US dollar and the Japanese yen as well as certain other currencies."

Exchange Rate Data

Before January 1, 1999, the Finnish markka was a part of the European Monetary System exchange rate mechanism known as the Exchange Rate Mechanism, or ERM. Within the ERM, exchange rates fluctuated within permitted margins, fixed by central bank intervention. Under the provisions of

the Treaty on European Union negotiated at Maastricht in 1991 and signed by the then 11 member states of the European Union in early 1992, the EMU superseded the EMS on January 1, 1999, and the euro was introduced as the single European currency. Since this date, the euro has been the lawful currency of the EMU states. The following 12 current member states participate in the EMU and have adopted the euro as their national currency: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal and Spain. The fixed legal rate of conversion between the Finnish markka and the euro was announced on December 31, 1998, at 5.94573 Finnish markka per euro.

The following table sets forth information concerning the noon buying rate in New York City for cable transfers as certified for customs purposes by the Federal Reserve Bank of New York for (i) Finnish markka for the year 1998, expressed in Finnish markka per US dollar, and (ii) euro for the years 1999 through 2002 and for each of the months in the six-month period ended January 31, 2003, expressed in US dollars per euro.

The average rate for a year means the average of the exchange rates on the last day of each month during a year. The average rate for a month means the average of the exchange rates at the end of each day during that month.

	Exchange Rates			
For the year ended December 31:	**Rate at period end**	**Average rate**	**Highest rate**	**Lowest rate**
	(Finnish markka per USD)			
1998	5.0645	5.3433	5.6280	4.8995
	(USD per EUR)			
1999[(1)]	1.0070	1.0588	1.1812	1.0016
2000	0.9388	0.9232	1.0335	0.8270
2001	0.8901	0.8954	0.9535	0.8370
2002	1.0485	0.9495	1.0485	0.8594
For the month ended:				
August 31, 2002	0.9806	0.9778	0.9882	0.9640
September 30, 2002	0.9879	0.9811	0.9959	0.9685
October 31, 2002	0.9881	0.9815	0.9881	0.9708
November 30, 2002	0.9932	1.0020	1.0139	0.9895
December 31, 2002	1.0485	1.0204	1.0485	0.9927
January 31, 2003	1.0739	1.0633	1.0861	1.0361

(1) The noon buying rate for the Finnish markka ceased to be available after January 15, 1999.

On January 31, 2003, the noon buying rate was USD 1.0739 per EUR 1.00.

3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the Offer and Use of Proceeds

Not applicable.

3.D Risk Factors

Set forth below is a description of factors that may affect our business, results of operations and share price from time to time.

The new advanced products and solutions that we are and will be developing incorporate complex, evolving technologies, including 3G and subsequent new technologies. This exposes us to certain risks that, if they were to occur, could have a material adverse impact on us and our ability to grow our business.

The markets for our products and solutions are characterized by rapidly changing and increasingly complex technologies. The business of Nokia Mobile Phones, which accounted for approximately 77% of our net sales in 2002, could be adversely affected by risks within and outside of our control related to these new technologies and their successful commercialization. In order to be competitive, Nokia Mobile Phones must continuously maintain and develop a wide portfolio of mobile phones that covers all major consumer segments and technology standards, and that includes phones that contain increasingly complex software that supports services which continue to drive the demand for our products and solutions. There is a risk that we will not be successful in maintaining and developing this wide portfolio, or that the technologies and related products and solutions on which we focus may not be brought to market by us and/or mobile network operators as quickly as anticipated, may not achieve as broad a customer acceptance among operators or end-users as we expect, or may not prove to be sufficiently compatible with the existing technologies and products of other product and solution providers.

We promote open standards in our technology in order to support open competition and interoperability. We aim to achieve this through working together with customers, suppliers and industry participants in global standardization fora. By driving open standards, specifications and interoperability, our aim is to support industry growth by ensuring a global and open mobile software and services market with reduced fragmentation, enhanced interoperability and compelling end-user offerings. Failure or delay in the creation of open, global specifications could have an adverse effect on the mobile communications market in general and a negative impact on our mobile phone sales and operating profit.

At any given time, Nokia Networks, which accounted for approximately 22% of our net sales in 2002, is developing a number of network infrastructure solutions incorporating advanced technologies from which we will select those that we feel have the best chance for success, based on our expectations of future market demand and evolution. Currently, Nokia Networks designs and builds networks based primarily on GSM, EDGE and WCDMA technologies. Although these are currently the dominant communications technology platforms, they may not always be; our networks business's sales and operating profit may be adversely affected if these technologies or subsequent new technologies on which we focus do not achieve as broad acceptance among customers as we expect, or if we fail to adapt to different technology platforms that emerge over time. Network operators' delays in rolling out new systems and services based on 3G technologies, as well as their reduced capital investment, adversely impacted our networks business's results of operations in 2002 and may continue to do so.

The development and application of new technologies involve time, substantial costs and risks, whether we develop these technologies internally or by acquiring or investing in other companies. We may experience difficulties in realizing the expected benefits from our investments in new technologies and businesses, or from our promotion of open standards. In addition, our new technology, products and solutions may become obsolete more quickly than in the past as communications technology continues to evolve rapidly. Furthermore, our products' and solutions' reliance on new less-proven technologies may cause performance and quality problems or defects.

This may cause a delay in market acceptance of our products and solutions, harm our reputation and subject us to increased costs.

Changes in the communications industry are expected to increase competition and change the competitive landscape and may affect our sales and operating profit negatively.

The markets for our products and solutions are intensely competitive. Our competitors, including many new market entrants, may implement new technologies before we do or strengthen their footing in the delivery of existing technologies more rapidly than we. Our competitors may deliver new products and solutions earlier, or provide more attractively priced, enhanced or better quality products and solutions, than we do. The development of other new technologies and potential changes in customer behavior also may change the competitive landscape for our products and solutions in ways that we cannot currently predict.

To date, our principal competitors on a global basis have been Motorola, Ericsson, Siemens, Samsung and Nortel, although we also compete with a variety of other companies. These include new suppliers of mobile phones. With the development of new technologies and services, competition for our mobile communications business is also coming from new categories of market entrants. For example, we may encounter increased competition in our handset business from consumer electronics product and device manufacturers that are increasing their focus on mobile communications, and in our networks business from communications equipment, Internet systems and software suppliers, as well as system integrators.

We may not reach our targets, and may experience greater variability in our sales and operating profit than in the past, particularly depending on the general economic conditions and the pace of development and acceptance of new technologies.

A variety of factors could affect our ability to reach our targets and have a material adverse effect on our quarterly and annual sales and operating profit. The economic slowdown and the financial condition of our clients could continue to negatively impact demand for mobile phones, the timing of network capacity build-outs, and the development and acceptance of new technologies and related products and solutions.

Nokia Mobile Phones quarterly and annual net sales and operating profit can be affected by the global growth rate in mobile phone unit sales, which depends in part on regional economic factors in our major markets, competitive pressures, seasonality, the timing and success of our new product introductions and shipments, the development of the market for replacement phones, the rate at which network operators launch new technologies and services for mass consumption, as well as the commercial acceptance of these new technologies and services. Nokia Networks quarterly and annual net sales and operating profit can be affected by general economic conditions, operator investment behavior and competitive pressures. Other such factors include the product mix of multi-year contracts, the deployment progress and the technical success we achieve under network contracts, in particular those comprising new technologies. We could also be affected adversely by any harm to the Nokia brand. Additionally, currently perceived risks of acts of war and terrorist activity in various parts of the world have created uncertainties that may affect the global economy and our results of operations adversely.

Any of these factors may affect our ability to reach our targets. In addition, uncertainties affecting any of these factors, particularly during difficult economic conditions, render estimates of our results of operations even more difficult to make than usual, and therefore may lead us to revise our estimates more frequently than in the past.

If we fail to manage the prices and costs of our portfolio of mobile phones, our sales and operating profit may be negatively affected.

We seek to maintain profitability through managing a balanced portfolio of mobile phone models, which we try to achieve by frequently introducing new phones with improved design and technological features, by leveraging the strength of our global brand and by reducing product costs. Although these actions have enabled us to maintain relatively stable average selling prices and control our product costs in recent years, we may not be successful in doing so in the future, which could cause our sales and operating profit to suffer materially.

The global networks business relies on a limited number of customers and large multi-year contracts. Unfavorable developments under a major contract or in relation to a major customer may affect our sales, operating profit and cash flow adversely.

In our networks business, we rely on a limited number of customers and on large, complex, multi-year system contracts. If an unfavorable development occurs under a major contract or involves one or more of these customers, this could impact our future sales and operating profit adversely.

Large multi-year contracts, which are typical in the networks industry, usually require the dedication of substantial amounts of working capital and other resources, which impacts our cash flow negatively. There is also an increased risk that the timing of net sales and operating profit associated with these contracts may be different than expected. Moreover, any non-performance by Nokia under these contracts may have significant adverse consequences for us because network operators, which already have made significant investments in licenses and other commitments for new technologies, are demanding stringent contract undertakings such as penalties for contract violations.

Customer financing to network operators can be a competitive requirement and could affect our net sales, operating profit,

balance sheet and cash flow adversely.

Network operators sometimes require their suppliers, including us, to arrange or provide long-term financing as a condition to obtaining or bidding on infrastructure projects. In some cases, the amounts of these financings and the associated impact on our working capital may be significant.

At December 31, 2002 our outstanding long-term loans to customers totaled EUR 1,056 million, while financial guarantees given on behalf of third parties totaled EUR 91 million. In addition, we had financing commitments totaling EUR 857 million. Total customer financing (outstanding and committed) was EUR 2,004 million, of which EUR 1,573 million, or 79%, was in respect of 3G networks.

In 2002, we reduced our total customer financing (outstanding and committed) by EUR 2,206 million compared to 2001. EUR 1.2 billion of customer financing commitments have been released in mutual agreement with the borrowers, and EUR 0.2 billion of outstanding loans have been repaid or financial guarantees released. We have also reduced our outstanding loans and commitments by EUR 0.4 billion pursuant to arrangements with banks, financial institutions and export credit agencies, or ECAs. Our intent is to further mitigate our total customer financing exposure, market conditions permitting. We are seeking to make further arrangements with financial institutions and investors to transfer credit risk we have incurred from the commitments and outstanding loans we have made as well as from the financial guarantees we have given.

The financial requirements for building out telecommunication networks are substantial. In particular, some operators, including those that may purchase our networks, have incurred

significant indebtedness in connection with the acquisition of 3G licenses or are early stage companies without an established customer base or revenue streams. Defaults by these operators have occurred in the past, could occur again in the future for reasons beyond our control, and could result in the restructuring of these financing arrangements and/or require us to re-assess the ultimate collectibility of such financings, which could result in write-offs of all or a portion of the outstanding loan balances affected and thus may negatively impact our results of operations. In 2001, we wrote off EUR 714 million in customer loans related to a defaulted financing to Telsim (EUR 669 million), a GSM operator in Turkey, and to the insolvency of Dolphin in the United Kingdom (EUR 45 million).

In 2002, MobilCom, a German operator to which we had extended customer financing loans, experienced financial difficulties. We have entered into an agreement with MobilCom's shareholder France Telecom S.A. regarding the assignment to France Telecom of MobilCom's obligations to us under the loans and the subscription by us of France Telecom subordinated convertible perpetual bonds with a total face value of approximately EUR 0.8 billion as repayment for such loans. As a result, we recorded a net charge of EUR 265 million in 2002 to write down the loans receivable to their estimated recoverable amount and to write off various other amounts related to MobilCom. The estimated recoverable amount of the MobilCom loans is based on the current estimated fair value of the subordinated convertible perpetual bonds of France Telecom. The fair value of the bonds will be reassessed upon completion of the assignment of the loans to France Telecom and the issuance of the bonds. We expect the assignment and subscription to be completed in March 2003 after MobilCom and France Telecom have received approval from their respective boards and shareholders. We have also terminated the remaining financing commitment to MobilCom of approximately EUR 530 million, which is included in the EUR 1.2 billion reduction of our customer financing commitments.

We see the current industry environment as not requiring material increases in customer financing. Customer financing continues to be requested by operators, but to a lesser extent and with lower importance than during the past years. As a strategic market requirement, we plan to continue to extend customer financing to a small number of selected customers. Nevertheless, should customer requirements, market or economic conditions change significantly, we may be required to increase the total amount of our customer financing.

We cannot guarantee that we will be successful in providing this type of financing to customers. Also, our ability to manage our total customer finance exposure depends on a number of factors, including our capital structure, market conditions affecting our customers, the level of credit available to us and our ability to mitigate exposure on acceptable terms. We cannot guarantee that we will be successful in managing the challenges connected with the total customer financing exposure that we may from time to time have. See "Item 4.B Business Overview—Nokia Networks," "Item 5.B Liquidity and Capital Resources—Customer Financing," and notes 7 and 34(b) to our consolidated financial statements included in Item 18 of this Form 20-F for a more detailed discussion of issues relating to customer financing and related commercial credit risk.

Our sales and operating profit could be adversely affected if we fail to efficiently manage our manufacturing and logistics, or fail to ensure that our products meet our quality standards.

Our sales and operating profit could be adversely affected if we fail to efficiently manage our manufacturing and logistics, or to ensure that our products meet our quality standards. Our manufacturing is complex, requires advanced and costly equipment and includes outsourcing to third parties. These operations are continuously modified in an effort to improve manufacturing efficiency and flexibility. We may experience difficulties in ramping up or down production at our facilities, adopting new manufacturing processes and finding the most timely way to develop the best technical solutions for new products. Difficulties in achieving optimal levels of manufacturing

efficiency for, and the uninterrupted output of, our products may have a material adverse effect on our sales and operating profit and may result from, among other things, capacity constraints, construction delays or delays in adjusting production at our facilities, upgrading or expanding existing production capacity, changing process technologies or interruptions in data communication systems that run our operations. In addition, during periods of decline in our sales or delayed product development, we may have excess capacity and may incur various costs relating to existing contractual commitments to suppliers, redundancies, obsolescence of components, impairment of related assets and structural changes to our operations. Also, a failure could occur at any stage of our product creation, manufacturing and delivery processes, resulting in our products and solutions not meeting our quality standards, which could have a material adverse effect on our sales, operating profit and reputation.

We depend on our suppliers for the timely delivery of components and for their compliance with our supplier requirements, such as, most notably, our product quality standards. Their failure to do so could adversely affect our ability to deliver our products successfully and on time.

Our manufacturing also depends on obtaining adequate supplies of fully functional components on a timely basis. Our principal requirements are for electronic components, such as semiconductors, microprocessors, micro controllers, memory devices and displays, which have a wide range of applications in our communications products. In addition, a particular component may be available only from a limited number of suppliers. We also outsource a portion of our manufacturing to third parties. If a component supplier fails to meet our supplier requirements, such as, most notably, our product quality standards, and consequently some of our products are unacceptable to us, this could adversely affect our sales and operating profit. Suppliers may from time to time extend lead times, limit supplies or increase prices due to capacity constraints or other factors, which could adversely affect our ability to deliver our products on a timely basis. Moreover, if one of the third parties to which we outsource manufacturing fails to perform, or experiences delays or disruption to its manufacturing, or financial difficulties, this could adversely affect our sales and operating profit.

We are developing a number of our new products and solutions in partnership with other companies. If any of these companies were to fail to perform, we may not be able to bring our products and solutions to market successfully or on a timely basis.

We sometimes invite providers of technology, components or software critical to the production of a number of our products and solutions, including those employing 3G technology, to work with us to develop these technologies. These arrangements involve the commitment by each company of various resources, including technology, research and development as well as personnel. We attempt to structure these arrangements to maximize cooperation and loyalty between the parties. However, if these arrangements do not develop as expected, especially those that involve proprietary components and complementary technologies, if the products produced by companies working with us do not meet the required quality standards, or if the financial standing of our partners deteriorates, our ability to introduce these new products and solutions successfully and on schedule may be hampered.

Our operations rely on complex information technology systems and networks. If any system or network disruption occurs, this reliance could have a material adverse impact on our operations, sales and operating profit.

Our operations rely to a significant degree on the efficient and uninterrupted operation of complex information technology systems and networks, which are integrated with those of third parties.

Any failure of our current or future systems or networks could have a material adverse effect on our operations, sales and operating profit. Furthermore, any data leakages resulting from information technology security breaches could also adversely affect us.

All information technology systems are potentially vulnerable to damage or interruption from a variety of sources. We pursue various measures in order to manage our risks related to system and network disruptions, including the use of multiple suppliers and available information technology security. However, despite precautions taken by us, an outage in a telecommunications network utilized by any of our information technology systems, virus or other unanticipated problem that leads to the interruption of our information technology systems or networks could have a material adverse effect on our operations, sales and operating profit.

If we are unable to recruit, retain and develop appropriately skilled employees, we may not be able to implement our strategies and, consequently, our results of operations may suffer.

To meet our business challenges and retain the effectiveness of our operations, changes in our business models, technology and an intensely competitive environment, we must continue to recruit, retain and develop appropriately skilled employees with a comprehensive understanding of different businesses and technologies. As competition for skilled personnel in our industry remains keen, we seek to create a corporate culture that encourages creativity and continuous learning. We also are continuously developing our compensation and benefit policies and taking other measures to attract and motivate skilled personnel. Nevertheless, we have encountered in the past, and may encounter in the future, shortages of appropriately skilled personnel.

As our products and solutions include complex technology involving patented and other proprietary technologies, we face a risk of claims that we have infringed third parties' intellectual property rights. These may result in costly and time-consuming litigation, the invalidation of intellectual property rights on which we depend or increased licensing costs for us to be able to utilize these rights.

Our products and solutions include complex technology involving patented and other proprietary technologies. As the number of entrants in the market grows and the complexity of the technology and the overlap of product functionalities increase, the possibility of an inadvertent infringement and related intellectual property claim against us increases. There may be patents and patent owners relevant to our product lines that are unknown to us. In addition, although we endeavor to ensure that companies that work with us possess appropriate intellectual property rights, we recognize that we cannot fully avoid risks of intellectual property rights infringement created by companies with which we work in cooperative research and development activities. Similarly, we or our customers may face claims of infringement in connection with our customers' use of our products and solutions.

Any such claims, regardless of merit, could result in costly litigation and the payment of damages and other compensation, divert the attention of our personnel, cause product shipment delays or require us to develop non-infringing technology or to enter into royalty or licensing agreements. If we were unable to develop non-infringing technology, or if royalty or licensing agreements were not available on commercially acceptable terms, we could be precluded from making and selling the affected products. As new features are added to our products, we may need to acquire further licenses, including from new and sometimes unidentified intellectual property owners. The cumulative costs of obtaining any necessary licenses are difficult to predict and may over time have a negative effect on our operating profit. See "Item 4.B Business Overview—Patents and Licenses" for a more detailed discussion of our intellectual property activities.

Allegations of health risks from the electromagnetic fields generated by base stations and mobile handsets, and the lawsuits and publicity relating to them, regardless of merit, could affect our operations negatively by leading consumers to reduce their use of mobile phones or by causing us to allocate monetary and personnel resources to these issues.

There has been public speculation about possible health risks to individuals from exposure to electromagnetic fields from base stations and from the use of mobile phones. While a substantial amount of scientific research conducted to date by various independent research bodies has indicated that these radio signals, at levels within the limits prescribed by public health authority safety standards and recommendations, present no adverse effect to human health, we cannot be certain that future studies, irrespective of their scientific basis, will not suggest a link between electromagnetic fields and adverse health effects that would adversely affect our sales and share price. Research into these issues is ongoing by government agencies, international health organizations and other scientific bodies in order to develop a better scientific and public understanding of these issues. Our contributions to ongoing research efforts are described in "Item 4.B Business Overview—Research and Development."