telecommunications	5 706	4 053	2 982	2 722	1 700
Nokia Mobile Phones	9 158	3 837	1 431	1 753	1 745
Other Operations**	-65	564	-147	537	151
Nokia Group	14 799	8 454	4 266	5 012	3 596
Average personnel					
Nokia Telecommunications	19 280	15 710	12 558	9 915	7 187
Nokia Mobile Phones	16 064	12 631	10 927	10 616	5 826
Other Operations*	5 747	7 149	8 281	11 417	15 030
Nokia Group	41 091	35 490	31 766	31 948	28 043
In Finland	20 978	19 342	17 999	17 821	14 984
Outside Finland	20 113	16 148	13 767	14 127	13 059

^{* &}quot;Other operations" include discontinued and divested operations as follows: Nokia Power 1994, Nokia Tyres and Machinery until the moment of disposal 1994-1995, TV business 1994-1995, NKF/Cable Industry until the moment of disposal 1994-1996 and Türkkablo/Cable Industry 1994-1996.

** "Other operations" include the operating profit/loss of discontinued and divested operations as follows: Nokia Power 1994, Nokia Tyres and Machinery until the moment of disposal 1994-1995, NKF/Cable Industry until the moment of disposal 1994-1996 and Türkkablo/Cable Industry 1994-1996.

Nokia 1994-1998, IAS, Proforma (MEUR)

	1998	1997	1996	1995	1994
Profit and loss account, MEUR					
Net sales	13 326	8 849	6 613	6 191	5 075
Cost and expenses	-10 837	-7 427	-5 896	-5 348	-4 470
Operating profit	2 489	1 422	717	843	605
Share of results of associated companies	6	9	6	14	4
Financial income and expenses	-39	-23	-68	-27	64
Profit before tax and minority interests	2 456	1 408	655	830	673
Tax	-737	-382	-144	-130	-157
Minority interests	-39	-17	1	-13	-12
Profit from continuing operations	1 680	1 009	512	687	504
Discontinued operations	_	44	37	-393	-
Profit from ordinary activities before					
cumulative effect of change in accounting policies	1 680	1 053	549	294	504
Cumulative prior year effect (after tax)				·	
of change in accounting policies	70	-	_	81	_
Profit before extraordinary items	1 750	1 053	549	375	504
Extraordinary items	-	-	_	-	158
Net profit	1 750	1 053	549	375	662
Balance sheet items, MEUR Fixed assets and other non-current assets Current assets Inventories Accounts receivable and prepaid expenses Cash and cash equivalents Shareholders' equity	2 220 7 814 1 292 3 631 2 891 5 109	1 589 5 431 1 230 2 141 2 060 3 620	1 414 4 182 1 080 1 833 1 269 2 678	1 522 3 988 1 679 1 601 708 2 322	1 336 3 348 1 144 1 318 886 2 089
Minority shareholders' interests	63	33	5	71	93
Long-term liabilities	409	276	406	434	598
Long-term interest-bearing liabilities	257	226	356	357	516
Deferred tax liabilities	88	220	550	337	510
Other long-term liabilities	64	50	50	77	82
Current liabilities	4 453	3 091	2 507	2 683	1 904
Short-term borrowings	699	506	573	729	413
Current portion of long-term loans	61	48	93	31	47
Accounts payable and accrued liabilities	3 615	2 446	1 784	1 579	1 360
Advance payments	78	91	57	66	84
Discontinuity/restructuring provision	/ 0	71	37	278	04
Total assets	10 034	7 020	5 596	5 510	4 684
10(a) a)5(()	10 034	/ 020	3 3 7 0	3 3 1 0	7 007

	1998	1997	1996	1995	1994
Net sales by business group, MEUR					
Nokia Telecommunications	4 390	3 166	2 242	1 739	1 162
Nokia Mobile Phones	8 070	4 649	3 629	2 700	1 800
Other Operations*	1 014	1 218	874	1 876	2 206
Inter-business group eliminations	-148	-184	-132	-124	-93
Nokia Group	13 326	8 849	6 613	6 191	5 075
Net sales by market area, MEUR					
Finland	465	430	410	543	580
Other European countries	6 898	4 527	3 463	3 499	2 987
Americas	2 815	1 601	1 065	793	683
Asia-Pacific	2 838	2 036	1 478	1 201	642
Other countries	310	255	197	155	183
Total	13 326	8 849	6 613	6 191	5 075
Operating profit/loss, MEUR					
Nokia Telecommunications	960	682	501	458	286
Nokia Mobile Phones	1 540	645	241	295	294
Other Operations**	11	95	-25	90	25
Nokia Group	2 489	1 422	717	843	605

^{* &}quot;Other operations" include discontinued and divested operations as follows: Nokia Power 1994, Nokia Tyres and Machinery until the moment of disposal 1994–1995, TV business 1994–1995, NKF/Cable Industry until the moment of disposal 1994–1996 and Türkkablo/Cable Industry 1994–1996.

** "Other operations" include the operating profit/loss of discontinued and divested operations as follows: Nokia Power 1994, Nokia Tyres and Machinery until the moment of disposal 1994–1996 and Türkkablo/Cable Industry 1994–1996.

Nokia 1994-1998, IAS (MFIM)

Key ratios	s and	economic	indicators
------------	-------	----------	------------

key ratios and economic indicators	1998	1997	1996	1995	1994
Net sales, MFIM	79 231	52 612	39 321	36 810	30 177
Change, %	50.6	33.8	6.8	22.0	27.3
Exports from Finland, MFIM	41 847	32 156	23 461	17 738	13 723
Exports and foreign subsidiaries, MFIM	76 468	50 055	36 881	33 583	26 728
Salaries and social expenses, MFIM	11 640	7 830	5 344	6 492	5 515
Operating profit, MFIM	14 799	8 454	4 266	5 012	3 596
% of net sales	18.7	16.1	10.8	13.6	11.9
Financial income and expenses, MFIM	-234	-137	-405	-164	384
% of net sales	-0.3	-0.3	-1.0	-0.4	1.3
Profit before tax and minority interests, MFIM	14 603	8 371	3 898	4 933	4 002
% of net sales	18.4	15.9	9.9	13.4	13.3
Profit from continuing operations, MFIM	9 992	5 998	3 044	4 087	2 995
% of net sales	12.6	11.4	7.7	11.1	9.9
Taxes, MFIM	4 380	2 274	856	769	932
Dividends, MFIM	3 482 *	2 249	1 048	899	749
Capital expenditure, MFIM	4 527	2 402	2 028	3 299	1 967
% of net sales	5.7	4.6	5.2	9.0	6.5
Gross investments**, MFIM	6 374	3 974	3 058	4 179	2 410
% of net sales	8.0	7.6	7.8	11.4	8.0
R&D expenditure, MFIM	6 838	4 560	3 514	2 531	1 937
% of net sales	8.6	8.7	8.9	6.9	6.4
Average personnel	41 091	35 490	31 766	31 948	28 043
Non-interest bearing liabilities, MFIM	22 857	15 378	11 245	11 893	9 074
Interest bearing liabilities, MFIM	6 048	4 641	6 076	6 640	5 802
Return on capital employed, %	50.2	38.3	22.7	29.1	25.4
Return on equity, %	38.5	32.0	20.5	31.2	31.6
Equity ratio, %	52.0	52.7	48.4	44.0	47.4
Net debt to equity, %	-36	-35	-9	17	4

^{*} Board's proposal

 $^{^{\}star\star}$ Incl. also acquisitions, invesment in shares and R&D capitalization.

Nokia 1994-1998, IAS, Proforma (MEUR)

Key ratios and economic indicators

	1998	1997	1996	1995	1994
Net sales, MEUR	13 326	8 849	6 613	6 191	5 075
Change, %	50.6	33.8	6.8	22.0	27.3
Exports from Finland, MEUR	7 038	5 408	3 946	2 983	2 308
Exports and foreign subsidiaries, MEUR	12 861	8 419	6 203	5 648	4 495
Salaries and social expenses, MEUR	1 958	1 317	899	1 092	928
Operating profit, MEUR	2 489	1 422	717	843	605
% of net sales	18.7	16.1	10.8	13.6	11.9
Financial income and expenses, MEUR	-39	-23	-68	-27	64
% of net sales	-0.3	-0.3	-1.0	-0.4	1.3
Profit before tax and minority interests, MEUR	2 456	1 408	655	830	673
% of net sales	18.4	15.9	9.9	13.4	13.3
Profit from continuing operations, MEUR	1 680	1 009	512	687	504
% of net sales	12.6	11.4	7.7	11.1	9.9
Taxes, MEUR	737	382	144	130	157
Dividends, MEUR	586 *	378	176	151	126
Capital expenditure, MEUR	761	404	341	555	331
% of net sales	5.7	4.6	5.2	9.0	6.5
Gross investments**, MEUR	1 072	668	514	703	405
% of net sales	8.0	7.6	7.8	11.4	8.0
R&D expenditure, MEUR	1 150	767	591	426	326
% of net sales	8.6	8.7	8.9	6.9	6.4
Average personnel	41 091	35 490	31 766	31 948	28 043
Non-interest bearing liabilities, MEUR	3 844	2 586	1 891	2 000	1 526
Interest bearing liabilities, MEUR	1 017	781	1 022	1 117	976
Return on capital employed, %	50.2	38.3	22.7	29.1	25.4
Return on equity, %	38.5	32.0	20.5	31.2	31.6
Equity ratio, %	52.0	52.7	48.4	44.0	47.4
Net debt to equity, %	-36	-35	-9	17	4
. 1 77	. *				

Proposal by the Board of Directors to the Annual General Meeting

The distributable earnings in the balance sheet of the Group amount to FIM 22 471 million and those of the Company to FIM 13 279 million.

The Board proposes that from the funds at the disposal of the Annual General Meeting, a dividend of FIM 5.75 per share is to be paid out on a total of 605 596 564 K and A shares, amounting to FIM 3 482 million.

Espoo, January 29, 1999

Casimir Ehrnrooth Iiro Viinanen

Pirkko Alitalo Edward Andersson Paul J. Collins

Jouko K. Leskinen Robert F.W. van Oordt Vesa Vainio

Jorma Ollila President and CEO

Auditors' Report

To the shareholders of Nokia Corporation

We have audited the accounting records, the financial statements and the administration of Nokia Corporation for the year ended December 31, 1998. The financial statements prepared by the Board of Directors and the President and Chief Executive Officer include the report of the Board of Directors, consolidated financial statements prepared in accordance with International Accounting Standards (IAS), and parent company financial statements prepared in accordance with prevailing regulations in Finland (FAS). Based on our audit we express an opinion on the consolidated financial statements and on the parent company's financial statements and administration.

We conducted our audit in accordance with Finnish Generally Accepted Auditing Standards. Those standards require that we plan and perform the audit in order 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 the administration has been to examine that the Board of Directors and the President and Chief Executive Officer have complied with the rules of the Finnish Companies' Act.

Consolidated financial statements

In our opinion, the consolidated financial statements prepared in accordance with International Accounting Standards (IAS) give a true and fair view of the consolidated result of operations as well as of the financial position. The financial statements are in accordance with prevailing regulations in Finland and can be adopted.

Parent company financial statements and administration

The financial statements have been prepared in accordance with the Finnish Accounting Act and other rules and regulations governing the preparation of financial statements in Finland. The financial statements give a true and fair view, as defined in the Finnish Accounting Act, of the parent company's result of operations, as well as the financial position. The financial statements can be adopted and the members of the Board of Directors and the President and Chief Executive Officer of the parent company can be discharged from liability for the period audited by us. The proposal by the Board of Directors concerning the disposition of the profit for the year is in compliance with the Finnish Companies' Act.

In accordance with Finnish regulations we have acquainted ourselves with the interim reports published by the company during the year. In our opinion they have been prepared in accordance with the rules and regulations governing the preparation of such reports.

Espoo, January 29, 1999

Eric Haglund Authorized Public Accountant (KPMG) Lars Blomquist
Authorized Public Accountant
(PricewaterhouseCoopers)

U.S. GAAP

The principal differences between IAS and U.S. GAAP are presented below together with explanations of certain adjustments that affect consolidated net income and total shareholders' equity as of and for the years ended December 31:

	1998 MFIM	1997 MFIM
Reconciliation of net income		
Net income reported under IAS	10 408	6 259
U.S. GAAP adjustments:		
Deferred income taxes	-	174
Pension expense	96	144
Development costs	-109	-180
Marketable securities	172	-
Sale-leaseback transaction	4	4
Deferred tax effect of U.S. GAAP adjustments	-110	-5
Net income under U.S. GAAP	10 461	6 396
Reconciliation of shareholders' equity	20.250	24 524
Total shareholders' equity reported under IAS	30 379	21 524
U.S. GAAP adjustments:		44.6
Deferred income taxes	2(0	416
Pension expense	269	173
Development costs	-824	-715
Marketable securities	530	114
Sale-leaseback transaction	-24	-28
Deferred tax effect of U.S. GAAP adjustments	8	118
Total shareholders' equity under U.S. GAAP	30 338	21 602

Deferred income taxes

Beginning January 1, 1998 the Group has accounted for deferred income taxes under IAS using the liability method.

The differences between the application of IAS and U.S. GAAP are insignificant in relation to Nokia's deferred tax balance.

Prior to January 1, 1998, under IAS, deferred income taxes were not provided for differences between taxable income and accounting income that were not expected to reverse for some considerable period of time. U.S. GAAP requires recognition of deferred income taxes on a comprehensive basis for all temporary differences. Under this method, deferred tax liabilities and assets are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect at year-end. Deferred tax assets are also recognized on net operating loss carryforwards, reduced by a valuation allowance where it is more likely than not that the asset will not be realized.

Pension expense

Under IAS, the determination of pension expense for defined benefit plans differs from the methodology set forth in U.S. GAAP. For purposes of U.S. GAAP, the Group has estimated the effect on net income and shareholders' equity assuming the application of SFAS No. 87 in calculating pension expense as of January 1, 1992.

Development costs

Development costs have been capitalized under IAS after the product involved has reached a certain degree of technical feasibility. Capitalization ceases and depreciation begins when the product becomes available to customers. The depreciation period of these capitalized assets is between two and five years.

Under U.S. GAAP software development costs would similarly be capitalized after the product has reached a certain degree of technical feasibility. However, certain non-software related development costs capitalized under IAS would not be capitalizable under U.S. GAAP and therefore would have been expensed.

Marketable securities

Under IAS, marketable securities for which it is management's intent to sell within the current operating cycle are marked to market value; otherwise such securities are carried at cost. The unrealized gain or loss recognized in connection with these securities that have been marked to market is charged to the profit and loss statement. Under U.S. GAAP, the Group's marketable securities would be classified as available for sale and carried at aggregate fair value with gross unrealized holding gains and losses reported as a separate component of shareholders' equity. Any unrealized losses recognized under IAS would be reversed under U.S. GAAP.

Sale-leaseback transaction

Under IAS, the Group recorded a gain from a transaction involving the sale of property and equipment and has recorded rental expense associated with the subsequent leaseback of such property and equipment.

Under U.S. GAAP, the sale-leaseback transaction would be treated as a financing. Accordingly, the gain would be reversed and the proceeds from the sale treated as an obligation. Rental payments would be applied to interest expense on the obligation as well as to reducing the principal amount of the obligation.

Calculation of Key Ratios

KEY RATIOS UNDER IAS

Operating profit

Profit after depreciation

Shareholders' equity

Share capital + reserves

Earnings per share

Profit from continuing operations

Average of adjusted number of shares during the year

P/E ratio

Adjusted share price, December 31

Earnings per share

Dividend per share

Nominal dividend per share

The adjustment coefficients of the share issues that have taken place during or after the year in question

Payout ratio

Dividend per share

Earnings per share

Dividend yield, %

Nominal dividend per share

Share price

Shareholders' equity per share

Shareholders' equity

Adjusted number of shares at year-end

Market capitalization

Number of shares x share price per share class

Adjusted average share price

Amount traded, in FIM, during the period

Adjusted number of shares traded during the period

Share turnover, %

Number of shares traded during the period

Average number of shares during the period

Return on capital employed, %

Profit before taxes and minority interests

+ interest and other financial expenses

Average shareholders' equity + short-term borrowings + long-term interest-bearing liabilities (including the current portion thereof) + minority shareholders' interests

Return on shareholders' equity, %

Profit from continuing operations

Average shareholders' equity during the year

Equity ratio, %

Shareholders' equity + minority shareholders' interests

Total assets - advance payments received

Net debt to equity (gearing), %

Long-term interest-bearing liabilities (including the current portion thereof) + short-term borrowings

- cash and cash equivalents

Shareholders' equity + minority shareholders' interests

Year-end currency rates

	1998	1997	1996	1995	1994
1 FIM =					
USD	0.198	0.187	0.215	0.229	0.211
GBP	0.118	0.112	0.129	0.148	0.135
SEK	1.594	1.443	1.476	1.527	1.572
DEM	0.329	0.331	0.335	0.329	0.327
FRF	1.103	1.108	1.133	1.122	1.127
ITL	325.733	324.675	330.033	363.636	342.466
JPY	22.815	24.056	24.618	23.618	21.013

1 EUR = 5.94573 FIM

Average rates

	1998	1997	1996	1995	1994
1 FIM =					
USD GBP SEK DEM FRF ITL IPY	0.187 0.113 1.483 0.329 1.104 325.000 24.418	0.194 0.118 1.474 0.334 1.125 328.615 23.435	0.218 0.140 1.462 0.327 1.114 337.312 23.679	0.229 0.145 1.626 0.327 1.138 372.024 21.456	0.191 0.125 1.481 0.311 1.063 309.215 19.541



www.nokia.com