

NOKIA CORP  
Form 20-F  
March 07, 2013  
Table of Contents

As filed with the Securities and Exchange Commission on March 7, 2013.

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE**  
**SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2012**

**Commission file number 1-13202**

**Nokia Corporation**

(Exact name of Registrant as specified in its charter)

Edgar Filing: NOKIA CORP - Form 20-F

Republic of Finland

(Jurisdiction of incorporation)

Keilalahdentie 4, P.O. Box 226, FI-00045 NOKIA GROUP, Espoo, Finland

(Address of principal executive offices)

Riikka Tieaho, Vice President, Corporate Legal, Telephone: +358 (0)7 1800-8000, Facsimile: +358 (0) 7 1803-8503 Keilalahdentie 4, P.O. Box 226, FI-00045 NOKIA GROUP, Espoo, Finland

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934 (the Exchange Act):

Title of each class	Name of each exchange on which registered
American Depositary Shares	New York Stock Exchange New York Stock Exchange <sup>(1)</sup>

<sup>(1)</sup> Not for trading, but only in connection with the registration of American Depositary Shares representing these shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered pursuant to Section 12(g) of the Exchange Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Exchange Act: **5.375% Notes due 2019 and 6.625% Notes due 2039**

Indicate the number of outstanding shares of each of the registrant's classes of capital or common stock as of the close of the period covered by the annual report. Shares: **3 744 956 052**.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes  No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S.

GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

Edgar Filing: NOKIA CORP - Form 20-F

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

**Table of Contents****TABLE OF CONTENTS**

	<b>Page</b>
<u>INTRODUCTION AND USE OF CERTAIN TERMS</u>	4
<u>FORWARD-LOOKING STATEMENTS</u>	5
<u>PART I</u>	8
ITEM 1. <u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u>	8
ITEM 2. <u>OFFER STATISTICS AND EXPECTED TIMETABLE</u>	8
ITEM 3. <u>KEY INFORMATION</u>	8
3A. <u>Selected Financial Data</u>	8
3B. <u>Capitalization and Indebtedness</u>	11
3C. <u>Reasons for the Offer and Use of Proceeds</u>	11
3D. <u>Risk Factors</u>	12
ITEM 4. <u>INFORMATION ON THE COMPANY</u>	47
4A. <u>History and Development of the Company</u>	47
4B. <u>Business Overview</u>	50
4C. <u>Organizational Structure</u>	80
4D. <u>Property, Plants and Equipment</u>	81
ITEM 4A. <u>UNRESOLVED STAFF COMMENTS</u>	81
ITEM 5. <u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u>	81
5A. <u>Operating Results</u>	81
5B. <u>Liquidity and Capital Resources</u>	128
5C. <u>Research and Development, Patents and Licenses</u>	132
5D. <u>Trends Information</u>	133
5E. <u>Off-Balance Sheet Arrangements</u>	133
5F. <u>Tabular Disclosure of Contractual Obligations</u>	133
ITEM 6. <u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u>	133
6A. <u>Directors and Senior Management</u>	133
6B. <u>Compensation</u>	142
6C. <u>Board Practices</u>	159
6D. <u>Employees</u>	165
6E. <u>Share Ownership</u>	165
ITEM 7. <u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u>	175
7A. <u>Major Shareholders</u>	175
7B. <u>Related Party Transactions</u>	175
7C. <u>Interests of Experts and Counsel</u>	176
ITEM 8. <u>FINANCIAL INFORMATION</u>	176
8A. <u>Consolidated Statements and Other Financial Information</u>	176
8B. <u>Significant Changes</u>	182
ITEM 9. <u>THE OFFER AND LISTING</u>	182
9A. <u>Offer and Listing Details</u>	182
9B. <u>Plan of Distribution</u>	183
9C. <u>Markets</u>	183
9D. <u>Selling Shareholders</u>	183
9E. <u>Dilution</u>	183
9F. <u>Expenses of the Issue</u>	183

**Table of Contents**

	<b>Page</b>
ITEM 10.	<u>ADDITIONAL INFORMATION</u>
10A.	<u>Share capital</u>
10B.	<u>Memorandum and Articles of Association</u>
10C.	<u>Material Contracts</u>
10D.	<u>Exchange Controls</u>
10E.	<u>Taxation</u>
10F.	<u>Dividends and Paying Agents</u>
10G.	<u>Statement by Experts</u>
10H.	<u>Documents on Display</u>
10I.	<u>Subsidiary Information</u>
ITEM 11.	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>
ITEM 12.	<u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u>
12D.	<u>American Depositary Shares</u>
	<u>PART II</u>
ITEM 13.	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u>
ITEM 14.	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</u>
ITEM 15.	<u>CONTROLS AND PROCEDURES</u>
ITEM 16A.	<u>AUDIT COMMITTEE FINANCIAL EXPERT</u>
ITEM 16B.	<u>CODE OF ETHICS</u>
ITEM 16C.	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u>
ITEM 16D.	<u>EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</u>
ITEM 16E.	<u>PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u>
ITEM 16F.	<u>CHANGE IN REGISTRANT S CERTIFYING ACCOUNTANT</u>
ITEM 16G.	<u>CORPORATE GOVERNANCE</u>
ITEM 16H.	<u>MINE SAFETY DISCLOSURE</u>
	<u>PART III</u>
ITEM 17.	<u>FINANCIAL STATEMENTS</u>
ITEM 18.	<u>FINANCIAL STATEMENTS</u>
ITEM 19.	<u>EXHIBITS</u>
	<u>GLOSSARY OF TERMS</u>

---

**Table of Contents**

**INTRODUCTION AND USE OF CERTAIN TERMS**

Nokia Corporation is a public limited liability company incorporated under the laws of the Republic of Finland. In this document, any reference to we, us, the Group or Nokia means Nokia Corporation and its subsidiaries on a consolidated basis, except where we make clear that the term means Nokia Corporation or a particular subsidiary or business segment only, and except that references to our shares, matters relating to our shares or matters of corporate governance refer to the shares and corporate governance of Nokia Corporation. As of January 1, 2013 our Location & Commerce reportable segment was renamed as the HERE reportable segment, and the terms Location & Commerce and HERE can be used interchangeably in this annual report.

Nokia Corporation has published its consolidated financial statements in euro for periods beginning on or after January 1, 1999. In this annual report on Form 20-F, references to EUR, euro or are to the common currency of the European Economic and Monetary Union, or EMU, and references to dollars, US dollars, USD or \$ are to the currency of the United States. Solely for the convenience of the reader, this annual report contains conversions of selected euro amounts into US dollars at specified rates, or, if not so specified, at the rate of 1.3186 US dollars per euro, which was the noon buying rate in New York City for cable transfers in euro as certified for customs purposes by the Federal Reserve Bank of New York on December 31, 2012. No representation is made that the amounts have been, could have been or could be converted into US dollars at the rates indicated or at any other rates.

Our principal executive office is located at Keilalahdentie 4, P.O. Box 226, FI-00045 Nokia Group, Espoo, Finland and our telephone number is +358 (0) 7 1800-8000.

Nokia Corporation furnishes Citibank, N.A., as Depositary, with consolidated financial statements and a related audit opinion of our independent auditors annually. These financial statements are prepared on the basis of International Financial Reporting Standards as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union ( IFRS ). In accordance with the rules and regulations of the US Securities and Exchange Commission, or SEC, we do not provide a reconciliation of net income and shareholders equity in our consolidated financial statements to accounting principles generally accepted in the United States, or US GAAP. We also furnish the Depositary with quarterly reports containing unaudited financial information prepared on the basis of IFRS, as well as all notices of shareholders meetings and other reports and communications that are made available generally to our shareholders. The Depositary makes these notices, reports and communications available for inspection by record holders of American Depositary Receipts, or ADRs, evidencing American Depositary Shares, or ADSs (one ADS represents one share), and distributes to all record holders of ADRs notices of shareholders meetings received by the Depositary.

In addition to the materials delivered to holders of ADRs by the Depositary, holders can access our consolidated financial statements, and other information included in our annual reports and proxy materials, at [www.nokia.com](http://www.nokia.com). This annual report on Form 20-F is also available at [www.nokia.com](http://www.nokia.com) as well as on Citibank s website at <http://citibank.ar.wilink.com> (enter Nokia in the Company Name Search). Holders may also request a hard copy of this annual report by calling the toll-free number 1-877-NOKIA-ADR (1-877-665-4223), or by directing a written request to Citibank, N.A., Shareholder Services, PO Box 43124, Providence, RI 02940-5140, or by calling Nokia Investor Relations at +1 914 282 0145. With each annual distribution of our proxy materials, we offer our record holders of ADRs the option of receiving all of these documents electronically in the future.

**Table of Contents**

**FORWARD-LOOKING STATEMENTS**

It should be noted that Nokia and its business are exposed to various risks and uncertainties and certain statements herein that are not historical facts are forward-looking statements, including, without limitation, those regarding:

the expected plans and benefits of our partnership with Microsoft to bring together complementary assets and expertise to form a global mobile ecosystem for smartphones;

the timing and expected benefits of our strategies, including expected operational and financial benefits and targets as well as changes in leadership and operational structure;

the timing of the deliveries of our products and services;

our ability to innovate, develop, execute and commercialize new technologies, products and services;

expectations regarding market developments and structural changes;

expectations and targets regarding our industry volumes, market share, prices, net sales and margins of our products and services;

expectations and targets regarding our operational priorities and results of operations;

expectations and targets regarding collaboration and partnering arrangements;

the outcome of pending and threatened litigation, regulatory proceedings or investigations by authorities;

expectations regarding the successful completion of restructurings, investments, acquisitions and divestments on a timely basis and our ability to achieve the financial and operational targets set in connection with any such restructurings, investments, acquisitions and divestments; and

statements preceded by believe, expect, anticipate, foresee, target, estimate, designed, aim, plans, intends, will. These statements are based on management's best assumptions and beliefs in light of the information currently available to it. Because they involve risks and uncertainties, actual results may differ materially from the results that we currently expect. Factors, including risks and uncertainties, that could cause these differences include, but are not limited to:

- 1) our ability to make the Windows Phone ecosystem a competitive and profitable global ecosystem that achieves sufficient scale, value and attractiveness to relevant market participants, making Nokia products with Windows Phone a competitive choice for consumers;

## Edgar Filing: NOKIA CORP - Form 20-F

- 2) our success in the smartphone market, including our ability to introduce and bring to market quantities of attractive, competitively priced Nokia products with Windows Phone that are positively differentiated from our competitors' products, both outside and within the Windows Phone ecosystem;
- 3) our ability to produce attractive and competitive devices in our Mobile Phones business unit, including feature phones and devices with features such as full touch that can be categorized as smartphones, in a timely and cost efficient manner with differentiated hardware, software, localized services and applications;
- 4) the success of our HERE strategy, including our ability to establish a successful location-based platform and extend our location-based services across devices and operating systems;



**Table of Contents**

- 5) our ability to provide support for our Devices & Services business and maintain current and create new sources of revenue from our location-based service and commerce assets;
- 6) our ability to protect numerous patented standardized or proprietary technologies from third-party infringement or actions to invalidate the intellectual property rights of these technologies;
- 7) our ability to maintain the existing sources of intellectual property related revenue and establish new such sources;
- 8) the intensity of competition in the various markets where we do business and our ability to maintain or improve our market position or respond successfully to changes in the competitive environment;
- 9) our ability to keep momentum and increase our speed of innovation, product development and execution in order to bring new innovative and competitive mobile products and location-based or other services to the market in a timely manner;
- 10) the success of our partnership with Microsoft in connection with the Windows Phone ecosystem;
- 11) our ability to effectively and smoothly implement the planned changes in our operational structure and achieve targeted efficiencies and reductions in operating expenses;
- 12) our ability to retain, motivate, develop and recruit appropriately skilled employees;
- 13) our dependence on the development of the mobile and communications industry, including location-based and other services industries, in numerous diverse markets, as well as on general economic conditions globally and regionally;
- 14) our ability to maintain and leverage our traditional strengths in the mobile products market, especially if we are unable retain the loyalty of our mobile operator and distributor customers and consumers as a result of the implementation of our strategies or other factors;
- 15) the performance of the parties we partner and collaborate with, including Microsoft, and our ability to achieve successful collaboration or partnering arrangements;
- 16) our ability to deliver our mobile products profitably, in line with quality requirements and on time, especially if the limited number of suppliers we depend on fail to deliver sufficient quantities of fully functional products, components, sub-assemblies, software and services on favourable terms and in compliance with our supplier requirements;
- 17) our ability to manage efficiently our manufacturing and logistics, as well as to ensure the quality, safety, security and timely delivery of our products and services;
- 18) any actual or even alleged defects or other quality, safety and security issues in our products;

- 19) any inefficiency, malfunction or disruption of a system or network that our operations rely on;
- 20) the impact of cybersecurity breach or other factors leading to an actual or alleged loss, improper disclosure or leakage of any personal or consumer data collected by us or our partners or subcontractors, made available to us or stored in or through our products;
- 21) our ability to successfully manage the pricing of our products and costs related to our products and our operations;
- 22) the potential complex tax issues and obligations we may face, including the obligation to pay additional taxes in various jurisdictions and our actual or anticipated performance, among other factors, could result in allowances related to deferred tax assets;
- 23) exchange rate fluctuations, particularly between the euro, which is our reporting currency, and the US dollar, the Japanese yen and the Chinese yuan, as well as certain other currencies;

**Table of Contents**

- 24) our ability to protect the technologies, which we or others develop or which we license, from claims that we have infringed third parties' intellectual property rights, as well as our unrestricted use on commercially acceptable terms of certain technologies in our product and services;
- 25) the impact of economic, regulatory, political or other development on our sales, manufacturing facilities and assets located in emerging market countries as well as the impact of regulations against imports to those countries;
- 26) the impact of changes in and enforcement of government policies, technical standards, trade policies, laws or regulations in countries where our assets are located and where we do business;
- 27) investigations or claims by contracting parties in relation to exits from countries, areas or contractual arrangements;
- 28) unfavorable outcome of litigation, regulatory proceedings or investigations by authorities;
- 29) allegations of possible health risks from electromagnetic fields generated by base stations and mobile devices, and the lawsuits and publicity related to them, regardless of merit;
- 30) Nokia Siemens Networks' success in the mobile broadband infrastructure and related services market and its ability to effectively, profitably and timely adapt business and operations to the diverse needs of its customers;
- 31) Nokia Siemens Networks' ability to maintain and improve its market position and respond successfully to changes and competition in the mobile broadband infrastructure and related services market;
- 32) Nokia Siemens Networks' success in implementing its restructuring plan and reducing its operating expenses and other costs;
- 33) Nokia Siemens Networks' ability to invest in and timely introduce new competitive products, services, upgrades and technologies;
- 34) Nokia Siemens Networks' dependence on limited number of customers and large, multi-year contracts;
- 35) Nokia Siemens Networks' liquidity and its ability to meet its working capital requirements, including access to available credit under its financing arrangements and other credit lines as well as cash at hand;
- 36) the management of Nokia Siemens Networks' customer financing exposure;
- 37) whether ongoing or any additional governmental investigations of alleged violations of law by some former employees of Siemens may involve and affect the carrier-related assets and employees transferred by Siemens to Nokia Siemens Networks;
- 38)

## Edgar Filing: NOKIA CORP - Form 20-F

any impairment of Nokia Siemens Networks customer relationships resulting from ongoing or any additional governmental investigations involving the Siemens carrier-related operations transferred to Nokia Siemens Networks, as well as the risk factors specified in this annual report on under Item 3D. Risk Factors.

Other unknown or unpredictable factors or underlying assumptions subsequently proving to be incorrect could cause actual results to differ materially from those in the forward-looking statements. Nokia does not undertake any obligation to publicly update or revise forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent legally required.

**Table of Contents**

**PART I**

**ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION**

**3A. Selected Financial Data**

The financial data set forth below at December 31, 2011 and 2012 and for each of the years in the three-year period ended December 31, 2012 have been derived from our audited consolidated financial statements included in Item 18 of this annual report. Financial data at December 31, 2008, 2009, and 2010 and for each of the years in the two-year period ended December 31, 2009 have been derived from our previously published audited consolidated financial statements not included in this annual report.

The financial data at December 31, 2011 and 2012 and for each of the years in the three-year period ended December 31, 2012 should be read in conjunction with, and are qualified in their entirety by reference to, our audited consolidated financial statements.

**Table of Contents**

The audited consolidated financial statements from which the selected consolidated financial data set forth below have been derived were prepared in accordance with IFRS.

	Year Ended December 31,					
	2008 (EUR)	2009 (EUR)	2010 (EUR)	2011 (EUR)	2012 (EUR)	2012 (USD)
(in millions, except per share data)						
<b>Profit and Loss Account Data</b>						
Net sales	50 710	40 984	42 446	38 659	30 176	39 790
Operating profit	4 966	1 197	2 070	(1 073)	(2 303)	(3 037)
Profit before tax	4 970	962	1 786	(1 198)	(2 644)	(3 486)
Profit attributable to equity holders of the parent	3 988	891	1 850	(1 164)	(3 106)	(4 096)
Earnings per share (for profit attributable to equity holders of the parent)						
Basic earnings per share	1.07	0.24	0.50	(0.31)	(0.84)	(1.11)
Diluted earnings per share	1.05	0.24	0.50	(0.31)	(0.84)	(1.11)
Cash dividends per share	0.40	0.40	0.40	0.20	0.00 <sup>(1)</sup>	0.00 <sup>(1)</sup>
Average number of shares (millions of shares)						
Basic	3 744	3 705	3 709	3 710	3 711	3 711
Diluted	3 780	3 721	3 713	3 710	3 711	3 711
<b>Balance Sheet Data</b>						
Fixed assets and other non-current assets	15 112	12 125	11 978	10 750	9 071	11 961
Cash and other liquid assets <sup>(2)</sup>	6 820	8 873	12 275	10 902	9 909	13 066
Other current assets	17 650	14 740	14 870	14 553	10 969	14 464
Total assets	39 582	35 738	39 123	36 205	29 949	39 491
Capital and reserves attributable to equity holders of the parent	14 208	13 088	14 384	11 873	8 061	10 629
Non-controlling interests	2 302	1 661	1 847	2 043	1 386	1 828
Long-term interest-bearing liabilities	861	4 432	4 242	3 969	5 087	6 708
Other long-term liabilities	1 856	1 369	1 110	876	769	1 014
Borrowings due within one year	3 591	771	1 037	1 352	462	609
Other current liabilities	16 764	14 417	16 503	16 092	14 184	18 703
Total shareholders' equity and liabilities	39 582	35 738	39 123	36 205	29 949	39 491
Net interest-bearing debt <sup>(3)</sup>	(2 368)	(3 670)	(6 996)	(5 581)	(4 360)	(5 749)
Share capital	246	246	246	246	246	324

- (1) The Board of Directors will propose for shareholders' approval at the Annual General Meeting convening on May 7, 2013 that no dividend payment be made for 2012.
- (2) For the years ended December 31, 2009, 2010 and 2011, cash and other liquid assets consist of the following captions from our consolidated balance sheets: (1) bank and cash, (2) available-for-sale investments, cash equivalents, (3) available-for-sale investments, liquid assets and (4) investments at fair value through profit and loss, liquid assets. For the previous years, cash and other liquid assets consist of the following captions from our consolidated balance sheets: (1) bank and cash, (2) available-for-sale investments, cash equivalents, and (3) available-for-sale investments, liquid assets.
- (3) Net interest-bearing debt consists of borrowings due within one year and long-term interest-bearing liabilities, less cash and other liquid assets.

**Table of Contents****Distribution of Earnings**

We distribute retained earnings, if any, within the limits set by the Finnish Companies Act. We make and calculate the distribution, if any, either in the form of cash dividends, share buy-backs, or in some other form or a combination of these. There is no specific formula by which the amount of a distribution is determined, although some limits set by law are discussed below. The timing and amount of future distributions of retained earnings, if any, will depend on our future results and financial condition.

Under the Finnish Companies Act, we may distribute retained earnings on our shares only upon a shareholders' resolution and subject to limited exceptions in the amount proposed by our Board of Directors. The amount of any distribution is limited to the amount of distributable earnings of the parent company pursuant to the last accounts approved by our shareholders, taking into account the material changes in the financial situation of the company after the end of the last financial period and a statutory requirement that the distribution of earnings must not result in insolvency of the company. Subject to exceptions relating to the right of minority shareholders to request for a certain minimum distribution, the distribution may not exceed the amount proposed by the Board of Directors.

**Share Buy-backs**

Under the Finnish Companies Act, Nokia Corporation may repurchase its own shares pursuant to either a shareholders' resolution or an authorization to the Board of Directors approved by the company's shareholders. The authorization may amount to a maximum of 10% of all the shares of the company and its maximum duration is 18 months. The Board of Directors has been regularly authorized by our shareholders at the Annual General Meetings to repurchase Nokia's own shares, and during the past three years the authorization covered 360 million shares in 2010, 2011 and 2012. The amount authorized each year has been at or slightly under the maximum limit provided by the Finnish Companies Act. Nokia has not repurchased any of its own shares since September 2008.

On January 24, 2013, we announced that the Board of Directors will propose that the Annual General Meeting convening on May 7, 2013 authorize the Board to resolve to repurchase a maximum of 370 million Nokia shares. The proposed maximum number of shares that may be repurchased corresponds to less than 10% of all the shares of the company. The shares may be repurchased in order to develop the capital structure of the company, finance or carry out acquisitions or other arrangements, settle the company's equity-based incentive plans, be transferred for other purposes, or be cancelled. The shares may be repurchased either through a tender offer made to all shareholders on equal terms, or in marketplaces by repurchasing the shares in another proportion than that of the current shareholders. The authorization would be effective until June 30, 2014 and terminate the current authorization for repurchasing of the company's shares resolved at the Annual General Meeting on May 3, 2012. The table below sets forth actual share buy-backs by Nokia in respect of each fiscal year indicated.

	Number of shares	EUR millions (in total)
2008	157 390 000	3 123
2009		
2010		
2011		
2012		

**Cash Dividends**

On January 24, 2013, we announced that the Board of Directors will propose at the Annual General Meeting convening on May 7, 2013 that no dividend payment be made for 2012.

The table below sets forth the amounts of total cash dividends per share and per ADS paid in respect of each fiscal year indicated. For the purposes of showing the US dollar amounts per ADS for 2008

**Table of Contents**

through 2012, the dividend per share amounts have been translated into US dollars at the noon buying rate in New York City for cable transfers in euro as certified for customs purposes by the Federal Reserve Bank of New York on the respective dividend payment dates.

	EUR per share	USD per ADS	EUR millions (in total)
2008	0.40	0.54	1 481
2009	0.40	0.49	1 483
2010	0.40	0.57	1 484
2011	0.20	0.25	742
2012	0.00 <sup>(1)</sup>	0.00 <sup>(1)</sup>	0 <sup>(1)</sup>

(1) The Nokia Board of Directors will propose at the Annual General Meeting convening on May 7, 2013 that no dividend payment be made for 2012.

We make our cash dividend payments in euro. As a result, exchange rate fluctuations will affect the US dollar amount received by holders of ADSs on conversion of these dividends. Moreover, fluctuations in the exchange rates between the euro and the US dollar will affect the dollar equivalent of the euro price of the shares on NASDAQ OMX Helsinki and, as a result, are likely to affect the market price of the ADSs in the United States. See also Item 3D. Risk Factors Our net sales, costs and results of operations, as well as the US dollar value of our dividends and market price of our ADSs, are affected by exchange rate fluctuations, particularly between the euro, which is our reporting currency, and the US dollar, the Japanese yen and the Chinese yuan, as well as certain other currencies.

**Exchange Rate Data**

The following table sets forth information concerning the noon buying rate for the years 2008 through 2012 and for each of the months in the six-month period ended February 28, 2013, 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 daily exchange rates during that month.

For the year ended December 31:	Rate at Period end	Exchange rates		
		Average rate	Highest rate	Lowest rate
		(USD per EUR)		
2008	1.3919	1.4695	1.6010	1.2446
2009	1.4332	1.3955	1.5100	1.2547
2010	1.3269	1.3216	1.4536	1.1959
2011	1.2973	1.3931	1.4875	1.2926
2012	1.3186	1.2859	1.3463	1.2062
September 30, 2012	1.2856	1.2885	1.3142	1.2566
October 31, 2012	1.2958	1.2974	1.3133	1.2876
November 30, 2012	1.3010	1.2837	1.3010	1.2715
December 31, 2012	1.3186	1.3119	1.3260	1.2930
January 31, 2013	1.3584	1.3304	1.3584	1.3047
February 28, 2013	1.3079	1.3347	1.3692	1.3054

On March 1, 2013, the noon buying rate was USD 1.2988 per EUR 1.00.

**3B. Capitalization and Indebtedness**

Not applicable.

**3C. Reasons for the Offer and Use of Proceeds**

Not applicable.





**Table of Contents****3D. Risk Factors**

Set forth below is a description of risk factors that could affect Nokia, starting with the risks which are mainly related to our primary revenue generating areas. There may be, however, additional risks unknown to Nokia and other risks currently believed to be immaterial that could turn out to be material. These risks, either individually or together, could adversely affect our business, sales, profitability, results of operations, financial condition, liquidity, market share, brand, reputation and share price from time to time. Unless otherwise indicated or the context otherwise provides, references in these risk factors to Nokia, we, us and our mean Nokia's consolidated operating segments. Additional risks primarily related to Nokia Siemens Networks that could affect Nokia are detailed under the heading Nokia Siemens Networks below.

***We may not be able to make Nokia products with Windows Phone a competitive choice for consumers unless the Windows Phone ecosystem becomes a competitive and profitable global ecosystem that achieves sufficient scale, value and attractiveness to relevant market participants.***

We believe that successful smartphone platforms require a successful ecosystem around them. At the heart of the major smartphone ecosystems is the operating system and the development platform upon which smartphones are based and services built. Today, industry participants are creating competing ecosystems of mutually beneficial partnerships to combine hardware, software, services and an application environment to create high-quality differentiated smartphones. Certain smartphone platforms and their related ecosystems have gained significant momentum and market share, specifically Google's Android platform and Apple's iOS platform, and are continuing apace, with Android-based smartphones continuing to gain significant market share during 2012 and also reaching lower price points.

We have adopted, and are licensing from Microsoft, Windows Phone as our primary smartphone platform. Although Microsoft will continue to license Windows Phone to other mobile manufacturers, we believe we can differentiate Nokia smartphones from those of our competitors that also use the Windows Phone platform as well as other platforms. The first Nokia smartphones powered by Windows Phone were launched in October 2011 under the Lumia name. We launched additional Windows Phone 7 devices and the first Windows Phone 8 Lumia devices during 2012. See Item 4B. Business Overview Devices & Services Smart Devices for a more information.

The creation of an ecosystem for Windows Phone smartphones that receives acceptance from contributing parties and reaches sufficient scale is critical to making our Nokia products with Windows Phone a competitive choice. If a successful Windows Phone ecosystem does not materialize in a timely manner, this would have a material adverse effect on sales of our Nokia products with Windows Phone and our profitability, and otherwise significantly impair our ability to compete effectively in the smartphone market. The principal risks and challenges that could prevent the creation of a successful ecosystem for Nokia Windows Phones include the following:

The Windows Phone platform may not achieve or retain broad or timely market acceptance or be preferred by ecosystem participants, mobile operators and consumers.

Microsoft has recently launched the Windows 8 operating system used to power personal computers and tablets, and the related Windows Phone 8 operating system is used in the latest Nokia smartphones. The success of Nokia's Windows Phone 8 smartphones will be negatively affected if the Windows 8 platform does not achieve or retain broad or timely market acceptance or is not preferred by ecosystem participants, mobile operators and consumers.

If we are not successful in our partnership with Microsoft or the benefits of that partnership do not materialize as expected, we may have limited our options to build a competitive

**Table of Contents**

smartphone ecosystem with another partner or join another competitive smartphone ecosystem in a timely or economically profitable manner.

Other competitive major smartphone ecosystems, primarily Google's Android and Apple's iOS, have advantages that may be difficult for the Windows Phone ecosystem to overcome, such as first-mover advantage, momentum, a larger share of the smartphone market, engagement by developers, mobile operators and consumers and brand preference, and their advantages may become greater over time.

We may not be able to develop sufficient quantities of high-quality differentiated Nokia products with Windows Phone in order to achieve the scale needed for a competitive global ecosystem in a timely manner, or at all.

Applicable developer tools for the Windows Phone platform may not gain needed traction or acceptance in the market, may be introduced late, or when introduced, may not offer technologies that developers are willing to use.

We may not be able to provide sufficient opportunities to innovate and customize on the Windows Phone platform in order to attract developers and other ecosystem participants seeking to differentiate their offerings on our smartphones from those of our competitors.

Our competitors may use various technical and commercial means to make the Windows Phone ecosystem unattractive compared to other ecosystems, including for instance hindering application development, not providing tools to allow applications to be developed to industry standard or not allowing certain applications to work or work efficiently on the Windows Phone platform.

We may not succeed in rapidly expanding the Windows Phone platform and related ecosystem to more affordable smartphones, limiting the expansion of this ecosystem.

The global ecosystem for the Windows Phone platform may not be flexible enough to allow local ecosystems to develop around and in connection with it. For instance, Microsoft, us and other participants in the Windows Phone ecosystem may not succeed in innovating and developing sufficiently locally relevant services, applications and content in a speedy and cost-efficient manner to attract and retain consumers in multiple markets with divergent local needs and preferences.

The Windows Phone ecosystem is relatively small, and thus it may not be compelling for hardware and software suppliers and developers, which may for instance lead to our reliance on a limited number of suppliers, later availability of the latest innovations and increased cost of components and software.

Mobile devices are increasingly used with other technical appliances, for instance speakers and car audio systems or have accessories and gadgets that can be used in conjunction with the mobile device. As the Windows Phone ecosystem is relatively small, it may not be compelling for third parties to design such technical appliances, accessories or gadgets to a similar extent as with other ecosystems.

We may not succeed in creating business models that provide value to other participants in the Windows Phone ecosystem, including ourselves.

## Edgar Filing: NOKIA CORP - Form 20-F

We may not be able to change our mode of working or culture sufficiently to collaborate effectively and efficiently both internally and externally with a large community of partners.

Consumers may be reluctant to provide personal data to us as a result of our partnership with Microsoft, which would hamper the success of the Windows Phone ecosystem.

## **Table of Contents**

The frequency of Windows Phone operating system updates may be too slow and the platform may be too closed to address changing market and customer requirements in a timely manner, which may erode customer support and consumer attractiveness of the platform.

Emergence of new alternative ecosystems and platforms could make the Windows Phone ecosystem less attractive to customers and consumers.

***Our success in the smartphone market depends on our ability to introduce and bring to market quantities of attractive, competitively priced Nokia products with Windows Phone that are positively differentiated from our competitors' products, both outside and within the Windows Phone ecosystem, and receive broad market acceptance.***

Our strategy is to compete in the smartphone market with Nokia products with Windows Phone. Our plans to further introduce and bring to market quantities of attractive, competitively priced Nokia products with Windows Phone that receive broad market acceptance and are positively differentiated from competitors' products, both outside and within the Windows Phone ecosystem, are subject to certain risks and uncertainties, which could, either individually or together, significantly impair our ability to compete effectively in the smartphone market.

The principal risks and uncertainties in addition to the factors outlined in the above risk factor that could undermine the competitive position of our Nokia products with Windows Phone include the following:

Our strategy for Nokia products with Windows Phone may not enable us to achieve in a timely manner the necessary scale, product breadth, geographical reach and localization to be sufficiently competitive in the smartphone market.

The Microsoft Windows Phone platform may not support the hardware configurations required to succeed in becoming a sufficiently price competitive platform and may limit our ability to develop a price competitive smartphone portfolio of products or bring certain hardware capabilities at the higher price points.

We may not be able to introduce a compelling portfolio of Nokia products with Windows Phone that include new hardware and design innovations. Additionally, we may not be able to introduce functionalities such as advanced imaging and sensor technology, location-based services and entertainment or otherwise customize our Nokia products with Windows Phone in order to positively differentiate our products from competitors' products, both outside and within the Windows Phone ecosystem.

Consumers may not prefer the Windows Phone user experience, interface or software functionality.

We may face delays in bringing our Nokia products with Windows Phone to various markets due to, for instance, manufacturing difficulties, delays in software and/or hardware development or product or sales package customization to accommodate various markets or operator requests.

We may face issues in selecting, engaging or securing support from leading operators and retailers for the initial launches and sales ramp-up of our Nokia products with Windows Phone due to, for instance, inadequate sales incentives, lack of proper training of sales personnel, insufficient marketing support and experience in generating interest for a still relatively unfamiliar Windows Phone platform in an otherwise highly competitive market. Delayed or non-optimal initial launches and sales ramp-up could result in diminished support from leading operators and retailers and low consumer interest for subsequent launches of our Nokia products with Windows Phone and may also adversely affect our Nokia brand generally and sales of our other Nokia mobile products.

## Table of Contents

We may not succeed in creating a high level of consumer interest for our Nokia products with Windows Phone, in converting interest for our Nokia products with Windows Phone to purchase decisions or in making the Nokia brand more desirable than brands of our competitors in smartphones.

Microsoft may not be able to provide the software innovations and features we rely on for the Windows Phone operating system in a timely manner, if at all. Additionally, we are dependent on Microsoft for timely error corrections for customer and country variants as well as generic software releases.

Our competitors may provide incentives to operators, retailers or developers that may make it unattractive for them to support Nokia products with Windows Phone, or our competitors may use various technical and commercial means to make it unattractive for consumers that currently use another product to purchase Nokia products with Windows Phone, including for instance hindering application development, not providing tools to allow applications to be developed to industry standards or not allowing certain applications to work or work efficiently on the Windows Phone platform.

In choosing to adopt Windows Phone as our primary smartphone platform, we may forgo more competitive alternatives achieving greater and faster acceptance in the smartphone market. If the benefits of the Microsoft partnership do not materialize as expected, more competitive alternatives may not be available to us in a timely manner, or at all.

Other manufacturers also produce competing mobile products which are based on the Windows Phone operating system. We may face increased competition from other manufacturers, including Microsoft, who already produce or may produce competing Windows Phone based products. Increased competition within the Windows Phone ecosystem could result for instance in lower sales of our devices or lower potential for a profitable business model.

Our strategy for Nokia products with Windows Phone may erode our brand identity in markets where we are traditionally strong and may not enhance our brand identity in markets where we are weak. For example, our association with the Microsoft brand may not accelerate our access to a broader market in the United States.

We are aiming to expand our Windows Phone-based products to lower price points. The availability of Windows Phone-based products that we or our competitors offer at lower price points may have a negative effect on the sales of our higher priced Windows Phone-based products.

***We may not be able to produce attractive and competitive devices in our Mobile Phones business unit, including feature phones and devices with features such as full touch that can be categorized as smartphones, in a timely and cost efficient manner with differentiated hardware, software, localized services and applications.***

The feature phone market, also referred to as the mobile phone market and a traditional area of strength for us, is undergoing significant changes. Today, a feature phone-specific ecosystem has emerged involving very low-cost components and manufacturing processes. Speed to market and attractive pricing are critical factors for success in affordable devices. In particular, the availability of complete mobile solutions chipsets and software from low-cost reference design chipset manufacturers has enabled the very rapid and low-cost production of feature phones, increasingly at lower price points, by numerous manufacturers particularly in China and India, which are gaining significant market share in emerging markets, as well as bringing some locally relevant innovations to the market.

Many mid-range to high-end feature phones increasingly offer access to the Internet and applications and provide more smartphone-like features and design, blurring the distinction between smartphones and feature phones and can be categorized as smartphones. We are subject to intense competition

## **Table of Contents**

over the entire spectrum we address through our Mobile Phones business unit from very low cost voice centric devices to devices that can be categorized as smartphones. Smartphones of other manufacturers, particularly Android-based smartphones, are reaching lower price points, which is increasingly reducing the addressable market and lowering the price points for feature phones and competing with the higher-end devices from our Mobile Phones portfolio.

Accordingly, we need to produce devices for our Mobile Phones portfolio in a timely and cost-efficient manner with differentiated user experience, hardware, software, localized services and applications that attract new users and connect new and existing users to an affordable Internet and application experience. If we are unable to produce competitive devices at various price points for our Mobile Phones portfolio, our business, results of operation and financial condition could be materially and adversely affected. The success of our Mobile Phones business unit is subject to certain risks and uncertainties, including the following:

We may not be able to leverage our traditional competitive strengths of scale in manufacturing and logistics, as well as in our marketing and sales channels for instance, to increase the speed to market in a sufficiently cost-competitive manner, particularly with mobile operators and consumers requiring increasing customization to meet divergent local needs and preferences.

The market we address with the more affordable devices from our Mobile Phones business unit may further reduce in size if the higher-end price points become dominated by more affordable smartphones, such as Android-based smartphones, and the higher-end devices from our Mobile Phones business unit are not sufficiently competitive compared to those.

The features of higher-end devices from our Mobile Phones business unit may not be sufficiently competitive compared to more affordable smartphones, such as Android-based smartphones.

Our estimates of the growth potential in the markets we address through our Mobile Phones business unit may not be accurate and as such result in misplaced investments of resources.

In some regions, overall market demand for feature phones may decline further.

Speed of shifts in market development and demand, for example, related to 2G, 3G and 4G mobile communication technology transitions and requirements, may be faster than we have anticipated, making our Mobile Phones portfolio less competitive if we are unable to timely develop and produce devices addressing such shifts.

We are using our internally developed platforms for our devices from the Mobile Phones business unit, which may hinder our ability or increase our costs in integrating hardware and sourcing components and other parts due to limitations in the platform and vendors tooling their supply and configurations for devices that operate on other platforms.

If the platforms that we use for our devices from the Mobile Phones business unit are not sufficiently competitive or otherwise optimal for our devices, developing the platform or switching to another platform may be time-consuming and costly, and there are no guarantees that our competitive position would benefit from such actions or that the development costs would result in a positive return on our investments. If the attractiveness of the platforms we use in the Mobile Phones business unit deteriorates, corrective actions will consume time and resources from us and may not lead to desired results, and may expose our Mobile Phones business unit to a significant deterioration in competitiveness.

The platforms that we use for our devices from our Mobile Phones business unit may not be sufficiently attractive, flexible and cost efficient for application developers and other partners to create a vibrant ecosystem for devices with increasingly smartphone-like

features, such as Internet access and applications.



## Table of Contents

There are shifts in the desired features and products in the market that are appealing to customers and consumers and such shifts may not be in our favor from a net sales or profitability perspective; for instance, QWERTY devices have been a traditional strength for us, but the overall market demand for QWERTY devices has declined and is expected to continue to decline.

We may not succeed in innovating and developing sufficiently locally relevant services, applications and content in a speedy and cost-efficient manner to attract and retain consumers in multiple markets with divergent local needs and preferences.

Management focus and allocation of resources on the development and launches of our Nokia products with Windows Phone and the creation of a successful ecosystem for Windows Phone smartphones with Microsoft may result in less management focus and resources being provided to our Mobile Phones business unit, as well as reduced monetary allocation for instance, to product marketing.

There may be elements in the ecosystems for our devices from our Mobile Phones business unit that are not in other ecosystems we support, such as the Windows Phone ecosystem, which may require additional resources and duplicative investments by us.

***Our strategy for our HERE business includes various risks and uncertainties and may not succeed if we are unable to establish a successful location-based platform, extend our location-based services across devices and operating systems, maintain current sources of revenue, provide support for our HERE business and create new sources of revenue from our location-based services and commerce assets.***

See item Item 4B. Business Overview HERE (formerly Location & Commerce) for a more information about our HERE business. The HERE business is exposed to various risks and uncertainties, including the following:

The existing map license data customers may choose not to purchase, or purchase less, content or services from our HERE business.

We may have inaccurately predicted market developments in, or market size of, the automotive navigation and personal navigation devices markets or we may lose market share to other manufacturers or other devices offering navigation solutions, for instance smartphones.

We may not be able to use our location-based assets to compete on a standalone basis or support the overall Nokia strategy.

HERE is a recently launched brand and platform and as such may be disadvantaged to more established brands and platforms.

We may not be able to establish a successful location-based platform through HERE if other competing location-based platforms are preferred by customers and consumers.

We may not be able to establish a successful HERE application suite for the platforms we are targeting.

Investments into new business opportunities may not give a return on investment as planned, or at all.

We may not succeed in attracting strategic partners and developers to develop and support our ecosystem around our HERE offering, or provide services that are supported by relevant ecosystems.

We may fail to attract business partners and merchants to our service offerings.

---

## **Table of Contents**

The service offering we currently provide may not be competitive or another participant may provide a more competitive new offering in the future or new more efficient or affordable ways of map content creation are introduced which may disrupt our own business models.

The advertising and local commerce business opportunities we target may not grow as expected or have the possibilities for profitable business in line with our expectations.

The HERE business may not succeed in creating integrated social location offerings in support of our strategic goals in smartphones, including Nokia products with Windows Phone, or support our efforts to connect the next billion people to the Internet and information, which would negatively affect our ability to offer compelling and differentiated mobile products.

Any Microsoft partnership business model to integrate our location-based assets with Microsoft's platform to generate new sources of revenue for us may not materialize as expected, or at all.

If our HERE business does not generate revenue as before or new sources of revenue for us do not materialize as expected, or at all, that business may not generate positive operating cash flow, and this or other factors may lead to the decrease in value of our location-based services and commerce assets and may result in further impairment charges.

Due to changes in the competitive position of our Devices & Services business and other factors, HERE's profitability has been, and may in the future be, adversely affected by lower recognized revenue from internal sales which generally carry a higher gross margin compared to external sales.

***Our products include numerous patented standardized or proprietary technologies on which we depend and utilize for revenue generation. Third parties may use without a license and unlawfully infringe our intellectual property or commence actions seeking to establish the invalidity of the intellectual property rights of these technologies, or we may not be able to maintain the existing sources of intellectual property related revenue or establish new such sources.***

Our products include numerous patented standardized or proprietary technologies on which we depend. Despite the steps that we have taken to protect our technology investment with intellectual property rights, we cannot be certain that any rights or pending applications will be granted or that the rights granted in connection with any future patents or other intellectual property rights will be sufficiently broad to protect our technology. Third parties may infringe our intellectual property relating to our proprietary technologies or by ignoring their obligation to seek a license under our standard essential patents.

Any patents or other intellectual property rights that are granted to us may be challenged, invalidated or circumvented, and any right granted under our patents may not provide competitive advantages for us. Other companies have commenced and may continue to commence actions seeking to establish the invalidity of our intellectual property, for example, patent rights. In the event that one or more of our patents are challenged, a court may invalidate the patent or determine that the patent is not enforceable, which could harm our competitive position. The outcome of court proceedings is difficult to predict and as such our ability to utilize intellectual property for revenue generation is dependent on favorable court rulings. Increasingly, patent litigation may be commenced in new jurisdictions, for instance if unitary patent protection regimes are introduced, where the outcome of the proceeding can be even more difficult to predict than in established jurisdictions for patent disputes. Also, if any of our key patents are invalidated, or if the scope of the claims in any of these patents is limited by a court decision, we could be prevented from using such patents as a basis for product differentiation or from licensing the invalidated or limited portion of our intellectual property rights, or we could lose part of the leverage we have in terms of our own intellectual property rights portfolio. Even if such a patent challenge is not successful, it could be expensive and time-consuming, divert attention of our

## **Table of Contents**

management and technical personnel from our business and harm our reputation. Any diminution of the protection that our own intellectual property rights enjoy could cause us to lose some of the benefits of our investments in research and development.

In 2012, we continued to work to enforce our patents against unlawful infringement and realize the value of our intellectual property, including filing patent suits, entering into patent license agreements and through divesting patents. Patent license agreements can cover both licensee's past and future sales. The portion of the income that relates to past sales is not expected to have a recurring benefit and ongoing patent income from licensing is generally subject to various factors that we have little or no control over, for instance sales by the licensees. There are no guarantees that our actions to generate intellectual property-related revenue will lead to favorable outcomes, such as patent license agreements on favorable terms to us or that we would be able to utilize our patent portfolio for revenue generation to a similar extent going forward. While we have various licensees, a significant portion of licensing revenues is generated from a limited number of licensees and as such issues or ends of contracts in relation to these select licensees could have a significant effect. Due to various reasons including the above, our intellectual property related revenue can vary considerably from time to time and there are no guarantees that past levels are indicative of future levels of intellectual property related revenue.

### ***We face intense competition in mobile products and in the digital map data and related location-based content and services markets.***

We experience intense competition in every aspect of our business and across all markets for our mobile products. Mobile products markets are segmented, diversified and increasingly commoditized. We face competition from a growing number of participants in different user segments, price points and geographical markets, as well as layers of the mobile product using different competitive means in each of them. Such layers include the hardware and component layers as well as the software and application layers of a mobile product. In some of those layers, we may have more limited experience and scale than our competitors. This makes it more difficult and less cost-efficient for us to compete successfully with differentiated offerings across the whole mobile products market against more specialized competitors. It also limits our ability to leverage effectively our scale and other traditional strengths, such as our brand, hardware assets, manufacturing and logistics, distribution, strategic sourcing, research and development, intellectual property and design, to achieve significant advantages compared to our competitors. We have been historically more successful where our mobile devices are sold to consumers in open distribution through non-operator parties. The increase in markets with operator-driven distribution and business models where operator subsidies are prevalent may adversely affect our ability to compete effectively in those markets. We are increasingly seeing such developments taking place in markets where we have been traditionally strong, for instance in China. Additionally, our scale benefits may be adversely affected as new regional or operator requirements are introduced.

In the smartphone market, we face intense competition from traditional mobile device manufacturers and companies in related industries, such as Internet-based product and service providers, mobile operators, business device and solution providers and consumer electronics manufacturers. Some of those competitors are currently viewed as more attractive partners for application developers, content providers and other key industry participants, resulting in more robust global ecosystems and more appealing smartphones; have more experience, skills, speed of product development and execution, including software development, and scale in certain segments of the smartphone market; have a stronger market presence and brand recognition for their smartphones; have created different business models to tap into significant new sources of revenues, such as advertising and subscriptions; or generally have been able to adjust their business models and operations in an effective and timely manner to the developing smartphone and related ecosystem market requirements.

---

**Table of Contents**

The availability and success of Google's Android platform has made entry and expansion in the smartphone market easier for a number of hardware manufacturers which have chosen to join the Android ecosystem, especially at the mid-to-low range of the smartphone market. Additionally, this is increasingly reducing the addressable market and lowering the price points for Nokia feature phones. Product differentiation is more challenging, however, potentially leading to increased commoditization of Android-based devices with the resulting downward pressure on pricing.

The significant momentum and market share gains of the global ecosystems around the Android platform, where Samsung is the dominant participant, and Apple's iOS platform have increased the competitive barriers to additional entrants looking to build a competing global smartphone ecosystem. In 2012, driven by successful product launches, the value market share of Android-based and Apple products continued to increase, with Samsung and Apple together capturing the majority of the profits in the smartphone market in 2012. These two entrenched ecosystems also captured the vast majority of smartphone applications and services by easily attracting third-party software developers to their ecosystems and, as a result, realized much of the industry profits made on applications and services. The dominance of the Android and Apple ecosystems makes the growth of other ecosystems, such as the Windows Phone ecosystem, increasingly more difficult. At the same time, other ecosystems are being built which are attracting developers and consumers, and may result in fragmentation among ecosystem participants and the inability of new ecosystems to gain sufficient competitive scale.

During the transition of our smartphones to the Windows Phone platform, our competitors have and, as we target to grow this ecosystem, will continue to endeavor to attract our current and future consumers, mobile operators and other customers to their smartphone offerings. Our competitors use aggressive business strategies in attracting and retaining customers while dissuading their switching to other products. If our competitors succeed in that endeavor, our smartphone market share could erode further, which we may not be able to regain with new Nokia products with Windows Phone.

In the feature phone market, an increasing number of our competitors, particularly recent entrants, have used, and we expect will continue to use, more aggressive pricing and marketing strategies, different design approaches and alternative technologies that consumers may prefer over our offering of feature phones. For example, certain industry participants bundle mobile device deals with their networks' deals. Some competitors, with lower profitability expectations, have chosen to focus on building feature phones based on commercially available components, software and content, in some cases available at very low or no cost, which enables them to introduce their products much faster and at significantly lower cost to the consumer than we are able to do. Smartphones of other manufactures, particularly Android-based smartphones, are reaching lower price points which is increasingly reducing the addressable market and lowering the price points for feature phones and may adversely affect our feature phone business. We have devices with features such as full touch that can be categorized as smartphones in our Mobile Phones business unit which face competition from other smartphone-like and smartphone devices such as Android-based devices.

We are also seeing the emergence of various local mobile device manufacturers that are strong in a certain country or region, especially in emerging markets. Success of such competitors could adversely affect sales of our mobile devices in various countries such as China, Indonesia and India where we have been traditionally strong.

We also face competition from vendors of legitimate, as well as unlicensed and counterfeit, products with manufacturing facilities primarily centered around certain locations in Asia and other emerging markets. The entry barriers for these vendors are very low as they are able to take advantage of licensed and unlicensed commercially available free or low-cost components, software and content. Our failure to provide low-cost differentiated alternatives for consumers in a timely manner or to enforce our intellectual property rights adversely affects our ability to compete efficiently in the market

## **Table of Contents**

for feature phones and more affordable smartphones. Some of our competitors may also benefit from governmental support in their home countries and other measures that may have protectionist objectives. These factors could reduce the price competitiveness of our feature phones and have an adverse effect on our sales and profitability.

The growing significance of ecosystems has further reinforced the importance of product design as a means for differentiating offerings from others within the same or a different ecosystem. Additionally, together with the growth of cloud computing, where data and services are hosted by remote servers rather than on devices themselves, ecosystems are also leading some vendors to pursue a strategy of developing and providing devices and electronic products of different form factors and screen sizes, such as mobile devices, tablets and televisions and software which make them compatible and support their smooth interaction with one another. As consumers acquire different devices, some may choose to purchase products and services from only one ecosystem or vendor. If our competitors succeed in capturing markets where we are not currently present, this could erode our competitive position. For instance, we currently do not have tablets or other adjacent products in our mobile product portfolio, which may result in our inability to compete effectively in the tablet and developing multi-screen market segments in the future or forgoing those potential growth opportunities, and may also have an adverse effect on the desirability of our smartphones.

Consumers may be more reluctant to provide personal data to us, which would hamper our competitive position in terms of our current business models, or new business models, that rely on access to personal data. For instance, the possible inability to collect and utilize consumer behavioral data may prevent us from efficiently developing product and services, do efficient marketing, take actions to enable consumer retention and work efficiently with service developers.

A key component of our current strategy is investment in future disruptive technologies, including investment in longer-term market exploration of next-generation devices, platforms and user experiences. Additionally, we continuously seek new business and monetization models. Certain of our competitors have significant resources to invest in market exploration and seek new monetization models or drive industry development and capture value in areas where we are not competitive. Those areas can be, for instance, monetization models linked to the use of large amounts of consumer data, large connected communities, home entertainment services and alternative payment mechanisms. We may not be able to invest our own resources to compete in these areas, which may in the future prove a competitive disadvantage for us. If we fail in these aspects of our strategy, we may not realize a return on our investments or may incur operating losses and impair our competitiveness for the longer term.

With respect to digital map data and related location-based content, several global and local companies, as well as governmental and quasi-governmental agencies, are making more map data with improving coverage and content, and high quality, available free of charge or at lower prices. For example, our HERE business competes with Google which uses an advertising-based model allowing consumers and companies to use its map data and related services in their products free of charge to consumers. Google has continued to leverage Google Maps as a differentiator for Android bringing certain new features and functionality to that platform. Apple has also sought to strengthen its location assets and capabilities through targeted acquisitions and organic growth.

HERE also competes with companies such as TomTom, which licenses its map data and where competition is focused on the quality of the map data and pricing, and Open Street Map, which is a community-generated open source map available to users free of charge. Aerial, satellite and other location-based imagery is also becoming increasingly available and competitors are offering location-based products and services with the map data to both business customers and consumers in order to differentiate their offerings. Those developments may encourage new market entrants, cause business

## **Table of Contents**

customers to incorporate map data from sources other than our HERE business or reduce the demand for fee-based products and services which incorporate HERE map database. Accordingly, our HERE business must positively differentiate its digital map data and related location-based content from similar offerings by our competitors and create competitive business models for our customers.

***Our failure to keep momentum and increase our speed of innovation, product development and execution will impair our ability to bring new innovative and competitive mobile products and location-based or other services to the market in a timely manner.***

We need to identify and understand the key market trends and user segments to address consumers' expanding needs in order to bring new innovative and competitive mobile products and location-based or other services to market in a timely manner. We must follow, anticipate and be able to respond with speed to these key market trends, and actively create future trends in the market, through our product development processes. We also need to execute efficiently in creating and developing competitive products, and in bringing our products to market in a timely manner with compelling marketing messages that succeed in retaining and engaging our current, and attracting new, customers and consumers.

We have made changes to our strategy in recent years including the introduction of a sharpened strategy and further rebalancing measures in 2012. This sharpened strategy included among other things reductions within certain research and development projects, consolidation of certain manufacturing operations, focusing of marketing and sales activities, including prioritizing key markets, streamlining certain functions, and planned reductions related to non-core assets. We may face adverse effects due to these measures: for instance, we may reduce marketing spend which may lead to less demand for our products or we may exit certain markets which may result in lower net sales. The operational changes in our focused strategy may lead to further dominance by competitors such as Samsung and Apple as well as other competitors.

Our inability to innovate, develop and bring our mobile products and location-based or other services to market and delays in the ramp up of new product deliveries may result from a variety of factors, including failure to anticipate consumer trends and needs; insufficient and ineffective internal and external execution in our research and product development processes; an inability to secure necessary components or software assets from suppliers in sufficient quantities on a timely basis; or an inability to improve our time to market, including the introduction of innovations, through execution challenges in relation to our shift of most of our mobile device assembly to our manufacturing facilities in Asia where a majority of our suppliers are located. Additionally, the software complexity and integration of the hardware and software functionalities may cause unforeseen delays even close to the anticipated launch of the mobile product. We continue to be dependent on component providers, contract manufacturers, application developers and other partners, which can lead to additional challenges and delays that are largely outside of our control.

We operate in a fast paced and innovative industry. Our business may require significant investment to innovate and grow successfully. Such investments may include research and development, licensing arrangements, acquiring businesses and technologies, recruiting specialized expertise and partnering with third parties. Those investments may not, however, result in technologies, products or services that achieve or retain broad or timely market acceptance or are preferred by application developers, our customers and consumers. We have also made, and may make in the future, such investments through acquisitions. We may, however, fail to successfully complete planned acquisitions or integrate the acquired businesses or assets or retain and motivate their key employees.

Our ability to innovate and the need to increase the speed of our product development and execution are critical to the success of our current strategies and in bringing products and location-based or other

---

**Table of Contents**

services to market in a timely manner. In addition to the factors described above, delays in innovation, product development and execution may result from the added complexity of working in partnership with Microsoft to produce Nokia products with Windows Phone. For example, we may not be successful in our mode of working to collaborate effectively and efficiently with Microsoft, or be able to develop the necessary infrastructure to manufacture Nokia products with Windows Phone, source the right chipsets and generally integrate the hardware and software that both we and Microsoft are contributing. There may be elements in certain ecosystems that we support that are not in other ecosystems that we support, which require additional resources and duplicative investments by us.

Failures or delays in understanding or anticipating market trends or delays in innovation, product development and execution may result in a suboptimal portfolio of mobile products and location-based or other services, gaps in certain price points or an uncompetitive offering. Our failure to deliver mobile products in a timely fashion to markets and in sufficient quantities not only may have a negative effect on our market share, net sales and profitability, but may also erode our brand through consumer disappointment. Moreover, our customers and consumers expect that the services and applications provided with and in connection with our mobile products are positively differentiated from our competitors' offerings, have the same or more capabilities than those of our competitors, function properly and are of high quality. If we fail in launching the services, have insufficient breadth of available applications or content, have inadequate or unsuccessful updates to them or there are other defects or quality issues with our mobile products, including the operating platform, software and user interface, this may cause consumer retention and engagement for our mobile products to deteriorate.

***Our partnership with Microsoft is subject to risks and uncertainties.***

In addition to the factors outlined above in connection with the Windows Phone ecosystem and sales of Nokia products with Windows Phone, our partnership with Microsoft is subject to certain risks and uncertainties, which could, either individually or together, significantly impair our ability to compete effectively in the smartphone market. A further change in smartphone strategy either by Microsoft or Nokia could be costly and further adversely affect our market share, competitiveness and profitability. Risks and uncertainties related to our partnership with Microsoft include the following:

The agreements with Microsoft may include terms that prove unfavorable to us or Microsoft could provide better support to another device manufacturer which produces devices that run on the Windows Phone platform.

We may not succeed in creating a profitable business model as we have transitioned from our own royalty-free smartphone platform to the royalty-based Windows Phone platform due to, among other things, our inability to offset our higher cost of sales resulting from our software royalty payments to Microsoft with new revenue sources and a reduction of our operating expenses, particularly our research and development expenses.

We will need to continue to innovate and find additional ways to create patentable inventions and other intellectual property, particularly as we invest less than before in our own development under the Microsoft partnership. As a result, we may not be able to generate sufficient patentable inventions or other intellectual property to maintain, for example, the same size and/or quality patent portfolio as we have historically.

We license from Microsoft the Windows Phone operating system as our primary smartphone platform. Microsoft may act independently of us with respect to decisions and communications on that operating system which may have a negative effect on us. Moreover, if Microsoft reduces investment in that operating system or discontinues it, our smartphone strategy would be directly negatively affected by such acts.



## Table of Contents

Microsoft may make strategic decisions or changes that may be detrimental to us. For example, in addition to the Surface tablet, Microsoft may broaden its strategy to sell other mobile devices under its own brand, including smartphones. This could lead Microsoft to focus more on their own devices and less on mobile devices of other manufacturers that operate on the Windows Phone platform, including Nokia.

We may not be able to sufficiently influence Microsoft in bringing the features or functionalities for the Windows Phone platform that we deem most important, or Microsoft may otherwise focus on other areas of its business leading to reduced resources devoted to the Windows Phone platform or failures to implement features or functionalities. This may be heightened if our position in the partnership deteriorates, for instance through other companies using leverage to influence Microsoft, or if Microsoft chooses to develop its own mobile devices, including smartphones, or if Microsoft otherwise develops interests that are contrary to ours.

The implementation and ongoing fostering and development of the Microsoft partnership will require significant time, attention and resources of our senior management and others within the organization potentially diverting their attention from other aspects of our business.

The ongoing fostering and development of the Microsoft partnership may cause disruption and dissatisfaction among employees reducing their motivation, morale and productivity, causing inefficiencies and other problems across the organization and leading to the loss of key personnel and the related costs in dealing with such matters.

We may not have or be able to recruit, retain and motivate appropriately skilled employees to implement successfully our strategies in relation to the Windows Phone platform and to work effectively and efficiently with Microsoft and the related ecosystem.

New business models require access and sometimes possession of consumer data. If we do not have such access within our own control, this may hinder our ability to pursue such opportunities.

We may be required or choose to share with Microsoft personal or consumer data that has been made available to us, which could increase the risk of loss, improper disclosure or leakage of such personal or consumer data or create negative perceptions about our ability to maintain the confidentiality of such data.

New sources of revenue expected to be generated from the Microsoft partnership, such as leveraging the Microsoft advertising assets to build and achieve the required scale for a Nokia-based online advertising platform on our smartphones and increased monetization opportunities for us in services, may not materialize as expected, or at all.

We may not be able to change our mode of working or culture to enable us to work effectively and efficiently with Microsoft in order to realize the stated benefits of the partnership in a timely manner.

The implementation and ongoing fostering and development of the Microsoft partnership may cause dissatisfaction and adversely affect the terms on which we do business with our other partners, including mobile operators, developers, distributors and suppliers, or foreclose the ability to do business with new such partners.

***We may not be able to effectively and smoothly implement the planned changes in operational structure or achieve targeted efficiencies and reductions in operating expenses and we may not be able to retain, motivate, develop and recruit appropriately skilled employees, which may hamper our ability to implement our strategies.***

We have announced a number of changes to our Devices & Services and location-based strategy and operational structure during 2011 and 2012. The implementation of these strategies and changes in



---

**Table of Contents**

operational structure have had and are further expected to have significant impacts on our operations and personnel. Additionally, reorganizations and restructurings result in cash outflows related to such activities, as well as restructuring charges and associated impairments. We may not be able to accurately estimate the restructuring charges and restructuring related cash outflows. We have announced that we target to reduce our Devices & Services operating expenses to an annualized run rate of approximately EUR 3.0 billion by the end of 2013, excluding special items and purchase price accounting related items. This reduction is expected to come from a variety of different sources and initiatives. We cannot guarantee that we will achieve or sustain the targeted benefits, which could result in further restructuring efforts. In addition, we cannot guarantee that the benefits, even if achieved, will be adequate to meet our long-term growth and profitability targets. Additionally, in November 2011 Nokia Siemens Networks announced plans for a strategic shift and restructuring targeted to maintain long-term competitiveness and improve profitability discussed below under risks primarily related to Nokia Siemens Networks.

These strategies also involve changing our mode of working and culture to facilitate speed and agility in innovation, product development and are aimed at increasing the efficiency of execution and bringing more accountability for achieving results. Organizational changes of this nature consume significant time, attention and resources of senior management and others within the organization, potentially diverting their attention from other aspects of our business. Additionally, when such changes are planned and implemented they may cause disruption and dissatisfaction among employees, as well as fatigue due to the cumulative effect of several other reorganizations in the past few years. As a result, employee motivation, morale and productivity may be reduced causing inefficiencies and other problems across the organization and leading to the loss of key personnel and the related costs associated in dealing with such matters. Moreover, our employees may be targeted by our competitors during the implementation of our strategies, and some employees may be more receptive to such offers leading to the loss of key personnel. These factors may have a more pronounced adverse affect due to the cumulative effect of the previous reorganizations. Should we fail to implement new operational structures effectively and smoothly and effect the changes in our mode of working and culture, the efficiency of our operations and performance may be affected, which could have a material adverse effect on our business and results of operations, particularly our profitability.

Our success is dependent on our ability to retain, motivate, develop through constant competence training, and recruit appropriately skilled employees with a comprehensive understanding of our current and future businesses, technologies, software and products. This is particularly important as we need highly-skilled, innovative and solutions-oriented personnel with new capabilities. The potential impacts noted above of the operational changes being implemented throughout our organization, as well as the cumulative effect of several other reorganizations in the past few years, may make it more difficult to attract the new personnel we may need to implement our strategies successfully. We may need to adjust our compensation and benefits policies and take other measures to attract, retain and motivate skilled personnel. This will require significant time, attention and resources of senior management and others within the organization and may result in increased costs. We have encountered, and may encounter in the future, shortages of appropriately skilled personnel, which may hamper our ability to implement our strategies and materially harm our business and results of operations.

Relationships with employee representatives are generally managed at site level and most collective bargaining agreement have been in place for several years. Our inability to negotiate successfully with representatives or failures in our relationships with the representatives could result in strikes by the workers and/or increased operating costs as a result of higher wages or benefits paid to employees as the result of a strike or other industrial action. This may affect our ability to implement planned reorganizations and restructurings or increase the amount of associated time or cost. If our employees were to engage in a strike or other work stoppage, we could experience a significant disruption of operations and/or higher ongoing labor costs.

---

**Table of Contents**

*Our sales and profitability are dependent on the development of the mobile and communications industry, including location-based and other services industries, in numerous diverse markets, as well as on general economic conditions globally and regionally.*

Our sales and profitability are dependent on the development of the mobile and fixed communications industry in numerous diverse markets in terms of the number of new mobile subscribers, the number of existing subscribers who upgrade or replace their existing mobile devices and the number of active users of applications and services on our devices. In certain low penetration markets, in order to support a continued increase in mobile subscribers, we continue to be dependent on our own and mobile network operators' and distributors' ability to increase the sales volumes of lower cost mobile devices and on mobile network operators to offer affordable tariffs and tailored mobile network solutions designed for a low total cost of ownership. In highly penetrated markets, we are more dependent on our own and mobile network operators' ability to successfully introduce value-added products, such as smartphones that drive the upgrade and replacement of devices, as well as ownership of multiple devices. We are also dependent on developers' interest and success in creating value-added applications and other content in our products to achieve differentiation and additional consumer demand.

Our location-based and other services business is dependent on the development of a wide variety of products that use its data, the availability and functionality of such products and the rate at which consumers and businesses purchase those products. Nokia Siemens Networks is dependent on the pace of investments made by mobile network operators and service providers in network infrastructure and related services. If we and the other market participants are not successful in our attempts to increase subscriber numbers, stimulate increased usage or drive upgrade and replacement sales of mobile devices and develop and increase demand for value-added services, or if mobile network operators and service providers invest in the related infrastructure and services less than anticipated, our business and results of operations could be materially adversely affected.

As we are a global company with sales in most countries of the world, our sales and profitability are dependent on general economic conditions globally and regionally. The traditional mobile communications industry has matured to varying degrees in different markets and, consequently, the industry is more vulnerable than before to the negative impacts of deteriorations in global economic conditions. Although the global economy continued to recover and grow in 2012 the growth was slower than in 2011 and in 2010. In 2012, the global economic growth was adversely impacted by the European debt crisis as well as the uncertainty around the implementation and timing of the fiscal consolidation in the United States, casting doubt on the sustainability of the recovery in the various markets where we do business. Indeed, the concerns regarding the ongoing European debt crisis discussed below, whether real or perceived, could result in a recession, prolonged economic slowdown or otherwise negatively affect the general health and stability of the economies in certain regions where we do business. The overall economic uncertainty is making it difficult to estimate for business planning purposes the impact and timing of changes in economic conditions in the various markets where we do business. In 2012, we also witnessed political unrest in various regions where we do business, which adversely affected our sales in those markets.

Uncertainty or deterioration in global economic conditions or a recurrence or escalation of political unrest may result in our current and potential customers and consumers postponing or reducing spending on our products. In addition, mobile network operators may reduce the device subsidies that they offer to the consumers or attempt to extend the periods of contracts that obligate the consumer to use a certain device and postpone or reduce investment in their network infrastructure and related services. The demand for digital map information and other location-based content by automotive and mobile device manufacturers may decline in relation to any further contraction of sales in the automotive and consumer electronics industry. In addition, any further deterioration in the global or regional economic conditions may:

Limit the availability of credit or raise the interest rates related to credit which may have a negative impact on the financial condition, and in particular on the purchasing ability, of some

**Table of Contents**

of our distributors, independent retailers and network operator customers and may also result in requests for extended payment terms, credit losses, insolvencies, limited ability to respond to demand or diminished sales channels available to us.

Cause financial difficulties for our suppliers and collaborative partners which may result in their failure to perform as planned and, consequently, in delays in the delivery of our products.

Increase volatility in exchange rates which may increase the costs of our products that we may not be able to pass on to our customers and result in significant competitive benefit to certain of our competitors that incur a material part of their costs in other currencies than we do; hamper our pricing; and increase our hedging costs and limit our ability to hedge our exchange rate exposure.

Result in inefficiencies due to our deteriorated ability to appropriately forecast developments in our industry and plan our operations accordingly, delayed or insufficient investments in new market segments and failure to adjust our costs appropriately.

Cause reductions in the future valuations of our investments and assets and result in impairment charges related to goodwill or other assets due to any significant underperformance relative to historical or projected future results by us or any part of our business or any significant changes in the manner of our use of acquired assets or the strategy for our overall business.

Cause lowered credit ratings of our short- and long-term debt or their outlook from the credit rating agencies and, consequently, impair our ability to raise new financing or refinance our current borrowings and increase our interest costs associated with any new debt instruments.

Result in failures of derivative counterparties or other financial institutions which could have a negative impact on our treasury operations.

Result in increased and/or more volatile taxes which could negatively impact our effective tax rate, including the possibility of new tax regulations, interpretations of regulations which are stricter or increased effort by governmental bodies seeking to receive taxes more aggressively.

Impact our investment portfolio and other assets and result in impairment.

We are domiciled in Europe and our reporting currency is the euro. We face certain risks in relation to the concerns regarding the European debt crisis, market perceptions concerning the instability of the euro, the potential re-introduction of individual currencies within the eurozone, or the potential dissolution of the euro entirely. Should the euro dissolve entirely, the legal and contractual consequences for holders of euro-denominated obligations would be determined by laws in effect at such time. These potential developments, or market perceptions concerning these and related issues, could adversely affect the value of our euro-denominated assets and obligations. In addition, concerns over the effect of this financial crisis on financial institutions in Europe and globally could cause significant volatility and disruption to the global economy, which could adversely impact our financial results, as well as having an adverse impact on the capital markets generally, and more specifically on the ability of us and our customers, suppliers and lenders to finance their respective businesses, to access liquidity at acceptable financing costs, if at all, on the availability of supplies and materials and on the demand for our products. Full or partial dissolution of the euro would cause additional exchange rate risks related to dividends, foreign cash balances and investments. As the euro is our reporting currency, the dissolution of the euro would result in increased costs to adjust our financial reporting and result in increased volatility in our reported results of operations and financial condition.

We currently believe our funding position to be sufficient to meet our operating and capital expenditures in the foreseeable future. However, adverse developments in the global financial markets



**Table of Contents**

could have a material adverse effect on our financial condition and results of operations and/or our ability to access affordable financing on terms satisfactory to us. For a more detailed discussion of our liquidity and capital resources, see Item 5B. Liquidity and Capital Resources and Note 34 of our consolidated financial statements included in Item 18 of this annual report.

***Our ability to maintain and leverage our traditional strengths in the mobile products market may be impaired if we are unable to retain the loyalty of our mobile operator and distributor customers and consumers as a result of the implementation of our strategies or other factors.***

We have a number of competitive strengths that have historically contributed significantly to our sales and profitability. These include our scale, our differentiating brand, our world-class manufacturing and logistics system, the industry's largest distribution network and our strong relationships with our mobile operator and distributor customers. Going forward, these strengths are critical core competencies that we bring to the partnership with Microsoft and the implementation of our Windows Phone smartphone strategy. Our ability to maintain and leverage these strengths also continues to be important to our competitiveness in the feature phone market. Competing smartphone platforms and vendors have captured increased market share while our position has suffered, leading for instance to a reduction of our bargaining power and our influence with operators and distributors to make decisions that are favorable to us. Our loss of market share has also eroded our perceived strength in the smartphone market by consumers, which may lead consumers to prefer other brands.

As discussed above, the Microsoft partnership and the adoption of Windows Phone as our primary smartphone platform are subject to certain risks and uncertainties. Several of those risks and uncertainties relate to whether our mobile operator and distributor customers and consumers will be satisfied with our current strategy and partnership with Microsoft going forward. If those risks materialize and mobile operator and distributor customers and consumers as a consequence reduce their support and purchases of our mobile products, this would reduce our market share and net sales and in turn may erode our scale, brand, manufacturing and logistics, distribution and customer relations. The erosion of those strengths would impair our competitiveness in the mobile products market and our ability to execute successfully our strategy and to realize fully the expected benefits of the Microsoft partnership.

Also, as result of market developments, competitors' actions or other factors within or out of our control, we may not be able to maintain these competitive strengths that we have benefited from historically. It is also possible that such strengths or some of them become less relevant in the future or are replaced by other types of strengths required for future success in the mobile products market.

***If any of the companies we partner and collaborate with, including Microsoft, were to fail to perform as planned or if we fail to achieve the collaboration or partnering arrangements needed to succeed, we may not be able to bring our mobile products or location-based or other services to market successfully or in a timely way.***

We are increasingly collaborating and partnering with third parties to develop technologies and products for our mobile devices. Additionally, we have outsourced various functions to third parties and are relying on them to provide certain services to us. For instance, in early 2013 we announced plans to streamline our IT organization including the transfer of certain activities and employees to HCL Technologies and TATA Consultancy Services. These arrangements involve the commitment by each party of various resources, including technology, research and development efforts, services and personnel. Today, mobile products are developed in an ecosystem of multiple partnerships with different industry participants where our ability to collaborate successfully with the right partners is critical to our success in creating and delivering mobile products that are preferred by our customers and consumers. Although the objective of the collaborative and partnering arrangements is a mutually

## Table of Contents

beneficial outcome for each party, our ability to introduce new mobile products that are commercially viable and meet our and our customers and consumers' quality, safety, security and other standards successfully and on schedule could be hampered if, for example, any of the following risks were to materialize:

We fail to engage the right partners or on terms that are beneficial to us.

We are unable to collaborate and partner effectively with individual partners and simultaneously with multiple partners to execute and reach the targets set for the collaboration.

The arrangements with the parties we work with do not develop as expected, including their performance, delivery and timing, or include terms which prove unfavorable to us.

The technologies provided by the parties we work with are not sufficiently protected or infringe third parties' intellectual property rights in a way that we cannot foresee or prevent, or private information shared with partners is leaked.

The technologies or products or services supplied by the parties we work with do not meet the required quality, safety, security and other standards or customer needs.

Our own quality controls fail.

We are unable to smoothly and efficiently implement our plans to streamline our IT organization, including the transfer of some activities and employees to HCL Technologies and TATA Consultancy Services, or such partners do not deliver as planned.

The financial condition of our collaborative partners deteriorates which may result in underperformance by the collaborative partners or insolvency or closure of the business of such partners.

Our increasing reliance on collaborative partnering for Nokia-branded or co-branded products may result in more variable quality due to our more limited control which may have a negative effect on our reputation and erode the value of the Nokia brand.

***If the limited number of suppliers we depend on fail to deliver sufficient quantities of fully functional products, components, sub-assemblies, software and services on favorable terms and in compliance with our supplier requirements, our ability to deliver our mobile products profitably, in line with quality requirements and on time could be materially adversely affected.***

Our manufacturing operations depend on obtaining sufficient quantities of fully functional products, components, sub-assemblies, software and services on a timely basis. Our principal supply requirements for our mobile products are for electronic components, mechanical components and software, which all have a wide range of applications in our products.

In some cases, a particular component may be available only from a limited number of suppliers or from a single supplier. In addition, our dependence on third-party suppliers has increased as a result of our strategic decisions to outsource certain activities, for example parts of our own chipset as well as wireless modems research and development, and to expand the use of commercially available chipsets and wireless modems. Suppliers may from time to time extend lead times, limit supplies, change their partner preferences, increase prices, have poor quality or be unable to increase supplies to meet increased demand due to capacity constraints or other factors, which could adversely affect our ability to deliver our mobile products on a timely basis. If we fail to anticipate customer demand properly, an over-supply or under-supply of components and production capacity could occur. In many cases, some of our competitors utilize the same contract manufacturers. If they have purchased capacity ahead of us, this could prevent us from acquiring the needed products, which could limit our ability to supply our customers



or increase our costs.

---

**Table of Contents**

We also commit to certain capacity levels or component quantities which, if unused, will result in charges for unused capacity or scrapping costs. For example, in 2011 and 2012 we recognized allowances for excess component inventory and future purchase commitments related to our devices, and may do so in the future. Increases or decreases especially to Smart Devices inventory related allowances may be required in the future depending on several factors, including consumer demand and continued ramp up particularly related to our new Nokia products with Windows Phone. Additionally, with the proportionally increased bargaining power of other large manufacturers in the mobile device and electronics industry, we may not be able to achieve as favorable terms as in the past resulting in increased costs that we may not be able to pass on to our customers, as well as lapses in the availability of certain components, especially in situations of tight supply.

Moreover, a supplier may fail to meet our supplier requirements, such as, most notably, our and our customers' and consumers' product quality, safety, security and other standards. Consequently, some of our products may be unacceptable to us and our customers and consumers, or may fail to meet our quality controls. In case of issues affecting a product's safety or regulatory compliance, we may be subject to damages due to product liability, or defective products, components or services may need to be replaced or recalled. Also, some suppliers may not be compliant with local laws, including, among others, local labor laws. In addition, a component supplier may experience delays or disruption to its manufacturing processes or financial difficulties or even insolvency or closure of its business, in particular due to difficult economic conditions. Due to our high volumes, any of these events could delay our successful and timely delivery of products that meet our and our customers' and consumers' quality, safety, security and other requirements, or otherwise materially adversely affect our sales and results of operations or our reputation and brand value.

Possible consolidation among our suppliers could potentially result in larger suppliers with stronger bargaining power and limit the choice of alternative suppliers, which could lead to an increase in the cost, or limit the availability, of components that may materially adversely affect our sales and results of operations. The intensive competition among our suppliers and the resulting pressure on their profitability, as well as negative effects from shifts in demand for components and sub-assemblies, may result in the exit of certain suppliers from our industry and decrease the ability of some suppliers to invest in the innovation that is vital for our business. Our ability to source components efficiently and on terms favorable to us could also be adversely affected if component suppliers who also operate in the mobile products market choose to limit or cease the supply of components to other mobile device manufacturers, including us. Further, our dependence on a limited number of suppliers that require purchases in their home country foreign currency increases our exposure to fluctuations in the exchange rate between the euro, our reporting currency, and such foreign currency and, consequently, may increase our costs which we may not be able to pass on to our customers.

Many of the production sites of our suppliers are geographically concentrated, with a majority of our suppliers based in Asia. In the event that any of these geographic areas is affected by any adverse conditions that disrupt production and/or deliveries from our suppliers, our ability to deliver our products on a timely basis could be negatively affected, which may materially adversely affect our business and results of operations.

***We may fail to manage our manufacturing, service creation and delivery as well as our logistics efficiently and without interruption, or fail to make timely and appropriate adjustments, or fail to ensure that our products meet our and our customers' and consumers' requirements and are delivered on time and in sufficient volumes.***

Our product manufacturing, service creation and delivery as well as our logistics are complex, require advanced and costly equipment and include outsourcing to third parties. These operations are continuously modified in an effort to improve efficiency and flexibility of our manufacturing, service

---

**Table of Contents**

creation and delivery as well as our logistics and to produce, create and distribute continuously changing volumes. We may experience difficulties in adapting our supply to meet the changing demand for our products, both ramping up and down production at our facilities as needed on a timely basis; maintaining an optimal inventory level; adopting new manufacturing processes; finding the most timely way to develop the best technical solutions for new products; managing the increasingly complex manufacturing process for our high-end products, particularly the software for those products; adapting our manufacturing processes for the requirements of the Windows Phone platform and the production of Nokia products with Windows Phone; or achieving manufacturing efficiency and flexibility, whether we manufacture our products and create our services ourselves or outsource to third parties.

We may also face challenges in retooling our manufacturing processes to accommodate the production of devices in smaller lot sizes to customize devices to the specifications of certain mobile networks operators or to comply with regional technical standards. Further, we may experience challenges in having our services and related software fully operational at the time they are made available to customers and consumers, including issues related to localization of the services to numerous markets and to the integration of our services with, for example, billing systems of network operators.

We have from time to time outsourced manufacturing of certain products and components to adjust our production to demand fluctuations as well as to benefit from expertise others have in the production of certain mobile technologies. For certain of our mobile products we use contract manufacturers to produce the entire product, which is subject to certain risks involving, for example, the choice of contract manufacturers, the need to change our mode of operation to work effectively and efficiently with such manufacturers and otherwise manage the complexities of such relationships to ensure that the products meet all of the required specifications.

We may also experience challenges caused by third parties or other external difficulties in connection with our efforts to modify our operations to improve the efficiency and flexibility of our manufacturing, service creation and delivery as well as our logistics, including, but not limited to, strikes, purchasing boycotts, public harm to the Nokia brand and claims for compensation resulting from our decisions on where to locate and how to utilize our manufacturing facilities, including the assembly and customization of our devices and products. Such difficulties may result from, among other things, delays in adjusting or upgrading production at our facilities, delays in expanding production capacity, failure in our manufacturing, service creation and delivery as well as logistics processes, failures in the activities we have outsourced, and interruptions in the data communication systems that run our operations. Such failures or interruptions could result in our products not meeting our and our customers and consumers quality, safety, security and other requirements, or being delivered late or in insufficient or excess volumes compared to our own estimates or customer requirements, which could have a material adverse effect on our sales, results of operations, reputation and the value of the Nokia brand.

Most of our mobile products are manufactured and assembled in Asia primarily at our manufacturing facilities, as well as those of our contract manufacturers. As a result, if that region or certain countries in that region are affected by any adverse conditions that disrupt production and/or deliveries from our facilities or those of our contract manufacturers, this could negatively affect our ability to deliver our products on a timely basis, which may materially adversely affect our business and results of operations.

***Any actual or even alleged defects or other quality, safety and security issues in our products, including the hardware, software and content used in our products, could have a material adverse effect on our sales, results of operations, reputation and the value of the Nokia brand.***

Our products are highly complex, and defects in their design, manufacture and associated hardware, software and content have occurred and may occur in the future. Due to the very high production

## **Table of Contents**

volumes of many of our mobile products, even a single defect in their design, manufacture or associated hardware, software and content may have a material adverse effect on our business. Our smartphones, in particular, incorporate numerous functionalities, feature computer-like and consumer electronics-like hardware and are powered by sophisticated software. This complexity and the need for the seamless integration of the hardware, software and services elements and compatibility with other relevant technologies may also increase the risk of quality issues in our smartphones. Further, our mobile product portfolio is subject to continuous renewal which, particularly during periods of significant portfolio renewals, may increase the risk of quality issues related to our products, in particular in smartphones.

Defects and other quality issues may result from, among other things, failures in our own product and service creation and deliveries as well as manufacturing processes, failures of our suppliers to comply with our supplier requirements, or failures in products and services created jointly with collaboration partners or other third parties where the development and manufacturing process is not fully in our control. Prior to shipment, quality issues may cause failures in ramping up the production of our products and shipping them to customers in a timely manner as well as related additional costs or even cancellation of orders by customers. After shipment, products may fail to meet marketing expectations set for them, may malfunction or may contain security vulnerabilities, and thus cause additional repair, product replacement, recall or warranty costs to us and harm our reputation. In case of issues affecting a product's safety, regulatory compliance including but not limited to privacy or security, we may be subject to damages due to product liability, and defective products, components or service offerings may need to be replaced or recalled. With respect to our services, quality issues may relate to the challenges in having the services fully operational at the time they are made available to our customers and consumers and maintaining them on an ongoing basis. The use of our HERE business map data in our customers' products and services, including HERE Maps in our mobile devices, involves a possibility of product liability claims and associated adverse publicity. Claims could be made by business customers if errors or defects result in a failure of their products or services, or by end-users of those products or services as a result of actual or perceived errors or defects in the map database. In addition, business customers may require us to correct defective data, which could be costly, or pay penalties if quality requirements or service level agreements are not satisfied.

We make provisions to cover our estimated warranty costs for our products. We believe that our provisions are appropriate, although the ultimate outcome may differ from the provided level which could have a positive or negative impact on our results of operations and financial condition.

Our mobile products and related accessories are also subject to counterfeiting activities in certain markets. Counterfeit products may erode our brand due to poor quality. Such activities may affect us disproportionately due to our brand recognition in various markets. Furthermore, our products are increasingly used together with hardware, software or service components that have been developed by third parties, whether or not we have authorized their use with our products. However, such components, such as batteries or software applications and content, may not be compatible with our products and may not meet our and our customers' and consumers' quality, safety, security or other standards. Additionally, certain components or layers that may be used with our products may enable them to be used for objectionable purposes, such as to transfer content that might be illegal, hateful or derogatory. The use of our products with incompatible or otherwise substandard hardware, software or software components, or for purposes that are inappropriate, is largely outside of our control and could harm the Nokia brand.

---

**Table of Contents**

***Our operations rely on the efficient and uninterrupted operation of complex and centralized information technology systems and networks. If a system or network inefficiency, malfunction or disruption occurs, this could have a material adverse effect on our business and results of operations.***

Our operations rely on the efficient and uninterrupted operation of complex and centralized information technology systems and networks, which are integrated with those of third parties. All information technology systems are potentially vulnerable to damage, malfunction or interruption from a variety of sources. We are increasingly relying on third parties for the provision of information technology systems and networks; for instance in early 2013, we announced plans to streamline our IT organization including the transfer of certain activities and employees to HCL Technologies and TATA Consultancy Services. We may experience disruptions if our partners do not deliver as we have planned or if we are unable to successfully and smoothly implement the plans to streamline our IT organization.

We pursue various measures in order to manage our risks related to system and network malfunction and disruptions, including the use of multiple suppliers and available information technology security. However, despite precautions taken by us, any malfunction or disruption of our current or future systems or networks such as an outage in a telecommunications network used by any of our information technology systems, or a breach of our cybersecurity, such as a malicious attack, malware or other event that leads to an unanticipated interruption or malfunction of our information technology systems or networks or data leakages, could have a material adverse effect on our brand image, business and results of operations. In addition, if we fail to successfully use our information technology systems and networks, our operational efficiency or competitiveness could be impaired which could have a material adverse effect on our business and results of operations. A disruption, for instance in our mail, music or location-based services, could cause significant discontent among users of our products resulting in claims or deterioration of our brand image.

***Any cybersecurity breach or other factors leading to an actual or alleged loss, improper disclosure or leakage of any personal or consumer data collected by us or our partners or subcontractors, made available to us or stored in or through our products could have a material adverse effect on our sales, results of operations, reputation and value of the Nokia brand.***

Although we endeavor to develop products that meet the appropriate security standards, including with respect to data protection, we or our products and online services, marketing and developer sites may be subject to breaches in our cybersecurity, including hacking, viruses, worms and other malicious software, unauthorized modifications or illegal activities, that may cause potential security risks and other harm to us, our customers or consumers and other end-users of our products. Cybersecurity concerns may affect us disproportionately due to our brand recognition in mobile products. Due to the very high volumes of many of our mobile products, and the evolving nature of services and map data, such events or mere allegations of such events may have a material adverse effect on our business. Additionally, we contract with multiple third parties in various jurisdictions who collect and use certain data on our behalf, for instance for marketing purposes. Although we have processes in place designed to ensure appropriate collection, handling and use of such data, third parties may use the data inappropriately, breach laws in collecting, handling or using such data or leak such data. This could lead to lengthy proceedings or fines imposed on us as well as adverse effects to our reputation and brand value.

In connection with providing our products to our customers and consumers, certain customer feedback, information on consumer usage patterns and other personal and consumer data is collected and stored through our products, in particular with smartphones, either by the consumers or by us or our partners or subcontractors. Our developer sites may also require certain data to be provided by the developers.

---

**Table of Contents**

Loss, improper disclosure or leakage of any personal or consumer data collected by us or that is available to our partners or subcontractors, made available to us or stored in or through our products could result in liability to us and harm our reputation and brand. Moreover, if data held by a developer site is hacked or leaked, the developer may become unwilling to join or remain a part of our developer ecosystems. In addition, governmental authorities may use our networks products to access the personal data of individuals without our involvement, for example, through so-called lawful intercept capability of network infrastructure. Even perceptions that our products do not adequately protect personal or consumer data collected by us, made available to us or stored in or through our products or that they are being used by third parties to access personal or consumer data could impair our sales, results of operations, reputation and brand value.

*Our business and results of operations, particularly our profitability, may be materially adversely affected if we are not able to successfully manage the pricing of our products and costs related to our products and our operations.*

We need to introduce products in a cost-efficient and timely manner and manage proactively the costs and cost development related to our portfolio of products, including component sourcing, manufacturing, logistics and other operations. Historically, our market position and scale provided a significant cost advantage in many areas of our business, such as component sourcing, compared to our competitors, but our ability to leverage that advantage is now more limited. As well, we have benefited from the cost of components eroding more rapidly than the price erosion of our mobile products. Recently, however, component cost erosion has been generally slowing, a trend that has adversely affected our profitability, and may do so in the future. Currency fluctuations may also have an adverse impact on our ability to manage our costs relative to certain of our competitors who incur a material part of their costs in other currencies than we do. If we fail to maintain or improve our market position and scale compared to our competitors across the range of our products, as well as leverage our scale to the fullest extent, or if we are unable to develop or otherwise acquire software, applications and content cost competitively in comparison to our competitors, or if our costs increase relative to those of our competitors due to currency fluctuations, this could materially adversely affect our competitive position, business and results of operations, particularly our profitability.

We need to manage our operating expenses and other internal costs to maintain cost efficiency and competitive pricing of our products. Any failure by us to determine the appropriate prioritization of operating expenses and other costs, to identify and implement on a timely basis the appropriate measures to adjust our operating expenses and other costs accordingly, including the current measures to achieve targeted reductions in our operating expenses, or to maintain reductions could have a material adverse effect on our business, results of operations and financial condition. In particular, our profitability could be adversely affected as we rely on the royalty-based Windows Phone platform as our primary smartphone platform if we are unable to offset our higher cost of sales resulting from our royalty payments to Microsoft with new revenue sources from the Microsoft partnership and a reduction in our operating expenses, particularly our research and development expenses.

Our products are subject to price erosion, both naturally over their life cycle and as a result of various other factors, including increased price pressure. We have also in the past and may continue to increase the proportion of mobile products sold at lower prices to reach wider groups of consumers, particularly in our smartphones. Other factors that may adversely impact the selling price of our mobile devices include the extent to which consumers do not upgrade their mobile devices, postpone replacement or replace their current device with a lower-priced device and the extent to which our regional mix is weighted towards emerging markets where lower-priced products predominate. Moreover, some of our competitors may continue to reduce their prices resulting in significantly lower profit margins than is customary or sustainable on a long-term basis in this industry, which would lower the selling price of our devices if we chose for competitive reasons to lower our prices. Our inability to

---

**Table of Contents**

lower our costs at the same rate or faster than the price erosion of our mobile products could have a material adverse effect on our business and results of operations, particularly our profitability.

***We have operations in a number of countries and, as a result, face complex tax issues and could be obligated to pay additional taxes in various jurisdictions and our actual or anticipated performance, among other factors, could result in allowances related to deferred tax assets.***

We operate our business in a number of countries which involve different tax regimes and the application of rules related to taxation. Applicable taxes, VAT and social taxes for which we make provisions could increase significantly as a result of changes in applicable tax laws in the countries where we operate, the interpretation of those laws by local tax authorities or tax audits performed by local tax authorities. The impact of these factors is dependent on the types of revenue and mix of profit we generate in various countries; for instance, profits from sales of devices or services may have a different tax treatment.

Nokia is subject to income taxes in Finland and in numerous other jurisdictions. Our business and investments globally and especially in emerging market countries are subject to uncertainties, including unfavorable or unpredictable tax law changes (even possibly with retroactive effect), taxation treatment and regulatory proceedings including tax audits. For instance, during early 2013 Nokia became subject to a tax investigation in India, apparently focusing on Indian tax consequences of payments made within Nokia for the supply of operating software from its parent company in Finland. Such proceedings can be lengthy, involve actions that can hinder local operations and the outcome of such proceedings is difficult to predict. Negative developments or outcome in such proceedings could have adverse effects to our cash flows, income statements and to our financial position.

Deferred tax assets recognized on tax losses, unused tax credits and tax deductible temporary differences are dependent on our ability to offset such items against future taxable income within the relevant tax jurisdiction. Deferred tax assets recognized on tax losses, unused tax credits and tax deductible temporary differences are based on our assumptions for future taxable earnings and these may not occur as planned, which may cause the deferred tax asset to be reduced. There can be no assurances that an unexpected reduction in deferred tax assets will not occur. Any such reduction could have an adverse effect on us. Additionally, our earnings have been and may continue to be in the future unfavorably impacted by Nokia Siemens Networks and Devices & Services taxes as no tax benefits are recognized for certain Nokia Siemens Networks and Devices & Services deferred tax items. There may also be unforeseen tax expenses which may have an unfavorable impact on us. As a result and given the inherent unpredictable nature of taxation, there can be no assurance that the estimated long-term tax rate of Nokia will remain at current levels or that cash flows regarding taxes will be stable.

***Our net sales, costs and results of operations, as well as the US dollar value of our dividends and market price of our ADSs, are affected by exchange rate fluctuations, particularly between the euro, which is our reporting currency, and the US dollar, the Japanese yen and the Chinese yuan, as well as certain other currencies.***

We operate globally and are therefore exposed to foreign exchange risks in the form of both transaction risks and translation risks. Our policy is to monitor and hedge exchange rate exposure, and we manage our operations to mitigate, but not to eliminate, the impacts of exchange rate fluctuations. There can be no assurance, however, that our hedging activities will be successful in mitigating the impact of exchange rate fluctuations. In addition, significant volatility in the exchange rates may increase our hedging costs, as well as limit our ability to hedge our exchange rate exposure in particular against unfavorable movements in the exchange rates of certain emerging market currencies and could have an adverse affect on our results of operations, particularly our profitability. Further, exchange rate fluctuations may have an adverse affect on our net sales, costs and results of operations, as well as our competitive position. Exchange rate fluctuations may also make our pricing more difficult as our products may be

**Table of Contents**

re-routed by the distribution channels for sale to consumers in other geographic areas where sales can be made at more favorable exchange rates by those channels. Further, exchange rate fluctuations may also materially affect the US dollar value of any dividends or other distributions that are paid in euro as well as the market price of our ADSs. For a more detailed discussion of exchange risks, see Item 5A. Operating Results Certain Other Factors Exchange Rates and Note 34 of our consolidated financial statements included in Item 18 of this annual report.

***Our products include increasingly complex technologies, some of which have been developed by us or licensed to us by certain third parties. As a result, evaluating the rights related to the technologies we use or intend to use is more and more challenging, and we expect increasingly to face claims that we could have allegedly infringed third parties' intellectual property rights. The use of these technologies may also result in increased licensing costs for us, restrictions on our ability to use certain technologies in our products and/or costly and time-consuming litigation.***

Our products include increasingly complex technologies, some of which have been developed by us or licensed to us by certain third parties. As the amount of such proprietary technologies and the number of parties claiming intellectual property rights continue to increase, even within individual products, as the range of our products becomes more diversified and we enter new businesses, and as the complexity of the technology increases, the possibility of alleged infringement and related intellectual property claims against us continues to rise. The holders of patents and other intellectual property rights potentially relevant to our products may be unknown to us, may have different business models, may refuse to grant licenses to their proprietary rights, or may otherwise make it difficult for us to acquire a license on commercially acceptable terms. There may also be technologies licensed to and relied on by us that are subject to alleged infringement or other corresponding allegations or claims by others which could impair our ability to rely on such technologies. In addition, although we endeavor to ensure that companies that work with us possess appropriate intellectual property rights or licenses, we cannot fully avoid the risks of intellectual property rights infringement created by suppliers of components and various layers in our products, or by companies with which we work in cooperative research and development activities. Similarly, we and our customers may face claims of infringement in connection with our customers' use of our products and such claims may also influence consumer behavior.

In many aspects the business models for mobile services are not yet established. The lack of availability of licenses for copyrighted content, delayed negotiations, or restrictive licensing terms may have a material adverse effect on the cost or timing of content-related services offered by us, mobile network operators or third-party service providers, and may also indirectly affect the sales of our mobile devices.

Since all technology standards, including those we use and rely on, include some intellectual property rights, we cannot fully avoid risks of a claim for infringement of such rights due to our reliance on such standards. We believe that the number of third parties declaring their intellectual property to be relevant to these standards, for example, the standards related to so-called 3G and 4G mobile communication technologies, as well as other advanced mobile communications standards, is increasing, which may increase the likelihood that we will be subject to such claims in the future. As the number of market entrants and the complexity of technology increases, it remains likely that we will need to obtain licenses with respect to existing and new standards from other licensors. While we believe that any such intellectual property rights declared or actually found to be essential to a given standard carry with them an obligation to be licensed on fair, reasonable and non-discriminatory terms, not all intellectual property owners agree on the meaning of that obligation and thus costly and time-consuming litigation over such issues has resulted and may continue to result in the future. While the rules of many standard setting bodies, such as the European Telecommunication Standards Institute,



**Table of Contents**

or ETSI, often apply on a global basis, the enforcement of those rules may involve national courts, which means that there may be a risk of different interpretation of those rules.

From time to time, some existing patent licenses may expire or otherwise become subject to renegotiation. The inability to renew or finalize such arrangements or new licenses with acceptable commercial terms may result in costly and time-consuming litigation, and any adverse result in any such litigation may lead to restrictions on our ability to sell certain products and could result in payments that potentially could have a material adverse effect on our operating results and financial condition. These legal proceedings may continue to be expensive and time-consuming and divert the efforts of our management and technical personnel from our business, and, if decided against us, could result in restrictions on our ability to sell our products, require us to pay increased licensing fees, substantial judgments, settlements or other penalties and incur expenses.

Our patent license agreements may not cover all the future businesses that we may enter; our existing businesses may not necessarily be covered by our patent license agreements if there are changes in our corporate structure or in companies under our control; or our newly-acquired businesses may already have patent license agreements with terms that differ from similar terms in our patent license agreements. This may result in increased costs, restrictions to use certain technologies or time-consuming and costly disputes whenever there are changes in our corporate structure or in companies under our control, or whenever we enter new businesses or acquire new businesses.

Nokia Siemens Networks has access to certain licenses through cross-licensing arrangements with its current shareholders, Nokia and Siemens. If there are changes to Nokia Siemens Networks corporate structure which lead to a deconsolidation of Nokia Siemens Networks from Nokia, Nokia Siemens Networks may be unable to rely on some of its existing licenses. There can be no assurance that such licenses could be replaced on terms that are commercially acceptable.

We make accruals and provisions to cover our estimated total direct IPR costs for our products. The total direct IPR cost consists of actual payments to licensors, accrued expenses under existing agreements and provisions for potential liabilities. We believe that our accruals and provisions are appropriate for all technologies owned by others. The ultimate outcome, however, may differ from the provided level which could have a positive or negative impact on our results of operations and financial condition.

Any restrictions on our ability to sell our products due to expected or alleged infringements of third-party intellectual property rights and any intellectual property rights claims, regardless of merit, could result in material loss of profits, costly litigation, the payment of damages and other compensation, the diversion of the attention of our personnel, product shipment delays or the need for us to develop non-infringing technology or to enter into a licensing agreement. If licensing agreements were not available or are not available on commercially acceptable terms, we could be precluded from making and selling the affected products, or could face increased licensing costs. As new features are added to our products, we may need to acquire further licenses, including from new and sometimes unidentified owners of intellectual property. The cumulative costs of obtaining any necessary licenses are difficult to predict and may over time have a negative effect on our operating results. See Item 4B. Business Overview Devices & Services and Location & Commerce Patents and Licenses and Nokia Siemens Networks Patents and Licenses for a more detailed discussion of our intellectual property activities.

***Our sales derived from, and manufacturing facilities and assets located in, emerging market countries may be materially adversely affected by economic, regulatory, political or other developments in those countries or by other countries imposing regulations against imports to such countries.***

We generate sales from and have manufacturing facilities located in various emerging market countries. Sales from those countries represent a significant portion of our total sales and those countries represent a significant portion of any expected industry growth. Most of our mobile products

---

**Table of Contents**

are manufactured and assembled in emerging market countries, particularly in Asia. Accordingly, economic or political turmoil, military actions, labor unrest, civil unrest, public health and environmental issues or natural and man-made disasters in those countries could materially adversely affect the supply of mobile products and network infrastructure equipment manufactured in those countries, our sales and results of operations. In 2011 and 2012, we witnessed political unrest in various markets where we do business, which adversely affected our sales in those markets, and any reoccurrence or escalation of such unrest could do so in the future.

Further, the economic conditions in emerging market countries may be more volatile than in developed countries, and the purchasing power of our customers and consumers in those countries depends to a greater extent on the price development of basic commodities and currency fluctuations which may render our products too expensive to afford. Our business and investments in emerging market countries may also be subject to risks and uncertainties, including unfavorable or unpredictable taxation treatment, exchange controls, regulatory proceedings, unsound business practices, challenges in protecting our intellectual property rights, nationalization, inflation, currency fluctuations, or the absence of, or unexpected changes in, regulation as well as other unforeseeable operational risks. For example, Nokia Siemens Networks, as well as its competitors, were adversely affected in 2010 by the implementation of security clearance requirements in India which prevented the completion of product sales to customers, and could be similarly affected again in future periods, leading to ongoing uncertainty in that market. See Note 2 to our consolidated financial statements included in Item 18 of this annual report for more detailed information on geographic location of net sales to external customers, segment assets and capital expenditures.

***Changes in various types of regulation, technical standards and trade policies as well as enforcement of such regulation and policies in countries around the world could have a material adverse effect on our business and results of operations.***

Our business is subject to direct and indirect regulation in each of the countries where we, the companies with which we work, and our customers, do business. We develop many of our products based on existing regulations and technical standards, our interpretation of unfinished technical standards or there may be an absence of applicable regulations and standards. As a result, changes in various types of regulations, their application and trade policies applicable to current or new technologies or products may adversely affect our business and results of operations. For example, changes in regulation affecting the construction of base stations and other network infrastructure could adversely affect the timing and costs of new network construction or expansion and the commercial launch and ultimate commercial success of those networks. Export control, tariffs or other fees or levies imposed on our products and environmental, health, product safety and security, consumer protection, money laundering and other regulations that adversely affect the export, import, pricing or costs of our products could also adversely affect our sales and results of operations. For example, copyright collecting societies in several member states of the EU as well as in several other countries claim that due to their capability to play and store copyrighted content, mobile devices should be subject to similar copyright levies that are charged for products such as compact disc, digital video disc or digital audio players.

Any new or increased levies and duties could result in costs which lead to higher prices for our products, which may in turn impair their demand or decrease profitability if such costs cannot be passed to customers. For instance, in Brazil consumer protection agencies are seeking to implement a requirement that certain mobile devices under warranty and claimed to be defective must be immediately replaced at the point of sale. If such measures are introduced, our costs in Brazil would increase. In addition, changes in various types of regulations or their application with respect to taxation or other fees collected by governments or governmental agencies may result in unexpected payments to be made by us, and in response to difficult global economic conditions there may be an increase in the aggressiveness of collecting such fees.

## **Table of Contents**

Our expansion into the provision of services, including the activities of our HERE business, has resulted in a variety of new regulatory issues and subjects us to increased regulatory scrutiny. Moreover, our competitors have employed and will likely continue to employ significant resources to shape the legal and regulatory regimes in countries where we have significant operations. Legislators and regulators may make legal and regulatory changes or interpret and apply existing laws in ways that make our services less appealing to the end users, require us to incur substantial costs, change our business practices or prevent us from offering our services.

In line with changes in strategy, as well as in some cases a difficult political or business environment and an increasingly complicated trade sanctions environment, Nokia and Nokia Siemens Networks have reduced operations and have exited or are in the process of exiting certain countries, such as Iran, or areas. Such actions may trigger additional investigations, including tax audits by authorities or claims by contracting parties. The result of such investigations or claims may be difficult to predict and could lead to lengthy disputes or fines or a settlement.

The impact of changes in or uncertainties related to regulation and trade policies could affect our business and results of operations adversely even though the specific regulations do not always directly apply to us or our products. In many parts of the world where we currently operate or seek to expand our business, local practices and customs may be contrary to our code of conduct and could violate anticorruption laws, including the US Foreign Corrupt Practices Act and the UK Bribery Act 2010 or EU and other applicable trade sanctions and embargoes. Our employees, or others who act on our behalf, could violate policies and procedures intended to promote compliance with anticorruption laws or trade sanctions. Violations of these laws by our employees or others who act on our behalf, regardless of whether we participated in such acts or knew about such acts at certain levels of our organization, could subject us and our employees to criminal or civil enforcement actions, including fines or penalties, disgorgement of profits and suspension or disqualification from sales. Additionally, violations of law or allegations of violations may result in the loss of reputation and business. Detecting, investigating and resolving such situations may also result in significant costs, including the need to engage external advisors, and consume significant time, attention and resources of our management.

As a global company, we are subject to various legislative frameworks and jurisdictions that regulate fraud committed in the course of business operations and trade sanctions and as such the extent and outcome of any proceedings is difficult to estimate. Further, our business and results of operations may be adversely affected by regulation and trade policies favoring the local industry participants as well as other measures with potentially protectionist objectives which host governments in different countries may take, particularly in response to difficult global economic conditions.

***An unfavorable outcome of litigation could have a material adverse effect on our business, results of operations, financial condition and reputation.***

We are a party to lawsuits in the normal course of our business. Litigation can be expensive, lengthy and disruptive to normal business operations and divert the efforts of our management. Moreover, the results of complex legal proceedings are difficult to predict. An unfavorable resolution of a particular lawsuit could have a material adverse effect on our business, results of operations, financial condition and reputation.

We record provisions for pending litigation when we determine that an unfavorable outcome is probable and the amount of loss can be reasonably estimated. Due to the inherent uncertain nature of litigation, the ultimate outcome or actual cost of settlement may vary materially from estimates. We believe that our provisions for pending litigation are appropriate. The ultimate outcome, however, may differ from the provided level which could have a positive or negative impact on our results of operations and financial condition.

---

## **Table of Contents**

See Item 8A7. Litigation for a more detailed discussion about litigation that we are party to.

*Allegations of possible health risks from the electromagnetic fields generated by base stations and mobile devices, and the lawsuits and publicity relating to this matter, regardless of merit, could have a material adverse effect on our sales, results of operations, share price, reputation and brand value by leading consumers to reduce their use of mobile devices, by increasing difficulty in obtaining sites for base stations, by leading regulatory bodies to set arbitrary use restrictions and exposure limits, or by causing us to allocate additional 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 devices. 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 safety standards set by, and recommendations of, public health authorities, present no adverse effect on human health. We cannot, however, be certain that future studies, irrespective of their scientific basis, will not suggest a link between electromagnetic fields and adverse health effects that could have a material adverse effect on our sales, results of operations, share price, reputation and brand value. 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.

Over the past twelve years we have been involved in several class action matters alleging that Nokia and other manufacturers and cellular service providers failed to properly warn consumers of alleged potential adverse health effects and failed to include headsets with every handset to reduce the potential for alleged adverse health effects. All of those cases have been withdrawn or dismissed. In addition, Nokia and several other mobile device manufacturers and network operators were named in twelve lawsuits by individual plaintiffs who allege that radio emissions from mobile devices caused or contributed to each plaintiff's brain tumor. A hearing on the admissibility of the plaintiffs' proffered general causation evidence will likely occur in the fourth quarter of 2013, at the earliest.

Although Nokia products are designed to meet all relevant safety standards and recommendations globally, we cannot guarantee we will not become subject to product liability claims or be held liable for such claims or be required to comply with future regulatory changes in this area that could have a material adverse effect on our business. Even a perceived risk of adverse health effects of mobile devices or base stations could have a material adverse effect on us through a reduction in sales of mobile devices or increased difficulty in obtaining sites for base stations.

### **Nokia Siemens Networks**

In addition to the risks described above, the following are risks primarily related to Nokia Siemens Networks that could affect Nokia.

*Nokia Siemens Networks' sales and profitability depend on its success in the mobile broadband infrastructure and related services market. Nokia Siemens Networks may fail to effectively and profitably adapt its business and operations in a timely manner to the increasingly diverse service needs of its customers in that market.*

A key component of Nokia Siemens Networks strategy to focus on the mobile broadband infrastructure and related services market is the provision of related essential services which it believes will be a key driver of general sales and profitability. If Nokia Siemens Networks is not successful in implementing its services business strategy and achieving the desired outcomes in a timely manner or if the mobile broadband services market fails to develop in the manner currently anticipated by it, or if there are

## Table of Contents

unfavorable variations in its product and service mix towards lower margin products or services, this could have a material adverse effect on our business, results of operations, particularly profitability, and financial condition.

Nokia Siemens Networks' strategy to focus on mobile broadband infrastructure and services is subject to risks and uncertainties, including:

Nokia Siemens Networks' ability to adapt its policies and procedures to the additional emphasis on a services business model.

Nokia Siemens Networks' ability to recruit and retain skilled personnel.

Nokia Siemens Networks' ability to successfully develop market recognition of its business as a leading provider of software and service support in the mobile broadband infrastructure industry.

Nokia Siemens Networks' ability to maintain efficient and low-cost operations.

Delays in implementing relevant initiatives.

Further consolidation of its customers.

Increased competition.

If Nokia Siemens Networks' fails to implement its strategy successfully, its market share may decline which could result in the loss of scale benefits and reduce competitiveness and its financial performance may deteriorate.

The market may develop in directions that leave Nokia Siemens Networks deficient in certain technologies and industry areas that impact its overall competitiveness.

Certain customers who currently buy services and products from Nokia Siemens Networks that are not regarded as core may choose to turn to alternative vendors to maintain end-to-end service from their suppliers.

The development and implementation of Nokia Siemens Networks' strategy has consumed and will continue to consume significant time, attention and resources of its management.

***Competition in the mobile broadband infrastructure and related services market is intense. Nokia Siemens Networks may be unable to maintain or improve its market position or respond successfully to changes in the competitive environment.***

The competitive environment in the mobile broadband infrastructure and related services market continues to be intense and is characterized by equipment price erosion, a maturing of industry technology and intense price competition. Moreover, mobile operators' cost reductions are reducing the amount of available business resulting in increased competition and pressure on pricing and profitability. Overall, participants in this market compete with each other on the basis of product offerings, technical capabilities, quality, service and price.

Nokia Siemens Networks competes with companies that have larger scale and historically higher margins affording such companies more flexibility on pricing, as well as companies that may have stronger customer finance possibilities due to internal policies or governmental

support, for example in the form of trade guarantees, allowing them to offer products and services at very low prices or with attractive financing terms. Nokia Siemens Networks also faces increasing competition from competitors from China, which endeavor to gain market share for instance by leveraging their low-cost advantage in tenders for customer contracts. Competition for new communication service provider customers as well as for new infrastructure deployments is particularly intense and focused on price. In addition, new

---

**Table of Contents**

competitors may enter the industry as a result of acquisitions or shifts in technology. If Nokia Siemens Networks cannot respond successfully to the competitive requirements in the mobile broadband infrastructure and related services market, our business and results of operations, particularly profitability, and financial condition may be materially adversely affected.

Nokia Siemens Networks seeks to increase sales in geographic markets in which price competition is less intense. If Nokia Siemens Networks is not successful in increasing its sales in those markets or the price competition in those markets intensifies as a result of the entry into those markets of low-cost competitors, price reductions by existing competitors or otherwise, our business, sales, results of operations, particularly profitability, and financial condition may be materially adversely affected.

***Nokia Siemens Networks restructuring plan to improve financial performance and competitiveness may not lead to sustainable improvements in Nokia Siemens Networks overall competitiveness and profitability, and it may be unable to otherwise continue to reduce operating expenses and other costs. Additionally, changes in the ownership structure of Nokia Siemens Networks could have an adverse effect on Nokia Siemens Networks or us.***

In November 2011, Nokia Siemens Networks announced a new strategy, including changes to its organizational structure and an extensive global restructuring program, aimed at improving its competitiveness and profitability. The restructuring program also includes a target to reduce Nokia Siemens Networks annualized operating expenses and production overheads, excluding special items and purchase price accounting related items, by more than EUR 1 billion by the end of 2013, compared to the end of 2011. Together with a range of productivity and efficiency measures, Nokia Siemens Networks has targeted headcount reductions intended to align the workforce with its strategy. Nokia Siemens Networks will also continue to target areas such as real estate, information technology, product and service procurement costs, overall general and administrative expenses, and a significant reduction in suppliers in order to further lower costs and improve quality. The execution of its restructuring program is subject to certain risks and uncertainties, including:

Developing and implementing the restructuring plan have consumed and will continue to consume significant time, attention and resources of management.

Personnel reductions may result in reduced productivity and dissatisfaction and loss of morale among employees and lead to loss of key personnel. These factors may have a more pronounced adverse impact due to prior restructuring measures. Although Nokia Siemens Networks has not experienced strikes in the past, it may face labor unrest, strikes or work stoppages as a result of increased dissatisfaction among its employees resulting from the ongoing and past restructuring measures.

There can be greater than expected difficulties from legal, regulatory or other matters that limit Nokia Siemens Networks ability to implement the restructuring as planned or adversely impact the associated costs.

If Nokia Siemens Networks fails to implement its restructuring plan successfully or to otherwise reduce its operating expenses and other costs on an ongoing basis, its market share may decline which could result in the loss of scale benefits and reduce competitiveness and its financial performance may deteriorate.

The costs, cash outflows and charges related to the implementation of the restructuring plan, including the planned personnel reductions, divestments of non-core businesses, the termination of unprofitable contracts and exiting certain countries, such as Iran, or areas may be greater than currently estimated.

Nokia Siemens Networks cannot guarantee that it will achieve or sustain the targeted benefits, which could result in further restructuring efforts. In addition, Nokia Siemens Networks cannot guarantee that the benefits, even if achieved, will be adequate to meet its long-term growth and profitability targets.

---

## **Table of Contents**

Beginning on April 3, 2013, certain restrictions on the transfer of Nokia's and Siemens' interests in Nokia Siemens Networks expire and certain other provisions relating to the transfer of such interests come into effect. Otherwise, the arrangements between Nokia and Siemens as shareholders of Nokia Siemens Networks will remain in effect as originally agreed. There can be no assurances, however, that the ownership of Nokia Siemens Networks will, or will not, change in the future. We cannot exclude the possibility that the expiration of these restrictions, or any plans for changes or actual changes that alter the ownership structure of Nokia Siemens Networks, would not have an adverse effect on Nokia Siemens Networks or us.

***Nokia Siemens Networks may fail to effectively and profitably invest in new competitive products, services, upgrades and technologies and bring them to market in a timely manner.***

The mobile broadband infrastructure and related services market is characterized by rapidly changing technologies, frequent new solutions requirements and product feature introductions and evolving industry standards.

Nokia Siemens Networks' success depends to a significant extent on the timely and successful introduction of new products, services and upgrades of current products to comply with emerging industry standards and to address competing technological and product developments carried out by its competitors. The research and development of new and innovative technologically-advanced products, including the introduction of new radio frequency technologies, as well as upgrades to current products and new generations of technologies, is a complex and uncertain process requiring high levels of innovation and investment, as well as accurate anticipation of technology and market trends. Nokia Siemens Networks may focus its resources on technologies that do not become widely accepted or ultimately prove not to be viable. Nokia Siemens Networks' net sales and operating results will depend to a significant extent on its ability in below areas:

to maintain a product portfolio and service capability that is attractive to its customers;

to enhance its existing products;

to continue to introduce new products successfully and on a timely basis; and

to develop new or enhance existing tools for its services offerings.

Nokia Siemens Networks' failure to effectively and profitably invest in new products, services, upgrades and technologies and bring them to market in a timely manner could result in a loss of net sales and market share and could have a material adverse effect on our results of operations, particularly profitability, and financial condition.

Nokia Siemens Networks also depends on its customers' perception of its technological strengths and weaknesses. For instance, its perceived lack of end-to-end capabilities in areas such as intellectual property transformation and of innovation capabilities and integration into the innovation ecosystem may be seen as weaknesses. Nokia Siemens Networks' relatively small presence in the centers of innovation ecosystems in telecommunications may harm its perceived credibility in terms of innovation capability.

***Nokia Siemens Networks business is dependent on a limited number of customers.***

The networks infrastructure and related services business is dependent on a limited number of customers and consolidation among those customers is continuing. A large number of net sales that Nokia Siemens Networks generates have historically come from a limited number of customers. As consolidation among existing customers continues, it is possible that an even greater portion of Nokia Siemens Networks' net sales will be attributable to a smaller number of large service providers. In addition, mobile operators are increasingly entering into network sharing arrangements, as well as joint procurement agreements, which further reduce the number of networks available for it to service. As a



---

**Table of Contents**

result of this trend and the intense competition in the industry, Nokia Siemens Networks may be required to provide contract terms increasingly favorable to the customer to remain competitive. Any unfavorable developments in relation to or any change in the contract terms applicable to a major customer may have a material adverse effect on our business, results of operations and financial condition.

*Nokia Siemens Networks mobile broadband infrastructure and related services business is dependent on large multi-year contracts.*

Large multi-year contracts, which are typical in the mobile broadband infrastructure and related services business, include a risk that the timing of sales and results of operations associated with those contracts will differ from what was expected when the contracts were entered into. Moreover, such contracts often require the dedication of substantial amounts of working capital and other resources, which may negatively affect our cash flow, particularly in the early stages of a contract, or may require Nokia Siemens Networks to sell products and services in the future that would otherwise be discontinued, thereby diverting resources from developing more profitable or strategically important products and services. Any non-performance by us under those contracts may have a material adverse effect on Nokia Siemens Networks because mobile operators have demanded and may continue to demand stringent contract undertakings, such as penalties for contract violations.

*Nokia Siemens Networks liquidity and its ability to meet its working capital requirements depend on access to available credit under its financing arrangements and other credit lines as well as cash at hand. If those sources of liquidity were to be unavailable, or cannot be refinanced when they mature, this could have a material adverse effect on our business, results of operations and financial condition.*

To provide liquidity and meet working capital requirements, Nokia Siemens Networks is party to certain financing arrangements and has arranged for other committed and uncommitted credit lines. Nokia Siemens Networks' ability to draw upon those resources is dependent upon a variety of factors, including compliance with existing covenants, the absence of any event of default and, with respect to uncommitted credit lines, the lenders' perception of its credit quality. The implementation of Nokia Siemens Networks' strategy and ongoing restructuring plan has resulted in costs, cash outflows and charges. These have had and will continue to have a negative effect on its liquidity position and may be greater than currently estimated. The financial covenants under Nokia Siemens Networks' existing credit facilities require it, among other things, not to exceed certain leverage ratios and to maintain certain interest coverage ratios. Nokia Siemens Networks' ability to satisfy these and other existing covenants may be affected by events beyond its control and there can be no assurance that it will be able to comply with its existing covenants in the future. Any failure to comply with the covenants under any of its existing credit facilities may constitute a default under its other credit facilities and credit lines and may require Nokia Siemens Networks to either obtain a waiver from Nokia Siemens Networks' creditors, renegotiate credit facilities, raise additional financing from existing or new shareholders or repay or refinance borrowings in order to avoid the consequences of a default. There can be no assurance that Nokia Siemens Networks would be able to obtain such a waiver, to renegotiate credit facilities, to raise additional financing from existing or new shareholders or to repay or refinance borrowings on terms that are acceptable to Nokia Siemens Networks, if at all.

In addition, any failure by Nokia Siemens Networks to comply with its existing covenants, any actual or perceived decline in its business, results of operations or financial condition or other factors may result in a deterioration of lenders' perception of its credit quality, which may negatively impact its ability to renegotiate its credit facilities, refinance its borrowings or to draw upon its uncommitted credit lines. Although Nokia Siemens Networks believes it has sufficient resources to fund its operations, if a significant number of those sources of liquidity were to be unavailable, or cannot be refinanced when they mature, this could have a material adverse effect on our business, results of operations and financial condition.

---

**Table of Contents**

Furthermore, in the normal course of business Nokia Siemens Networks enters into a large number of accounts receivables sale agreements with banks and other financial institutions. If Nokia Siemens Networks were not able to sell these accounts receivables in line with its past practice for whatever reason, including, but not limited to, the actual or perceived deterioration of its customers' credit quality, banks' refinancing abilities or prevailing interest rates, this could negatively impact our liquidity and our ability to meet our working capital requirements.

Nokia Siemens Networks has historically received financial support in the form of additional capital from its shareholders Nokia and Siemens. Nokia and Siemens do not, however, guarantee Nokia Siemens Networks' current financial obligations. There is no assurance that Nokia Siemens Networks will receive similar or other financial support from its shareholders in the future.

***Nokia Siemens Networks may be adversely affected by customer financing or extending payment terms it provides to customers.***

Communication service providers in some markets may require their suppliers, including Nokia Siemens Networks, to arrange, facilitate or provide financing in order to obtain sales or business. They may also require extended payment terms. In some cases, the amounts and duration of these financings and trade credits, and the associated impact on Nokia Siemens Networks' working capital, may be significant. Credit markets in general have been tight since 2009. Requests for customer financing and especially extended payment terms have remained at a reasonably high level. However, during 2012, the amount of financing provided directly to our customers has decreased.

Uncertainty in the financial markets may result in more customer financing requests. As a strategic market requirement, Nokia Siemens Networks primarily arranged and facilitated, and plans to continue to arrange and facilitate, financing to a number of customers, typically supported by export credit or guarantee agencies. In the event that those agencies face future constraints in their ability or willingness to provide financing to our customers, it could have a material adverse effect on Nokia Siemens Networks' business. Nokia Siemens Networks has agreed to extended payment terms for a number of customers, and it will continue to do so. Extended payment terms may continue to result in a material aggregate amount of trade credits. Even when the associated risk is mitigated by the fact that the portfolio relates to a variety of customers, defaults in the aggregate could have a material adverse effect on us.

Nokia Siemens Networks cannot guarantee that it will be successful in arranging, facilitating or providing needed financing, including extended payment terms to customers, particularly in difficult financial market conditions. In addition, certain of Nokia Siemens Networks' competitors may have greater access to credit financing, which could adversely affect its ability to compete successfully for business in the networks infrastructure and, indirectly, in the related services sectors. Nokia Siemens Networks' ability to manage its total customer finance and trade credit exposure depends on a number of factors, including its capital structure, market conditions affecting its customers, the level and terms of credit available to Nokia Siemens Networks and to its customers, the cooperation of export credit or guarantee agencies and its ability to mitigate exposure on acceptable terms. Nokia Siemens Networks may not be successful in managing the challenges associated with the customer financing and trade credit exposure that it may have from time to time. While defaults under financings, guarantees and trade credits to Nokia Siemens Networks' customers resulting in impairment charges and credit losses have not been a significant factor for us, these may increase in the future, and commercial banks may not continue to be able or willing to provide sufficiently long-term financing, even when backed by export credit agency guarantees, due to their own liquidity constraints. See Item 5B. Liquidity and Capital Resources Structured Finance, and Note 34(b) to our consolidated financial statements included in Item 18 of this annual report for a more detailed discussion of issues relating to customer financing, trade credits and related commercial credit risk.

---

**Table of Contents**

*Some of the Siemens carrier-related operations transferred to Nokia Siemens Networks have been and continue to be the subject of various criminal and other governmental investigations related to whether certain transactions and payments arranged by some current or former employees of Siemens were unlawful. As a result of those investigations, government authorities and others have taken and may take further actions against Siemens and/or its employees that may involve and affect the assets and employees transferred by Siemens to Nokia Siemens Networks, or there may be undetected additional violations that may have occurred prior to the transfer or violations that may have occurred after the transfer of such assets and employees.*

Public prosecutors and other government authorities in several jurisdictions have conducted and in some jurisdictions continue to conduct criminal and other investigations related to whether certain transactions and payments arranged by some current or former employees of Siemens relating to the carrier-related operations for fixed and mobile networks that were transferred to Nokia Siemens Networks were unlawful. These investigations are part of substantial transactions and payments involving Siemens' former Com business and other Siemens business groups which remain under investigation.

Although the investigations by the German and United States governments were concluded and resolved in December 2008, investigations in other countries continue, as well as individual investigations of Siemens employees and other individuals. Accordingly, until these investigations are complete and the matters are finally resolved, it is not possible to ensure that Siemens employees who may have been involved in the alleged violations of law were not transferred to Nokia Siemens Networks. Nor is it possible to predict the extent to which there may be as yet undetected additional violations of law that occurred prior to the transfer that could result in additional investigations or actions by government authorities. Such actions have, and could include criminal and civil fines, tax liability, as well as other penalties and sanctions. To date, none of the substantial fines imposed on Siemens by regulators in Germany and the United States has applied to Nokia Siemens Networks or Nokia. It is also not possible to predict whether there have been any ongoing violations of law after the formation of Nokia Siemens Networks involving the assets and employees of the Siemens carrier-related operations that could result in additional actions by government authorities. The development of any of these situations could have a material adverse effect on Nokia Siemens Networks and our reputation, business, results of operations and financial condition. In addition, detecting, investigating and resolving such situations have been, and might continue to be, expensive and consume significant time, attention and resources of Nokia Siemens Networks and our management, which could harm our business and that of Nokia Siemens Networks.

The government investigations may also harm Nokia Siemens Networks' relationships with existing customers, impair its ability to obtain new customers, business partners and public procurement contracts, affect its ability to pursue strategic projects and transactions or result in the cancellation or renegotiation of existing contracts on terms less favorable than those currently existing or affecting its reputation. Nokia Siemens Networks has terminated relationships, originated in the Siemens carrier-related operations, with certain business consultants and other third-party intermediaries in some countries as their business terms and practices were contrary to Nokia Siemens Networks' Code of Conduct, thus foregoing business opportunities. It is not possible to predict the extent to which other customer relationships and potential business may be affected by Nokia Siemens Networks' efforts to comply with applicable regulations. Nokia Siemens Networks may also be joined to civil litigation brought by third parties against Siemens carrier-related operations.

Siemens has agreed to indemnify Nokia and Nokia Siemens Networks for any government fines or penalties and damages from civil law suits incurred by either Nokia Siemens Networks or us, resulting from violations of law in the Siemens carrier-related operations that occurred prior to the transfer to Nokia Siemens Networks. Siemens has also agreed, in certain circumstances and subject to the

## **Table of Contents**

fulfillment of certain criteria, to reimburse up to 50% of any lost profit suffered by Nokia Siemens Networks as a result of the violations of law in the Siemens carrier-related operations that occurred prior to the transfer to Nokia Siemens Networks.

We cannot predict with any certainty the final outcome of the ongoing investigations related to this matter, when and the terms upon which such investigations will be resolved, which could be a number of years, or the consequences of the actual or alleged violations of law on our or Nokia Siemens Networks' business, including its relationships with customers.

### **ITEM 4. INFORMATION ON THE COMPANY**

#### **4A. History and Development of the Company**

Nokia is a global leader in mobile communications whose products have become an integral part of the lives of people around the world. Every day, more than 1.3 billion people use their Nokia to capture and share experiences, access information, find their way or simply to speak to one another. Nokia's technological and design innovations have made its brand one of the most recognized in the world. Nokia Siemens Networks, jointly owned by Nokia and Siemens, is one of the leading global providers of telecommunications infrastructure hardware, software and services.

For 2012, our net sales were EUR 30.2 billion (USD 39.8 billion), and we had an operating loss of EUR 2.3 billion (USD 3.0 billion). At the end of 2012, we employed 97,798 people, of which 6,186 were employed by HERE (formerly Location & Commerce) and 58,411 were employed by Nokia Siemens Networks.

We operate a global network of production facilities for mobile products and network infrastructure in eight countries, as well as a broad network of sales, customer service and other operational units. Nokia has made significant investments into research and development and has been one of the leading innovators in the industry over the past two decades. For mobile products, we operate several major research and development and software development facilities, with key sites in China, Finland, Germany and the United States.

#### **History**

During our 148 year history, Nokia has evolved from its origins in the paper industry to become a world leader in mobile communications. Today, Nokia brings mobile products and services to more than one billion people from virtually every demographic segment of the population.

The key milestones in our early history and through to the early part of this century are as follows:

In 1967, we took our current form as Nokia Corporation under the laws of the Republic of Finland. This was the result of the merger of three Finnish companies: Nokia AB, a wood-pulp mill founded in 1865; Finnish Rubber Works Ltd, a manufacturer of rubber boots, tires and other rubber products founded in 1898; and Finnish Cable Works Ltd, a manufacturer of telephone and power cables founded in 1912.

We entered the telecommunications equipment market in 1960 when an electronics department was established at Finnish Cable Works to concentrate on the production of radio-transmission equipment.

Regulatory and technological reforms have played a role in our success. Deregulation of the European telecommunications industries since the late 1980s stimulated competition and boosted customer demand.

---

**Table of Contents**

In 1982, we introduced the first fully-digital local telephone exchange in Europe, and in the same year we introduced the world's first car phone for the Nordic Mobile Telephone analog standard.

The technological breakthrough of GSM, which made more efficient use of frequencies and had greater capacity in addition to high-quality sound, was followed by the European resolution in 1987 to adopt GSM as the European digital standard by July 1, 1991.

The first GSM call was made with a Nokia phone over the Nokia-built network of a Finnish operator called Radiolinja in 1991, and in the same year Nokia won contracts to supply GSM networks in other European countries.

In the early 1990s, we made a strategic decision to make telecommunications our core business, with the goal of establishing leadership in every major global market. Basic industry and non-telecommunications operations including paper, personal computer, rubber, footwear, chemicals, power plant, cable, aluminum and television businesses were divested between 1989 to 1996.

Mobile communications evolved rapidly during the 1990s and early 2000s, creating new opportunities for devices in entertainment and enterprise use. This trend where mobile devices increasingly support the features of single-purposed product categories such as music players, cameras, pocketable computers and gaming consoles is often referred to as digital convergence.

Nokia Siemens Networks began operations on April 1, 2007. The company, jointly owned by Nokia and Siemens AG and consolidated by Nokia, combined Nokia's networks business and Siemens' carrier-related operations for fixed and mobile networks. In network infrastructure, Nokia Siemens Networks acquired the majority of the wireless network infrastructure assets of Motorola Solutions in April 2011.

In early 2011, we announced and began implementing a new strategy for our Devices & Services business, including our partnership with Microsoft to build a new global mobile ecosystem with Windows Phone serving as our primary smartphone platform and changes to our leadership team and operational structure, with the aim of accelerating speed of execution in the intensely competitive mobile products market.

In recent years, we have supported the development of our services and software capabilities with acquisitions of key technologies, content and expertise. For example, in 2008 we acquired NAVTEQ, a leading provider of comprehensive digital map information and related location-based content and services. Now as part of our HERE business, NAVTEQ continues to play a pivotal role in the development of our location-based products and services offering both in terms of its provision of content and as a business-to-business provider of map data. More recently, acquisitions have included Novarra, whose technology has formed the basis of a new, more powerful mobile browser available for our latest feature phones and Asha full touch smartphones, and Scalado, whose technologies are strengthening Nokia's leading position in mobile imaging and supporting our broader strategic goals set out in early 2011, which we describe below in Item 4B. Business Overview

As part of our efforts to concentrate on services that we believe are core to our offering, we have also made disposals, including the recent sale of most of our stake in our luxury goods business Vertu. Additionally, since announcing in 2011 a strategy to focus on mobile broadband and services, Nokia Siemens Networks has made a number of divestments of non-core assets, including the sale of its microwave transport business to DragonWave, the sale of its fixed line Broadband Access business to ADTRAN and the divestment of the assets of the non-core IPTV business to Belgacom and Accenture.

---

## **Table of Contents**

### **Organizational Structure and Reportable Segments**

We have three businesses: Devices & Services, HERE (formerly Location & Commerce) and Nokia Siemens Networks, and four operating and reportable segments for financial reporting purposes: Smart Devices and Mobile Phones within our Devices & Services business; HERE; and Nokia Siemens Networks.

Smart Devices focuses on our most advanced products, including Lumia smartphones powered by the Windows Phone operating system.

Mobile Phones focuses on our most affordable products, including Asha full touch smartphones powered by the Series 40 operating system.

HERE develops location-based products and services for a broad range of devices and operating systems, including our Lumia smartphones. As of January 1, 2013, HERE is the new name of our former Location & Commerce business and reportable segment.

Nokia Siemens Networks, jointly owned by Nokia and Siemens and consolidated by Nokia, is a leading global provider of telecommunications infrastructure, with a focus on the mobile broadband market.

Each reportable segment has profit-and-loss responsibility and end-to-end accountability for the full consumer experience, including product development, product management and product marketing.

All of our businesses have recently undertaken major strategic and operational changes with the aim of delivering long-term sustainable growth. These changes have included our announcement in early 2011 of a new strategy for our Devices & Services business, including our partnership with Microsoft to build a new global mobile ecosystem with Windows Phone serving as our primary smartphone platform and changes to our leadership team and operational structure, with the aim of accelerating speed of execution in the intensely competitive mobile products market. In June 2012, we announced a range of additional planned measures aimed at sharpening our strategy, improving our operating model and returning the company to profitable growth. These actions included targeted investments in our Smart Devices and HERE business, and streamlining, reducing and divesting certain operations, as well as headcount reductions, in our Devices & Services business. Since late November 2011, Nokia Siemens Networks has also been implementing a new strategy and restructuring plan to focus on mobile broadband and services.

During 2012, we also manufactured and sold luxury mobile devices under the Vertu brand. We sold most of our shareholding in Vertu, which has more than 450 points of sale globally, to a private equity group in October 2012. We have reported the operating results of Vertu under Devices & Services Other.

For a breakdown of our net sales and other operating results by category of activity and geographical location in 2011, see Item 5 and Note 2 to our consolidated financial statements included in Item 18 of this annual report.

### **Other**

We primarily invest in research and development, sales and marketing and building the Nokia brand. During 2013, we currently expect the amount of capital expenditure, excluding acquisitions, to be approximately EUR 350 million, and to be funded from our cash flow from operations. During 2012, our capital expenditures, excluding acquisitions, totaled EUR 461 million, compared with EUR 597 million in 2011. For further information regarding capital expenditures, see Item 5A. Operating Results, and for a description of capital expenditures by our reportable segments, see Note 2 to our consolidated financial statements included in Item 18 of this annual report.

---

## **Table of Contents**

We maintain listings on two major securities exchanges. The listing venues for our shares are NASDAQ OMX Helsinki, in the form of shares, and the New York Stock Exchange, in the form of American Depositary Shares.

Our principal executive office is located at Keilalahdentie 4, P.O. Box 226, FI-00045 Nokia Group, Espoo, Finland and our telephone number is +358 (0) 7 1800-8000.

### **4B. Business Overview**

In November 2012, we introduced a new brand, HERE, for our location-based products and services and have since been adopting the HERE brand across the portfolio. As of January 1, 2013, HERE is the new name of our former Location & Commerce business and reportable segment and is used in the following discussion. The discussion should be read in conjunction with Item 3D. Risk Factors and Forward-Looking Statements.

### **Devices & Services**

#### ***Market Overview***

Communication with a mobile device has become an integral part of the lives of people around the world. Since the early 1990s, mobile telecommunications penetration has grown rapidly, and today billions of people own a mobile device. Over the same period, what people can do with their mobile device has also undergone fundamental change. The development of more capable and smaller processors and the emergence of the mobile device as a single alternative to an array of one-purpose products such as music players, cameras and pocketable computers have combined with the growth of the Internet and more sophisticated network infrastructure to make mobile devices powerful, must-have consumer products. Demand has also grown for larger handheld Internet-centric computing devices, such as tablets and e-readers, which trade off pocketability for larger screen sizes. Such devices offer access to the Internet over WiFi and cellular networks and, like more conventional mobile products, are increasingly offered in combination with an operator data plan giving the user unlimited or a predefined amount of data using their device. The growing significance of the Internet in communication has meant that the mobile telecommunication, computing, consumer electronics and Internet industries are increasingly converging to form a broader industry encompassing Internet-connected products of varying shapes and sizes.

With respect to conventional mobile devices, it is still commonplace for the market to be characterized in terms of feature phones also sometimes called mobile phones and smartphones. The distinction between these two classes of mobile products is typically rooted in their differing capabilities in terms of software and hardware, the opportunities they provide for third-party application development, the richness of the experience they offer and the volume of data they process. Historically, feature phones have been primarily used for calling and text messaging, while smartphones with the aid of their more capable operating systems and greater computing power have provided opportunities to access the Internet, navigate, record high-definition video, take high-resolution photographs, share media, play video games and more. Today, however, the distinction between these two classes of products is blurring. Increasingly, basic feature phone models, supported by innovations in both hardware and software, are also providing people with the opportunity to access the Internet and applications and, on the whole, offering them a more smartphone-like experience.

Whether smartphones or feature phones, mobile devices geared for Internet access and their accompanying Internet data plans are also becoming increasingly affordable and, consequently, they are becoming attractive to a broader range of consumer groups and geographic markets. A notable recent development has been the increased affordability of devices based on the Android platform, which has enabled some vendors to offer smartphones for below EUR 100, excluding taxes and subsidies, and thus address a portion of the market which has been dominated by more basic feature

**Table of Contents**

phone offerings. While developed and controlled by Google, Android is made available to others free of charge and a significant part of the source code is available as open source software, which has made entry and expansion in the smartphone market easier for a number of device manufacturers which have chosen to join the Android ecosystem. Users of Android-based devices can access and download applications from the Android application store Google Play, run by Google, so many companies deploying Android have focused their software development efforts around a few elements of the user interface they have the ability to shape as well as focused on exploring new hardware form factors, such as tablets, as they seek to differentiate their offering from that of their competitors also using Android, as well as that of competitors using alternative operating systems, including Nokia. However, in general, we believe product differentiation for Android-based products is challenging, leading to increased commoditization of those devices. We also believe that there is increasing fragmentation in the Android ecosystem, meaning that increasing custom versions of the software could weaken interoperability of applications within that ecosystem.

Other major platforms include iOS, a system developed by Apple and deployed on its popular high-end iPhone models, and BlackBerry OS, an operating system developed by BlackBerry (formerly Research In Motion) and deployed on its messaging-focused BlackBerry smartphones. Both Apple and BlackBerry have developed their own application stores through which users of their products can access applications. Apple has also enjoyed success with its iOS-powered iPad tablets, which has helped further grow the iOS ecosystem. Microsoft's Windows Phone, which we have chosen as our primary smartphone platform and which is also deployed by others, is a relatively new entrant into the market. Users of Windows Phone products are served by the Windows Phone Store. Users of devices powered by Symbian, which used to be our primary smartphone platform, and users of Series-40 based Asha full touch smartphone are served by the Nokia Store application store.

Each smartphone platform is based on different technologies and accompanied by its own set of tools with which developers can develop applications. The ease of developing for a platform as well as the potential size of the addressable market and business opportunity are important factors developers and other industry participants such as hardware manufacturers, software providers, publishers, entertainment providers, advertisers and e-commerce specialists consider when deciding where to focus their resources. We believe that, particularly in the smartphone and tablet segments, success for manufacturers is now primarily shaped by their ability to build, catalyze or be part of a competitive ecosystem where these different industry participants are forming increasingly large communities of mutually beneficial partnerships in order to bring their offerings to market. A vibrant ecosystem creates value for consumers, giving them access to a rich and broad range of user experiences. Currently, ecosystems in the smartphone segment are primarily based around the Android and iOS platforms, as well as the Windows Phone and BlackBerry OS platforms.

The emergence of ecosystems has also impacted the mobile products market in other ways. For instance, their growing significance has further reinforced the importance of product design as a means for differentiating offerings from others within the same or a different ecosystem. Additionally, together with the growth of cloud computing where data and services are hosted by remote servers rather than on devices themselves ecosystems are also leading some vendors to pursue a strategy of developing and providing devices and electronic products of different form factors and screen sizes such as smartphones, tablets, smartphone and tablet hybrids sometimes referred to as phablets, personal computers and televisions and software which make them compatible and support their seamless interaction with one another. As consumers acquire combinations of multiple different devices, some may choose to purchase products and services from only one ecosystem or vendor.

In the low-end phone market, other ecosystems have emerged, including that based around Nokia's own Series 40 operating system which powers feature phones and our Asha full touch smartphones.



## **Table of Contents**

A growing number of developers are writing Java-based applications for Series 40 which are available through the Nokia Store. Another ecosystem is the one which is based around mobile solutions chipsets from low-cost reference design chipset manufacturers which have enabled the very rapid and low-cost production of feature phones by numerous manufacturers especially in China and India, which are making the business landscape more competitive, as well as bringing some locally relevant innovations to market.

### ***Segment overview***

Nokia's strategy to generate sustainable long-term growth is centered on the creation of connected products that sense the world. We create products for virtually every demographic and every geography worldwide. Our overarching strategy in Devices & Services, and supported by HERE, has three core elements: (i) to win in smartphones; (ii) to connect the next billion to the Internet and information, especially in key emerging markets; and (iii) to continue to invest in future disruptions through long-term exploratory research into the future of mobility and computing.

### ***Smart Devices***

Our Smart Devices business unit focuses on our most advanced products, including smartphones powered by the Windows Phone operating system. The business unit has profit-and-loss responsibility and end-to-end accountability for the full consumer experience, including product development, product management and product marketing. Nokia's portfolio of smartphones covers price points ranging from around EUR 140 to more than EUR 500, excluding taxes and subsidies. During 2012, our Smart Devices unit shipped approximately 35 million smartphones.

Smart Devices makes products based on the Windows Phone operating system, which is developed by Microsoft. In 2011, we commenced our partnership with Microsoft that brings together our respective complementary assets and expertise to build a new global mobile ecosystem for smartphones. The goal for both partners is that by bringing together our complementary assets in software, search, maps, location-based services, e-commerce, social networking, entertainment, unified communications and advertising, we can jointly create an entirely new consumer proposition.

Since entering into the partnership with Microsoft, we have brought to market a number of Windows Phone-based devices under the Lumia name, with the first wave of devices based on an iteration of the Windows Phone operating system called Windows Phone 7. In late 2012, we introduced our first smartphones based on Windows Phone 8, which, for the first time, is based on many of the same core technologies as its sister software Windows 8, which is used to power personal computers and tablets. With Windows Phone 8 and Windows 8 sharing many of the same core technologies, applications can more easily be ported between the two platforms compared to previous versions. We believe this will attract more developers and consumers who want a similar experience across their personal computer, tablet and smartphone.

Our first Windows Phone 8 products, introduced in late 2012, are the Nokia Lumia 620, a compact, colorful smartphone that is also the most affordable of the range; the Lumia 820, which brings high-end smartphone innovation like wireless charging, super-sensitive touch displays and new augmented reality experiences to a midrange price point; and the Lumia 920, the flagship Windows Phone 8 smartphone and our leading imaging device, bringing optical image stabilization to a Nokia product for the first time. During the beginning of 2013, we have also introduced the Lumia 520, the most affordable of the range, and the Lumia 720, which delivers high-end camera performance at a mid-range price point. All these products also bring consumers several additional benefits offered by the Windows Phone 8 software, including:

multi-core processors, NFC (near field communication) technology, and high screen resolutions;

## Table of Contents

a personal smartphone experience, with a start screen the user can tailor to his or her own requirements. The start screen displays animated Live Tiles for real-time updates on the things that matter to the user;

PeopleHub, which automatically links together contacts from the user's social networks, enabling the user to see all his or her contacts in one place;

the ability to synchronize content between smartphones running Windows Phone 8, personal computers and tablets running Windows 8, and Xbox, which means files, music, pictures and video can be accessed in whichever way is most convenient, including through Skydrive, Microsoft's cloud storage service.

Internet Explorer 10 for fast, safe browsing;

Microsoft Office applications, including Word, PowerPoint, Excel and OneNote, which are all built into the platform;

HERE location-based products and services experiences, including HERE Drive navigation; and

a growing range of third-party applications in Windows Phone Store. As of March 2013, there were more than 130 000 applications in the Windows Phone Store, compared with 7000 in early 2011.

Alongside these benefits of Windows Phone 8, Nokia Lumia smartphones provide several key points of differentiation versus competing smartphones running Windows Phone as well as other platforms, including Android and iOS. Our current range of Lumia products offers the following points of differentiation:

*our industrial design.* We use premium materials and precision manufacturing to provide well-built, attractive smartphones that offer robustness and durability;

*our leading location-based experiences,* including HERE Maps, as well as HERE Transport and HERE City Lens, the last two of which are exclusive to Lumia users.

*Nokia Music,* a digital music service that offers free unlimited streaming via hundreds of ad-free music channels on or off-line; and

*our industry-leading imaging.* Our imaging technologies are making it possible for a smartphone camera such as that in our flagship Lumia 920 to take the kind of images and video usually only seen on single purpose cameras and video cameras. We also offer users a number of unique imaging experiences we have developed, such as Cinemagraph and Photobeamer. Our flagship imaging experiences are represented by PureView.

We also work closely with Microsoft to influence many development priorities, such as in the areas of languages and technical requirements.

During our transition to Windows Phone, we have continued to ship devices based on an older smartphone operating system called Symbian. However, after a decade-long history as part of Nokia's portfolio, we are not creating any new devices based on Symbian. The Nokia 808 PureView, a device which showcases some of our imaging capabilities and which came to market in mid-2012, was the last Symbian device from Nokia. We do not expect to sell any significant volumes of Symbian devices in 2013.

## Edgar Filing: NOKIA CORP - Form 20-F

Smart Devices has dedicated research and development teams addressing our short to medium-term needs in product development. To support the execution of our strategy, we are working to ensure that each of our research and development sites for our smartphones has a clear focus and that there is greater co-location of our teams. The major Smart Devices research and development sites are in Beijing in China, San Diego in the United States and in Salo, Tampere and Greater Helsinki in Finland.

---

## **Table of Contents**

### ***Mobile Phones***

Our Mobile Phones business unit focuses on the area of mass market entry and feature phones as well as affordable smartphones. The unit has profit-and-loss responsibility and end-to-end accountability for the full consumer experience, including development, management and marketing of products, services and applications. During 2012, our Mobile Phones unit shipped approximately 300 million devices.

In Mobile Phones, our strategy focuses on leveraging our innovation and strength in growth markets to provide people with an affordable Internet experience on their mobile device. Our Mobile Phones team creates products for three consumer segments: First, Feature and Smart.

*First* covers very affordable products such as the Nokia 101, a dual SIM music phone which costs about EUR 25, excluding taxes and subsidies. During the beginning of 2013, we have also introduced the Nokia 105, the most affordable mobile phone in the range, offering a bright color screen, FM radio, long battery life and available in different colors for EUR 15, excluding taxes and subsidies. The target consumer for our *First* products is someone seeking their first mobile experience, an ability to use their phone as a music player, a durable and robust product, good battery life and for whom price is a critical factor. Almost 90% of the world's population lives within range of a mobile signal, but there are many people who do not yet own a mobile device.

*Feature* covers products, such as the Nokia 206, which costs approximately EUR 46, excluding taxes and subsidies. The target consumer for our *Feature* products is someone seeking a product that offers good quality staple features, good battery life and easy and affordable access to the Internet, particularly to Facebook and Twitter. Our latest products in this segment uses a powerful new cloud-enabled browser which compresses data and can thus reduce the cost and increase the speed of browsing the web, giving peace of mind to consumers who do not wish to purchase a data plan or exceed the limit on their data plan. Many people buying our *Feature* products are using them to access the Internet for the first time. Additionally, they are seeking a product that is durable and robust and which brings them the benefit of Nokia's expertise and technologies in call quality, reception and data connectivity.

*Smart* covers products such as the Nokia Asha 311, a smartphone with a full touch, capacitive display, a fluid swipe user interface, a power processor, 3.2 megapixel camera and which costs EUR 92, excluding taxes and subsidies. The target consumer for our *Smart* products is someone seeking an affordable smartphone whose hardware, software and services are optimized for and not compromised by low price points. Our *Smart* products, besides being very functional, also offer some distinctive and stylish designs that share similarities to those in our Lumia portfolio of smartphones.

While Mobile Phones targets consumers in three segments, the whole portfolio has, over time, become smarter and richer in terms of experiences and features. In late 2011, we introduced the Asha product name for certain models which provide smartphone-like experiences. During 2012, we continued to support the Asha range with technological and design innovations, including launching the first full touch models. They also offer a fluid swipe user interface and an open environment for third-party application development characteristics which have helped earn the complete Asha full touch range full smartphone classification from global market research companies and analysts.

Mobile Phones has dedicated research and development teams addressing our short to medium-term needs in product and services development. During 2011 and 2012, we made changes to our research and development operations for Mobile Phones to reflect and support our strategy. These changes included, in 2012, the closure of our facility in Ulm, Germany. Over the last two years, we have worked

## **Table of Contents**

to ensure that each research and development site has a clear focus and that there is greater co-location of our teams. The major Mobile Phones research and development sites are in Beijing in China and Oulu in Finland.

### ***Technology Research***

Nokia has a long and rich history of innovation and technology leadership, and its innovations through technology research have transformed the lives of billions of people around the world.

Longer-term, more exploratory technology development comes under the scope of Nokia's CTO (Chief Technology Office) organization, which also includes Nokia's research unit, the Nokia Research Center, as well as the compatibility and industrial collaboration unit. The teams in these units explore next-generation mobile technology innovations in areas such as sensor technology, materials, imaging and connectivity and set the long-term research agenda for Nokia.

The CTO organization looks beyond the technology development of current products, services, platforms and technologies to the creation of assets and competencies in technology areas that we believe will be vital to our future success. Through this work, the CTO organization is a major contributor to Nokia's standard essential patents. For example, inventions have been presented in the latest developments in 4G LTE wireless communication technologies, or in a new sharing technology called Slam for quick and easy photo sharing using Bluetooth at close proximity.

The CTO organization operates in a number of locations, including sites in Finland, the United States, the United Kingdom and China. One of our key mode of operations for our research is open innovations and it collaborates with tens of universities and research institutes around the world.

The costs related to our long-term technology research related activities are reported under Devices & Services Other.

### ***Sales and marketing***

Nokia has a large distribution network, with hundreds of thousands of points of sale globally alongside our own online retailing presence. We have a significant distribution and care network, particularly in China, India, and the Middle East and Africa.

We derive our net sales of mobile devices primarily from sales to mobile network operators, distributors, independent retailers, corporate customers and consumers. However, the total device volume that goes through each channel varies by region. In 2012, sales in North America and Latin America were predominantly to operator customers, sales in Asia-Pacific, China and Middle East and Africa were predominantly to distributors, and sales in Europe were more evenly distributed between operators and distributors.

Our marketing activities play a fundamental role in our effort to bring people great mobile products. Our activities are designed to create loyalty, enhance the Nokia brand and drive more sales. In our marketing, we focus on expanding awareness of the key points of differentiation in our products and services, such as the imaging capabilities of our high-end smartphones or the robust quality of our most affordable feature phones. During 2012, we continued to shift towards a single brand visual identity in our marketing, presenting a clear, simple and coherent image of Nokia. We also continued to expand our digital marketing efforts, including engaging consumers through our own social media channels, including Nokia Conversations, which is among the most popular company blogs. We are among the top brands in the world according to the Interbrand annual rating of 2012 Best Global Brands.

**Table of Contents*****Production of mobile devices***

For the production and customization of mobile devices, we operate facilities in Asia, Europe and Latin America.

In connection with the implementation of our strategy, we have made a number of changes to our operations resulting in the closure or planned closure and reconfiguration of certain Nokia facilities. In late 2011, we closed our facility in Cluj, Romania, before selling the site to household appliances group De'Longhi in early 2012. Later in 2012, we made changes to our facilities in Komárom in Hungary and Reynosa in Mexico, shifting product assembly to other Nokia sites to ensure these two facilities focused on software and sales package customization. We also closed our production facility in Salo in Finland. Today, we carry out most of our product assembly at our Asian facilities which have greater proximity to our key component suppliers.

The following table shows our major manufacturing facilities as of December 31, 2012.

<b>Country</b>	<b>Location</b>	<b>Product focus</b>	<b>Production focus</b>
BRAZIL	Manaus	Mobile Phones and Smart Devices	Assembly as well as software and sales package customization
CHINA	Beijing	Smart Devices	Assembly as well as software and sales package customization
	Dongguan	Mobile Phones	Assembly as well as software and sales package customization
HUNGARY	Komárom	Smart Devices	Software and sales package customization
INDIA	Chennai	Mobile Phones	Assembly as well as software and sales package customization
MEXICO	Reynosa	Smart Devices	Software and sales package customization
REPUBLIC OF KOREA	Masan	Smart Devices	Assembly as well as software and sales package customization

Nokia is planning to establish a new manufacturing facility near Hanoi in northern Vietnam. The targeted opening of the facility is the second half of 2013. The new manufacturing site is being established to produce our most affordable smartphones and feature phones.

Our manufacturing facilities form an integrated global production network, giving us flexibility to adjust our production volumes to fluctuations in market demand in different regions. Each of our plants employs state-of-the-art technology and is highly automated. A significant part of the production of a mobile device includes software and sales package customization or the integration of software and content a process which is usually done according to the specific requirements of our customers and the needs of individual markets.

Our mobile device manufacturing and logistics are complex and require advanced and costly equipment. From time to time, we outsource the manufacturing of certain aspects of certain products and components to adjust our production to demand fluctuations, as well as to benefit from expertise others have in the production of certain mobile technologies. For certain of our devices, we use contract manufacturers to produce the entire product. During 2012, the vast majority of our manufacturing needs were met by our own production network.

## **Table of Contents**

We provide additional information about our production facilities in Item 4D. Property, Plants and Equipment.

### ***Strategic sourcing and partnering***

In line with industry practice, Devices & Services sources components for our mobile devices from a global network of suppliers. Those components include electronic components, such as chipsets, integrated circuits, microprocessors, standard components, printed wiring boards, sensors, memory devices, cameras, audio components, displays, batteries and chargers and mechanical components, such as covers, connectors, key mats, antennas and mechanisms. Such hardware components account for the majority of our overall spending on sourcing.

We also source software, applications and content from a global network of third-party companies, application developers, content providers and industry-leading technology providers. For instance, we obtain content from commercial partners in the music industry to offer an extensive catalog of digital music through Nokia Music, our digital music store, and content from travel guide publishers to expand and enhance HERE Maps.

### ***Patents and licenses***

A high level of investment by Devices & Services in research and development and rapid technological development has meant that the role of intellectual property rights, or IPR, in our industry has always been important. Digital convergence, multiradio solutions, alternative radio technologies and differing business models combined with large volumes are further increasing the complexity and importance of IPR.

The convergence has for a long time meant that complete products integrate a number of technologies, and that multiple parties contribute to the development of new technologies. The detailed designs of our products are based primarily on our own research and development work and design efforts, and generally comply with all relevant and applicable public standards. We seek to safeguard our investments in technology through adequate intellectual property protection, including patents, design registrations, trade secrets, trademark registrations and copyrights. In addition to safeguarding our technology advantage, they protect the unique Nokia features, look and feel and brand.

We have built our IPR portfolio since the early 1990s. During the last two decades, we have invested approximately EUR 50 billion in research and development and have approximately 10 000 patent families. As a leading innovator in wireless technologies, we have built one of the mobile products market's strongest and broadest IPR portfolios, extending across all major cellular and mobile communications standards, software and services as well as hardware and user interface features and functionalities. We receive IPR income from certain handset and other vendors. IPR income is reported under Devices & Services Other.

We are a world leader in the development of the wireless technologies of GSM/EDGE, 3G/WCDMA, HSPA, LTE and TD-SCDMA, and we have a robust patent portfolio in all of those technology areas, as well as for CDMA2000, WiMAX and WiFi. We believe our standards-essential patent portfolio is one of the strongest in the industry.

Our products include increasingly complex technology involving numerous patented, standardized or proprietary technologies. The possibility of alleged infringement and related intellectual property claims against us continues to rise as the number of entrants in the market grows, our product range becomes more diversified, our products are increasingly used together with hardware, software or service components that have been developed by third parties, we enter new businesses and the complexity of technology increases. As new features are added to our products, we are also agreeing upon licensing terms with a number of new companies in the field of new evolving technologies. We believe companies

---

**Table of Contents**

like Nokia with a strong IPR position, cumulative know-how and IPR expertise can have a competitive advantage in the converging industry and in the increasingly competitive marketplace.

***Competition***

The mobile products market continues to undergo significant changes, most notably due to the broad convergence of the mobile telecommunications, computing, consumer electronics and Internet industries. With the traditional feature phone market continuing to mature, the major part of volume and value growth in the industry has been in smartphones offering access to the Internet. Additionally, other large handheld Internet-centric computing devices, such as tablets, smartphone and tablet hybrids, and e-readers, have emerged, trading off pocketability and some portability for larger screen sizes, but in many cases offering both cellular and non-cellular connectivity in the same way conventional mobile devices do. Larger-screened Internet-enabled devices have captured a significant share of consumer spending across the broader market for mobile products and digital content and in different ways. For example, some competitors seek to offer hardware at a low price to the consumer with the aim of capturing value primarily through the sale of content.

The increasing demand for wireless access to the Internet has had a significant impact on the competitive landscape of the market for mobile products and digital content. Companies with roots in the mobile devices, computing, Internet and other industries are increasingly competing directly with one another, making for an intensely competitive market across all mobile products and services. At the same time, and particularly in the smartphone and tablets segments, success for hardware manufacturers is increasingly shaped by their ability to build, catalyze or be part of a competitive ecosystem, where different industry participants, such as hardware manufacturers, software providers, developers, publishers, entertainment providers, advertisers and e-commerce specialists are forming increasingly large communities of mutually beneficial partnerships in order to bring their offerings to the market. A vibrant ecosystem creates value for consumers, giving them access to a rich and broad range of user experiences. As a result, the competitive landscape is increasingly characterized in terms of a war of ecosystems rather than a battle between individual hardware manufacturers or products.

At the heart of the major ecosystems is the operating system and the development platform upon which devices are based and services built. In smartphones, our competitors are pursuing a wide range of strategies. Many device manufacturers are utilizing freely available operating systems, the development of which is not paid for from device sales revenue or by software license fees. The availability of Google's Android platform has made entry into and expansion in the smartphone market easier for a number of hardware manufacturers which have chosen to join the Android ecosystem, especially at the mid-to-low price points of the smartphone market. For example, some competitors' offerings based on Android are available for purchase by consumers for below EUR 100, excluding taxes and subsidies, and thus address a portion of the market which has been traditionally dominated by feature phone offerings, including those offered by Nokia. Accordingly, lower-priced smartphones are increasingly reducing the addressable market and lowering the price points for feature phones.

In general, we believe product differentiation with Android is more challenging, leading to increased commoditization of these devices and the resulting downward pressure on pricing. In addition, there is uncertainty in relation to the intellectual property rights in the Android ecosystem, which we believe increases the risk of direct and indirect litigation for participants in that ecosystem. Google, HTC, LG, Motorola, Samsung and Sony are among competitors which have deployed the Android operating system on their smartphones. Samsung is among our strongest competitors, competing with us across a broad range of price points.

Other companies favor proprietary operating systems, including Apple, whose popular high-end iPhone models use the iOS operating system, and BlackBerry (formerly Research in Motion), which deploys



## **Table of Contents**

BlackBerry OS on its mobile devices and recently introduced devices running a new version of its operating system, BlackBerry 10. Both Apple and BlackBerry have developed their own application stores, through which users of their products can access applications.

Apple, which has already gained a strong position in the market for high-end smartphones and tablets, has also used the strength of its ecosystem to further expand its offering of digital content through other interfaces such as television sets. Similarly, Google has sought to extend the Android ecosystem with its Google TV Internet-based television service. Many competitors, including Apple, Google and Samsung, are pursuing a multi-screen strategy and building cloud technologies which enable consumers to access services and content across different sized screens, from mobile devices to tablets, personal computers and televisions.

Nokia offers smartphones based on the Windows Phone operating system. Windows Phone devices can access the Microsoft-run Windows Phone Store for digital content and third-party applications. The Windows Phone operating system is also being deployed on smartphones by others, including HTC, Huawei, Samsung and ZTE. During our continued transition to Windows Phone through 2012, we continued to ship devices based on an older smartphone operating system called Symbian. However, after a decade-long history as part of Nokia's portfolio, we are not creating any new devices based on Symbian.

The significant momentum and market share gains of the global ecosystems around the Android and iOS platforms have increased the competitive barriers to additional entrants looking to build a competing global smartphone ecosystem, such as Nokia with the Windows Phone platform. At the same time, other ecosystems are being built which are attracting developers and consumers, and which may result in potential fragmentation among ecosystem participants and the inability of new ecosystems to gain sufficient competitive scale.

We also face intense competition in feature phones where a different type of ecosystem from that of smartphones is emerging involving very low-cost components and manufacturing processes, with speed to market and attractive pricing being critical success factors. In particular, the availability of complete mobile solutions chipsets from low-cost reference design chipset manufacturers has lowered the barriers of market entry and enabled the very rapid and low-cost production of feature phones by numerous manufacturers in especially China and India, which are gaining significant market share in emerging markets, as well as bringing some locally relevant innovations to market. Such manufacturers have also demonstrated that they have significantly lower gross margin expectations than we do.

We also face competition from vendors of unlicensed and counterfeit products with manufacturing facilities primarily centered around certain locations in Asia and other emerging markets which produce inexpensive devices with sometimes low quality and limited after-sales services that take advantage of commercially-available free software and other free or low-cost components, software and content. In addition, we compete with non-branded feature phone manufacturers, including mobile network operators, which offer mobile devices under their own brand, as well as providers of specific hardware and software layers within products and services at the level of those layers rather than solely at the level of complete products and services and their combinations. In the future, we may face competition from established Internet companies seeking to offer smartphones under their own brand.

Our competitors use a wide range of other strategies and tactics. Certain competitors choose to accept significantly lower profit margins than we are targeting. Certain competitors have chosen to focus on building products and services based on commercially available components and content, in some cases available at very low or no cost. Certain competitors have also benefited from favorable currency exchange rates. Further, certain competitors may benefit from support from the governments of their home countries and other measures which may have protectionist objectives.

---

## **Table of Contents**

### **HERE (formerly Location & Commerce)**

#### ***Market Overview***

The market for location services has undergone significant change in recent years. Access to location services has broadened from personal navigation devices (PNDs) such as those in automobiles and personal computers to mobile devices. Location is now being embedded into almost every part of the mobile experience.

As the race to expand and perfect the delivery of contextual information continues, mobile platform owners have also been increasing investment in geo-location related services to provide relevance, rich information about a location and to help people orient around as well as to and from a location. Mapping is the key underlying user interface to make sense of location services. Nokia and Google are among companies which have been investing in this area for a number of years.

#### ***Segment Overview***

Our HERE business, which through 2012 operated under the Location & Commerce name, develops a range of location-based products and services for consumers, as well as content and platform services for device manufacturers, automobile manufacturers, application developers, Internet services providers, merchants and advertisers. The business has profit-and-loss responsibility and end-to-end accountability for the full consumer experience.

HERE was formed during 2011 through the combination of NAVTEQ, which we acquired in July 2008, with our Devices & Services social location services operations. In November 2012, we introduced a new brand, HERE, for our location-based products and services and have since been adopting the HERE brand across the portfolio. As of January 1, 2013, HERE is the new name of our former Location & Commerce business and reportable segment.

HERE is developing location-based offerings in support of our strategic goals in mobile devices, as well as developing a portfolio of products for the broader Internet ecosystem, including products for Nokia's direct competitors. The business aims to positively differentiate its digital map data and location-based offerings from those of our competitors and create competitive business models for our customers. In the development of the Windows Phone ecosystem, we and Microsoft are bringing together our complementary assets in search, with Nokia's maps offering at the heart of key Microsoft assets such as Bing and AdCenter to form a local search and advertising experience.

HERE's resources are primarily focused on the development of content, the platform and applications.

*Content.* The development of content involves the mapping of the physical world and places such as roads and points of interest, as well as the collection of activity data generated and authorized for use by our users. To further enhance our maps, we are building 3D maps and in late 2012 we further enhanced our 3D map-making capabilities with the acquisition of earthmine, a California-based company whose reality capture and processing technologies will become integral parts of the 3D map making capabilities of HERE.

During 2012, HERE continued to build partnerships with a number of major industry players, particularly in the area of automotive-grade maps content and solutions. We are providing content to partners including Aol, Audi, Bing Maps, BMW, Chrysler, ESRI, Fiat, Ford, Garmin, General Motors, Hyundai, Kia, Mercedes, Nissan, Oracle, Pioneer, PSA, Renault, Toyota and Volkswagen and Yahoo!

*The platform.* The platform, also known in 2012 as the Nokia Location Platform (NLP) and now as the HERE Location Platform, includes the underlying infrastructure of the map and the development tools for Nokia and others to create on top of it. During 2012, among others, Amazon became a HERE Location Platform licensee for maps and geocoding and Ford's research organization selected the

## **Table of Contents**

HERE Location Platform to leverage Nokia's high-quality global location content as well as scalable cloud services and APIs. We also license our platform to partners such as Bing Maps and Yahoo! Maps.

*Applications.* We offer a suite of location applications, which we continue to develop for users of our products and, in some instances, for customers of competing products. These include:

*HERE Maps*, a mobile application that gives people new ways to discover and explore the world around them, as well as enabling them to search for and navigate to addresses and places of interest. We enhance our maps with 3D landmarks, real-time traffic services and precise road geometry for advanced driver assistance systems (ADAS). We offer 196 country maps.

*HERE Drive*, a dedicated in-car navigation application including voice-guided navigation in multiple languages for more than 100 countries, 2D and 3D map views and day and night modes. The latest iteration of HERE Drive includes features such as speed limit warnings even when the user is not using the application. During 2012, we also introduced the My Commute feature for HERE Drive. Available in 26 countries by the end of 2012, My Commute brings users real-time info on traffic flow and incidents on their regular routes.

*HERE Transport*, a mobile application for the Lumia range providing underground, tram, suburban train and bus directions for more than 500 cities in 46 countries.

*HERE City Lens*, an augmented reality application for the Lumia range. HERE City Lens is the first application providing an experience based on LiveSight, a Nokia technology that enables a precise and intuitive augmented reality experience which turns the phone's camera viewfinder into a new way to see information about restaurants, shops, hotels and more overlaid onto the surfaces of buildings around you.

In late 2012, to further extend our location services, we launched a maps application for iOS under the HERE brand. Based on HTML5, it includes offline capabilities, voice-guided walk navigation and public transport directions. The application is available for free download from the Apple App Store. We also commenced a strategic partnership with Mozilla to bring new location experiences to the Firefox OS and we plan to debut a mobile Web version of HERE Maps for the new Firefox OS during 2013. Additionally, in early 2013, we launched an Android OS-based reference application and HERE SDK for Android vendors. This is aimed at enabling partners to create location-based applications for Android devices with Nokia's leading content.

## ***Sales and marketing***

HERE provides content, platform technologies and applications both directly and indirectly to a broad range of customers, including mobile device manufacturers such as Nokia, retail establishments, Internet players, automobile manufacturers and other redistributors. We generate revenues through the sale of content, the licensing of all or parts of the HERE Location Platform and advertising. For example, with respect to advertising, HERE has a partnership with Groupon to bring the offers to our map users.

In late 2012, Nokia introduced the HERE brand for its location products and services and is gradually adopting HERE across the portfolio. With the HERE brand, Nokia aims to extend much of its location offering to new devices and operating systems that reach beyond Nokia.

## ***Production of our map and location-based services***

HERE's resources are primarily focused on the development of content, the platform and applications. We gather data in a variety of ways, including through sophisticated vehicles which collect more than

## **Table of Contents**

1.3 million geocoded data points/second. In most cases, these vehicles are driven by geographic researchers, each of whom is responsible for a particular geographic area which adds a critical human element to our collection methodology. We also gather content from more than 80 000 other sources, such as local governments, local transport networks, logistics companies and expert communities.

We employ around 3 000 professional geographers. The major HERE product development sites are in Berlin in Germany and Burlington, Cambridge and Chicago in the United States.

### ***Patents and licenses***

HERE relies primarily on a combination of copyright laws, including, in Europe, database protection laws, trade secrets and patents to establish and protect its intellectual property rights in its database. HERE protects its database, software and related technology through patents as well as through the terms of license agreements and by confidentiality agreements with its employees, consultants, customers and others.

### ***Competition***

With respect to digital map data and related location-based content, several global and local companies, as well as governmental and quasi-governmental agencies, are making more map data with improving coverage and content, and high quality, available free of charge or at lower prices.

Our HERE business competes with a number of participants:

Google uses an advertising-based model allowing consumers and businesses to use its map data and related services free of charge. Google has continued to leverage Google Maps as a differentiator for Android, bringing certain new features and functionality to the platform. During 2012, Google continued to invest in location content to enrich its Places offering with the purchase of Frommer, a well-known travel guide. That followed the 2011 purchase of Zagat, a popular restaurant guide. These acquisitions demonstrate Google's strategy to invest in owning and creating its own content related to Places and a move away from pure aggregation and indexing of third-party content.

Apple has also sought to strengthen its location assets and capabilities through targeted acquisitions and organic growth. Apple now offers its own mapping service based on maps from TomTom to its users through the latest version of iOS. Apple Maps has displaced Google Maps, which had been pre-loaded on iOS since the iPhone's launch in 2007, although a web version of Google Maps along with Nokia's own HERE Maps is available to iPhone users through their browser. Apple's pre-loaded mapping service provides iPhone users with new map visuals such as 3D fly-over as well as free voice-guided turn-by-turn driving directions for the first time.

HERE also competes with companies such as TomTom, which licenses its map data and where competition is focused on the quality of the map data and pricing, and Open Street Map, which is a community-generated open source map available to users free of charge. Aerial, satellite and other location-based imagery is also becoming increasingly available and competitors are offering location-based products and services with the map data to both business customers and consumers in order to differentiate their offerings.

We believe that economies of scale and scope in the mapping services industry favor players that are able to provide end-to-end hardware-agnostic solutions which include proprietary content, platform (APIs) and applications. Nokia with HERE and Google are leading examples of such players with global footprints.

---

## **Table of Contents**

### **Nokia Siemens Networks**

#### ***Overview***

Nokia Siemens Networks is a leading global provider of telecommunications infrastructure, with a focus on the mobile broadband market. In its target market, Nokia Siemens Networks believes it is the second largest company worldwide, by revenue. It has a strong position in the newer infrastructure technologies of 3G and 4G (LTE). In 3G, Nokia Siemens Networks is the industry leader by customers served. More than a billion subscribers connect through Nokia Siemens Networks' 3G networks. In LTE, Nokia Siemens Networks had 77 commercial contracts at the end of 2012. The company is the number one provider of subscriber database management, an essential tool in effective network operations.

Nokia Siemens Networks began operations on April 1, 2007, combining the networks business of Nokia Corporation and the carrier-related operations of Siemens AG for fixed and mobile networks. Nokia Siemens Networks is jointly owned by Nokia and Siemens and its financial results are consolidated by Nokia. Beginning on April 3, 2013, certain restrictions on the transfer of Nokia's and Siemens' interests in Nokia Siemens Networks expire and certain other provisions relating to the transfer of such interests come into effect. Otherwise, the arrangements between Nokia and Siemens as shareholders of Nokia Siemens Networks will remain in effect as originally agreed.

Nokia Siemens Networks' focus on mobile broadband began towards the end of 2011, when the company adopted a new strategy (please see the section "Strategy" below). Mobile broadband provides many opportunities for Nokia Siemens Networks. The company believes the market will continue to grow as mobile operators face the challenge of increasing demand for greater network capacity and improved user experience. At the same time, mobile operators are continually seeking ways to meet subscriber demands in a cost-effective manner. With a specialist approach to mobile broadband, targeted research and development and streamlined structure, Nokia Siemens Networks believes it is well placed to meet these operators' needs.

The company has an installed base of around 600 customers worldwide and serves 2.5 billion subscribers. Nokia Siemens Networks' customers include many of the world's largest mobile operators and the company is proud to count Bharti Airtel, China Mobile, Deutsche Telekom, Softbank, Telefónica, Verizon and Vodafone among them.

For the year ended December 31, 2012, Nokia Siemens Networks had net sales of EUR 13.8 billion and total assets of EUR 10.2 billion.

Nokia Siemens Networks has, since late 2011, been engaged in a significant restructuring program. This program, which is intended to continue throughout 2013, has already delivered substantial improvements to operating expenses and profitability. Please see the section "Restructuring" below.

#### ***Strategy***

##### ***Focus***

Nokia Siemens Networks announced its current strategy on November 23, 2011. Built around focus (both technological and geographic), quality and innovation, the strategy guides Nokia Siemens Networks to focus its business solely on mobile broadband; for example, by divesting a number of businesses and streamlining its portfolio. Please see the section "Non-core businesses, divestments and portfolio management" below.

The company also named Japan, Korea and the United States as "priority markets", attracting appropriate managerial focus, while putting specific turnaround initiatives in place also in other regions and exiting a number of less-profitable countries and projects.

## **Table of Contents**

### *Quality*

In naming quality as the second pillar of its current strategy, Nokia Siemens Networks clearly stated that it wishes to make this area a competitive differentiator over time. The extreme intolerance of lapses in service of most mobile broadband subscribers and operators means that quality improvements have a direct impact on the reputation and success of network suppliers.

Nokia Siemens Networks has, over the last year, increased investment significantly in capabilities such as testing, automation, resources and training in the area of quality. The company's quality program is based on:

Defect prevention and containment, including earlier and faster detection of problems and their causes and clear links from research and development through manufacturing to sales, delivery and maintenance

Customer quality management, including making effective use of customer feedback and providing cross-functional support on specific issues

Quality capability and maturity, including developing the skills, expertise and ability organization-wide to support customer demands and promoting a deep quality culture throughout all parts of the company.

### *Innovation*

Nokia Siemens Networks employs a strategy of customer-focused innovation, which aims to deliver better return on investment than pure technology research and to direct resources and attention to specific challenges faced by operators.

Nokia Siemens Networks has one of the largest research and development commitments in the telecommunications industry. The efforts of these teams result in a stream of continuous improvement, technology breakthroughs and industry awards.

For example, the company's Flexi Multiradio base stations have, since their first development in 2008, been shipped to more than 200 customers and won several awards. New generations of the product are continuously in development and launch.

Nokia Siemens Networks also focuses on innovation in the area of customer experience management (CEM) – a term covering various tools that help operators to better meet their subscribers' demands and to monetize their network investments. An implementation of the CEM on Demand suite for leading Indonesia-based operator, Telkomsel, was the Global Telecoms Business award winner for 2012 in the wireless network infrastructure innovation category.

With a portfolio of around 3 800 patent families, Nokia Siemens Networks is a significant holder of intellectual property rights.

### ***Restructuring***

At the same time as it announced its new strategy, Nokia Siemens Networks also communicated plans to undertake a far-reaching and significant restructuring aimed at reducing its annualized operating expenses and production overheads.

A large proportion of these savings were expected to come from headcount reduction and the company announced plans to reduce 17 000 positions, announced in conjunction with the new strategy. A combination of this restructuring program, divestments and project exits led to a reduction

## **Table of Contents**

of approximately 15 300 headcount leaving Nokia Siemens Networks by the end of 2012. Substantial additional savings have also come from restructuring, outsourcing or similar changes in areas including real estate, information technology, product and service procurement costs and general and administrative expenses.

Nokia Siemens Networks continues to target to reduce its annualized operating expenses and production overheads, excluding special items and purchase price accounting related items, by more than EUR 1 billion by the end of 2013, compared to the end of 2011.

### ***Organization***

Nokia Siemens Networks has two business units. Mobile Broadband provides radio and core network hardware and software to mobile operators throughout the world, as well as CEM software. Nokia Siemens Networks' mobile broadband product portfolio includes the company's innovative and award-winning Flexi Multiradio base station. Software offerings, meanwhile, include subscriber data management and operations support systems which help operators monitor and manage their networks.

Global Services enables operators to plan, implement, run and upgrade their networks. Nokia Siemens Networks' services include network planning and optimization, network implementation, systems integration and maintenance support. A large and increasing percentage of Nokia Siemens Networks' services, currently more than one fifth, is delivered through global delivery centers in India and Portugal, supported by a global network of smaller, specialized centers. These establishments enable Nokia Siemens Networks to provide customers with access to highly trained and dedicated teams very cost-effectively through pooling of expertise and economies of scale.

The company has stated its aim to develop best-in-class Operations to support the triple aim of maintaining permanently competitive operating costs, providing excellence in customer satisfaction and defending and promoting quality.

### ***Non-core businesses, divestments and portfolio management***

As part of its strategy of focusing on mobile broadband, Nokia Siemens Networks has embarked on a number of divestments of businesses not consistent with the new company direction. As of December 31, 2012, seven divestments had been announced and five of these deals were closed in the course of the year. The divestments concluded during 2012 were:

A deal to transfer the microwave transport business, including its associated operational support systems and related support functions, to Dragonwave Inc.

The sale of former Motorola Solutions' WiMAX business to NewNet Communications Technologies

The divestment of fixed line broadband access business and associated professional services and network management solutions to Adtran

The sale of Belgacom-related IPTV assets to Belgacom and other IPTV assets to Accenture

A deal to transfer the Nokia Siemens Networks' proprietary broadband business, Expedience, to CN Tetragen  
Towards the end of 2012, Nokia Siemens Networks announced its intention to divest its Optical Networks business to Marlin Equity Partners and its Business Support Systems operations to Redknee. These deals, which are not yet completed, are both expected to close in the first half of 2013.

## **Table of Contents**

During the course of 2012, Nokia Siemens Networks also took steps to exit several projects that no longer form part of the company's core focus areas. For example, the company transferred the assets and liabilities related to the TETRA Nødnett project to Motorola Solutions Inc.

### ***Sales and marketing***

Nokia Siemens Networks' direct sales force is active in approximately 120 countries. This helps ensure Nokia Siemens Networks is close to its customers, both physically and in cultural terms, and helps the company to develop stable customer relationships.

In 2012, Nokia Siemens Networks' sales organization was organized in three geographical clusters: the Americas; Asia and Middle East; and Europe and Africa. These three markets are further divided into regions containing Nokia Siemens Networks' sales and delivery teams. Since the start of 2013, Nokia Siemens Networks has reorganized into three different geographical clusters: North America; Europe and Latin America (which also includes Africa); and Asia and Middle East. Nokia Siemens Networks has tailored its operating approach in the different regions and countries according to the macro-economic environment and the maturity of their telecommunications industry.

Nokia Siemens Networks' marketing and corporate affairs unit (MCA) is responsible for developing, executing and measuring the corporate marketing strategy, plan and budget. MCA researches markets and customers to predict the way the market will develop and how customer requirements will change over time. The team develops content and executes corporate marketing programs that raise the visibility of the Nokia Siemens Networks brand to position the company as a leader in the telecommunications industry and promotes its portfolio of products and services to customers.

### ***Production of infrastructure equipment and products***

Nokia Siemens Networks' Operations unit handles the supply chain management of all of the company's hardware, software and original equipment manufacturer (OEM) products. This includes supply planning, manufacturing, distribution, procurement, logistics, supply network design and delivery capability creation in product programs.

As of December 31, 2012, Nokia Siemens Networks had ten manufacturing facilities worldwide: four in China (Beijing, Shanghai, Tianjin and Suzhou), one in Finland (Oulu), two in Germany (Berlin and Bruchsal), two in India (Kolkata and Chennai) and one in Russia (Tomsk). As part of the Motorola Solutions, assets acquisition, Nokia Siemens Networks acquired manufacturing sites in Tianjin and Hangzhou. Nokia Siemens Networks closed the Hangzhou site in 2012.

Certain components and sub-assemblies for products, such as company specific integrated circuits and radio frequency components, are sourced and manufactured by third-party suppliers. Nokia Siemens Networks then assembles these components and sub-assemblies into final products and solutions. For selected products and solutions, suppliers deliver goods directly to customers. Consistent with industry practice, Nokia Siemens Networks manufacture telecommunications systems on a contract-by-contract basis.

### ***Patents and licenses***

Intellectual property rights, or IPR, are fundamental to Nokia Siemens Networks and its business units. The company is an industry leader in the research and development of wireless technologies, as well as transport and broadband technologies, and has a robust patent portfolio in a broad range of technology areas. Nokia Siemens Networks seeks to safeguard its investments in technology through



## **Table of Contents**

appropriate IPR protections and has generated and maintained an extensive portfolio of patents covering significant innovations arising from its research and development activities since its formation, including patents, design patents, trade secrets, trademark registrations and copyrights. Additionally, where the company deems necessary it obtains licenses to use standards-essential and other patents in its hardware and software solutions for both fixed and mobile network infrastructure.

Nokia Siemens Networks owns a large portfolio of approximately 3 800 patent families across an array of technologies, some of which were transferred from Nokia and Siemens upon its formation in 2007.

Nokia Siemens Networks IPR portfolio includes high quality standards essential patents and patent applications which have been declared to ETSI and other SDOs as essential to LTE, WCDMA, TD-SCDMA, WIMAX, GSM, CDMA2000 and other standards.

In addition, Nokia Siemens Networks holds copyright registrations relating to certain aspects of its products and services. The company has in place a number of patent license agreements with other major companies and patent holders, both directly and through its shareholders, that afford it freedom to operate without risk of infringing standards-essential patents owned by such entities.

Nokia Siemens Networks receives and pay patent license royalties in the ordinary course of its business based on existing agreements with telecommunication vendors.

### ***Competition***

Conditions in the market for mobile and fixed network infrastructure and related services were challenging and intensely competitive in 2011 and remained so during 2012. With relatively limited growth in a negative global economic environment, competition has been intense around growth areas such as 4G (LTE), which is the current technology battleground in the wireless industry, and in other network modernization projects.

Industry participants have changed significantly in recent years. Substantial industry consolidation occurred in 2007 with the emergence of three major European vendors: Alcatel-Lucent, Ericsson and Nokia Siemens Networks. In January 2011, Motorola Solutions completed its separation from Motorola Mobility Holdings Inc. In April 2011, Nokia Siemens Networks acquired the majority of Motorola Solutions wireless network assets.

During this period, the market also saw the rise of Huawei and ZTE, low-cost vendors from China, both of which have gained market share by leveraging their low-cost advantage in tenders for customer contracts. In recent years, the technological capabilities of these vendors, particularly Huawei, have improved significantly, resulting in competition not only on price but also on quality. In 2012, Huawei and ZTE have continued to grow their market share but at a slower pace than in previous years, further challenging European vendors. In 2012, Nokia Siemens Networks also witnessed emerging competition from Samsung Electronics, which has expanded its network infrastructure business out of its domestic Korean market with limited gains in Europe and the United States.

At present, Nokia Siemens Networks considers five companies – Ericsson, Alcatel Lucent, Huawei, ZTE and Samsung Electronics – to be its main competitors as major network infrastructure providers. Nokia Siemens Networks also competes with Cisco Systems, Inc. and NEC Corporation.

In 2012, the telecommunications infrastructure market was characterized by slight growth in capital expenditures in Euro terms by global mobile operators, mainly attributable to operators in Japan, Asia Pacific and North America off-set by declines in Europe, China and India.

---

## **Table of Contents**

In segment terms, the continued decline of legacy technologies in the Mobile Broadband business, such as 2G (GSM) and CDMA that was experienced in 2011 continued during 2012. After reasonable growth in 2011, the 3G segment declined in 2012. This decline has been off-set by the growth in 4G (LTE) which has emerged as a fast-growing commercial technology in markets outside the early adopting United States, and especially in Asia.

Within the 4G segment, leading vendors are competing based on factors such as technology innovation, network topology and less complex network architectures as well as integration towards all-IP networks. Competition in 3G remains intense as deployments of single Radio Access Network technology remains viewed as a critical entry point for networks, particularly by vendors looking to win share in new markets. This was particularly intense in 2011 in Europe and Asia Pacific, but showed some signs of easing during 2012.

In services, which remained a growth area in the industry, Nokia Siemens Networks business is increasingly tied directly to the mobile broadband product business, in particular in areas such as care and network implementation. As a result, pricing, efficiency and roll-out capabilities are competitive drivers. The development of its global service delivery capability, which allows Nokia Siemens Networks to perform more tasks remotely using standardized tools and processes, is increasingly important as it enables efficiencies for mobile operators and for its own operations. Competition in services is from both traditional network providers such as Alcatel-Lucent, Ericsson and Huawei, as well as non-traditional telecommunications entities and system integrators, such as Accenture and IBM. In addition to these companies, there are also local service companies competing, which have a narrower scope in terms of served regions and business areas. In 2012, some vendors, including Alcatel-Lucent and Nokia Siemens Networks, signaled their intention to scale back their activities in the lower profitability areas of services such as field maintenance and some managed networks operations.

Certain of Nokia Siemens Networks' competitors may receive governmental support allowing them to offer products and services at substantially lower prices. In many regions, restricted access to capital has caused mobile operators to reduce capital expenditure and has produced a stronger demand for vendor financing. Certain of the company's competitors may have stronger customer financing options due to internal policies or government support. While the amount of financing Nokia Siemens Networks provided directly to its customers in 2012 has declined from already relatively low levels in 2011, as a strategic market requirement the company plans to offer this financing option only to a limited number of customers and primarily to arrange and facilitate financing with the support of export credit or guarantee agencies.

### **Seasonality Devices & Services, HERE and Nokia Siemens Networks**

For information on the seasonality of Devices & Services, HERE and Nokia Siemens Networks, see Item 5A. Operating Results Certain Other Factors Seasonality.

### **Sales in US Sanctioned Countries: Devices & Services, HERE and Nokia Siemens Networks**

#### ***General***

We are a global company and have sales in most countries of the world. In 2012, we sold mobile devices and services through our Devices & Services and HERE (formerly Location & Commerce) businesses and network equipment and services through Nokia Siemens Networks to customers in Iran, Sudan and Syria. We did not have any sales in Cuba in 2012. Our aggregate net sales to customers in Iran, Sudan and Syria accounted for approximately 0.9% of Nokia's total net sales, or EUR 262 million, in 2012; approximately 1.4%, or EUR 545 million, in 2011; and approximately 1.3%, or EUR 542 million, in 2010. Cuba, Iran, Sudan and Syria are targets of comprehensive United States economic sanctions and the United States government has designated these countries as state sponsors of terrorism.

---

**Table of Contents**

Nokia Siemens Networks has made the decision in November 2011 to withdraw from the Iranian market in a controlled manner and is in the process of winding down its business activities in Iran. Nokia Siemens Networks expects to cease all revenue-generating activities relating to Iran by June 30, 2013. Other activities relating to the withdrawal such as dissolution of the local branch, divestment or discontinuation of certain shareholdings, closing of local bank accounts and resolution of contractual and legal obligations in Iran will take longer.

Similarly, we have decided to end the local presence in Iran of our Devices & Services and HERE businesses. The local Iranian office of these businesses was closed in August 2012 and as of December 31, 2012 there were no longer any employees based in Iran for these businesses. Other activities relating to the termination of our local presence in Iran for these businesses will take longer. Nokia will continue to sell mobile devices, accessories and certain free of charge items such as digital content and services into Iran through regional distributors based outside of Iran.

In connection with the business activities described above relating to Iran, we have routine contacts with governmental agencies in Iran as required, for example, to maintain a legal presence in Iran, pay taxes, employ Iranian nationals and maintain shareholdings in certain Iranian companies as required under Iranian law and as is customary under Iranian business practices. We expect to cease these contacts and shareholdings as soon as possible in connection with our withdrawal from Iran as described above.

We cannot exclude the possibility that third parties acting independently from us have exported our products to countries from other countries in which we sell them. We also distribute services, applications and content through the Internet. In terms of these offerings, we have industry standard systems in place recognizing users' IP addresses and, if applicable, block the access to our service offerings if they are not intended for a certain market or country. We cannot exclude the possibility that our services, applications and content when distributed through the Internet, may be accessed in markets or countries which they are not intended for if the industry standard protective mechanisms, such as IP address blocks, are circumvented.

***Disclosure pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 (ITRA)***

To our knowledge, none of our sales of mobile devices and services through Devices & Services and HERE in Iran in 2012 are required to be disclosed pursuant to ITRA Section 219. To our knowledge, none of our sales of network equipment and services through Nokia Siemens Networks in Iran in 2012 are required to be disclosed pursuant to ITRA Section 219, with the possible exception of the following: During the year ended December 31, 2012, Nokia Siemens Networks provided 2G Radio, core and transmission equipment, including related implementation and care services, in Iran under agreements with Mobile Communications Company of Iran (MCCI) and MTN Irancell. Additionally, during the year ended December 31, 2012, Nokia Siemens Networks provided optical networks equipment to Sadid Consultant Connection Developer Company (SCCDC), a privately held reseller for Nokia Siemens Networks, where the end user was Iranian Gas Transmission Company (IGTC). Furthermore, Nokia Siemens Networks provided during the year ended December 31, 2012 under an existing care and maintenance contract a return and repair service to SCCDC, where the beneficiary of the service was IGTC. During the year ended December 31, 2011 and the year ended December 31, 2012 Nokia Siemens Networks provided optical networks equipment to Hamkaran Samanehaye Ertebati Pars (Hamkaran), a privately held reseller for Nokia Siemens Networks, where the end user was Petrochemical Commercial Co. (PCC) and for which Nokia Siemens Networks received a payment during the year ended December 31, 2012. Through a branch of its Finnish subsidiary, Nokia Siemens Networks employs personnel in Iran to perform its contractual and regulatory obligations in Iran. In connection with these agreements, Nokia Siemens

---

## **Table of Contents**

Networks maintains shareholdings in Pishahang Communications Network Development Company (Pishahang) and Iran Telecommunications Manufacturing Company (ITMC), as required under Iranian law and as is customary under Iranian business practices. Nokia Siemens Networks holds 49% and 20% of the outstanding shares of Pishahang and ITMC, respectively. The other major shareholder in Pishahang is Information Technology Application Development TACFAM Company (Tacfam). Tacfam holds 49% of the outstanding shares of Pishahang. Although it is difficult to do with a reasonable degree of certainty, we have concluded that at least one of the Iranian entities identified in this paragraph, PCC, is and perhaps others may be owned or controlled, directly or indirectly, by the Government of Iran.

During the year ended December 31, 2012, gross sales from agreements with MCCI, MTN Irancell, SCCDC and Hamkaran were EUR 68 156 689 in aggregate and resulted in a net loss (taking into account the effect of foreign currency exchange rates and repatriation costs) for Nokia Siemens Networks for that period. A vast majority of the gross sales are derived from Nokia Siemens Networks' agreements with MCCI and MTN Irancell. As discussed, Nokia Siemens Networks expects to cease all revenue-generating activity in Iran under agreements with MCCI and MTN Irancell by June 30, 2013. All revenue-generating activity with SCCDC and Hamkaran was discontinued by December 31, 2012. Nokia Siemens Networks expects to cease its shareholdings in Pishahang and ITMC as soon as possible in connection with its withdrawal from the Iranian market.

Nokia Siemens Networks maintains accounts in Iran with Bank Tejarat. Nokia Siemens Networks conducted transactions in these accounts until March 17, 2012 mainly relating to winding down activities. After March 17, 2012 no transactions were conducted in these accounts with the exception of maintaining a balance so that un-presented checks issued on these accounts could be honored upon presentment to Bank Tejarat. As of December 31, 2012, there was a nil balance in these Bank Tejarat accounts. Nokia Siemens Networks is in the process of closing these accounts.

### **Government Regulation: Devices & Services, HERE and Nokia Siemens Networks**

Our business is subject to direct and indirect regulation in each of the countries in which we, the companies with which we work and our customers do business. As a result, changes in or uncertainties related to various types of regulations applicable to current or new technologies, products and services could affect our business adversely. Moreover, the implementation of technological or legal requirements could impact our products and services, manufacturing and distribution processes, and could affect the timing of product and services introductions, the cost of our production, products and services, as well as their commercial success. Also, our business is subject to the impacts of changes in trade policies or regulation favoring the local industry participants, as well as other measures with potentially protectionist objectives that the host governments in different countries may take. Export control, tariffs or other fees or levies imposed on our products and services as well as environmental, product safety and security and other regulations that adversely affect the export, import, pricing or costs of our products and services could adversely affect our net sales and results of operations.

For example, in the United States, our products and services are subject to a wide range of government regulations that might have a direct impact on our business, including, but not limited to, regulation related to product certification, standards, spectrum management, consumer privacy, competition and sustainability. In the European Union the EU level or local member state regulation has in many areas a direct impact on our business and customers. The European regulation influences for example conditions for innovation for multifunctional devices and services, as well as investment in fixed and wireless broadband communication infrastructure. In China new partly local 3G telecom standards have been enacted that may affect production processes and have impact on our business. Additionally, with respect to certain developing market countries for example in Asia and in Latin and South America the business environment we operate in can pose risks to our business due to unpredictable, discriminatory or protectionist regulation.

---

## **Table of Contents**

We are in continuous dialogue with relevant state agencies, regulators and other decision makers through our experts, industry associations and our representatives in Washington, D.C., Brussels, Espoo, Berlin, Beijing, Delhi and Moscow and through our experts, industry associations and representatives in the regions of Middle East and Africa, Latin and South America and South-East Asia.

### **Corporate Responsibility: Nokia**

*In the following description of our corporate responsibility activities, Nokia and we refer to our Devices & Services and HERE businesses. Corporate responsibility matters relating to Nokia Siemens Networks are discussed below under heading Corporate Responsibility: Nokia Siemens Networks.*

Nokia strives to be a leader in sustainability. We have a long track record of taking sustainability into account in everything we do, from the products we build and the suppliers we choose, to the services we develop to enhance people's education, livelihoods and health. More than 1.3 billion people use a Nokia product, which puts us in a unique position to enable them to effect positive and sustainable changes.

Sustainability issues are reviewed regularly at various levels of the company, including within the Nokia Leadership Team and the Board of Directors, and we have personnel across the business responsible for environmental and social targets. We also publish our annual sustainability report on our website. Nokia has published corporate responsibility reports since 2002 and environmental reports since 1999. In this section, we cover the ethical, socio-economic and environmental areas from 2012 that are defined as most material to our business and our stakeholders.

### ***Impact on People: Devices & Services and HERE (formerly Location & Commerce)***

*Supporting broad access to the benefits of mobile technology.* Mobile technology has enabled people to connect with one another and access information in new ways, and we believe it has been a force for positive change in people's lives around the world. At Nokia, we address the fundamental needs of connectivity, affordability and relevance for a broad range of consumer groups through our core business. Our strategy, including our plan to win in smartphones and connect the next billion to the Internet and information, aims to bring the benefits of mobile technology to people around the world.

*Accessibility of Nokia products.* Accessibility means making products and services usable and accessible to the greatest possible number of people, including users with disabilities. Nokia is working to bring mobile communications to the estimated 600 million people worldwide who have a recognized disability, whether in vision, hearing, speech, mobility or cognition. Many of the features initially developed to better serve these specific groups are also finding uses with the general population, especially with age. We continue to engage our stakeholders in discussion on our new direction and its implications for accessibility, and in October 2012, we held a Nokia Accessibility Update event, where we launched a further improved version of the Nokia Wireless Loopset, the LPS-6. It enables t-coil equipped hearing aid users to use a mobile device in a convenient way, whilst delivering superior audio clarity during phone calls and richer tones when listening to music. The Nokia Screen Reader, which enables the visually impaired to hear the contents of the screen, was also extended to 27 languages in total in 2012.

*Our focus in corporate social investment.* We have a number of global partnerships in place to support our ambitions in our key corporate responsibility focus areas of education, health, livelihoods and environmental sustainability. In all of our efforts, we focus on how mobile technology can bring social benefits with a meaningful impact on a large scale, but at a low cost. The global partners in 2012 were Oxfam, IUCN (International Union for Conservation of Nature), UNESCO (United Nations Educational, Scientific and Cultural Organization), UNICEF (United Nations Children's Fund) and WWF (World Wide

**Table of Contents**

Fund for Nature). In each of these partnerships we have provided not only financial support, but also our technology, resources and expertise on an ongoing basis for projects in which we are working jointly together.

*Education.* Mobile technology can provide access to quality education materials and support to teachers, learners and their families, and mobile communication enables the delivery of education to people, instead of people to education. In that sense, mobile learning initiatives help in improving equality in educational achievement, as girls tend to be disadvantaged in school attendance in many parts of the world. The cost of providing good quality learning content can also be reduced and the teaching environment can be transformed into a more collaborative and motivating environment with mobile technology. Furthermore, concepts such as our Nokia Life subscription-based service also show the potential of affordable education delivery to people on a large scale. We currently offer Nokia Life in China, India, Indonesia, Kenya and Nigeria, and by late 2012, approximately 90 million people had experienced the service, more than double the number from a year earlier. Our other initiatives specifically related to education and which are designed to support our corporate responsibility goals include:

*Nokia Education Delivery*, software which enables delivery of quality education materials over mobile networks to the classroom, particularly useful in hard-to-reach areas. Combined with teacher training and community engagement, it has been shown to improve academic results and increase retention among students, especially girls.

*Nokia Mobile Mathematics* is a mobile service that combines official mathematics curricula with social networking. At the end of 2012, the service reaches approximately 50 000 students (more than double the number since the end of 2011), approximately 700 teachers and approximately 200 schools in South Africa.

*Health.* Nokia Data Gathering contributes to health as one of its many uses. It is an open source platform which allows any organization to collect data via mobile phones, and it has been used for example in preventing and controlling disease outbreaks. Our Nokia Life service disseminates useful information and advice on pregnancy and maternal health, childcare and parenting skills, and family health in general.

*Livelihoods.* Nokia Data Gathering software replaces traditional data collection methods with mobile devices, improving results and saving time and money. The open source model allows us to offer the software on a large scale, providing clients with flexibility and supporting the creation of livelihoods for systems integrators and developers. Almost 300 organizations use Nokia Data Gathering, making it one of the most used mobile data collection solutions globally. Examples of its successful use include the mapping of water points in Kenya by UN FAO, resulting in a faster reaction to drought in East Africa. We also support agricultural livelihoods through Nokia Life, which gives its subscribers regular and relevant information updates on local market prices, weather conditions, the availability of seeds, fertilizers and pesticides, as well as news and advice.

*Nokia values.* Nokia's change of strategy in 2011 underlined the need for our employees to adopt the mind-set of a challenger, which emphasizes results, speed and accountability and requires us to adopt new attitudes and pursue new approaches to satisfy our customers.

*Impact on our employees.* During 2012, as we continued to implement our strategy, we made some difficult decisions which have impacted Nokia sites and resulted in headcount reductions. These changes have included the closure of our production facility in Salo, Finland, and our research and development facilities in Ulm, Germany, and Burnaby, Canada. We also divested certain non-core activities, including Vertu, our luxury mobile device brand. Additionally, we acquired new talent both by hiring people who can bring us new expertise we need, and through small acquisitions, including that of Scalado, a Sweden-based company, to support our ambitions in imaging.

## **Table of Contents**

To support individuals and local communities directly impacted by changes at Nokia, we operate a unique program tailored for different markets. This program, Bridge, which continued in 2012, provides the following options to employees whose job is affected by the restructuring:

*A new job within the company:* Career counseling and helping employees to identify job opportunities within Nokia wherever possible.

*A new job outside the company:* Career counseling and helping to identify job opportunities outside of Nokia by providing a job center at Nokia premises to link employees directly with local companies and their resourcing needs.

*Entrepreneurship:* Training and funding to help identify business opportunities and partnerships for those interested in setting up a company of their own, which can fuel new growth for impacted communities.

*Career renewal:* Assisting employees in re-training for a different line of work, which can support a speedy return to employment. By the end of 2012, approximately 17 000 employees had participated in the Bridge program, almost 1 000 new businesses had been established and approximately 57% of employees had found a new position within Nokia, outside of Nokia or in the newly established businesses or are now in full-time education.

In addition, employees receive severance packages in accordance with local practices when they leave Nokia.

*Diversity and inclusion.* We are committed to promoting diversity and inclusion in the workplace and providing rewarding career development opportunities for all employees.

*Training and development.* We believe that a dedicated progressive approach to both personal and professional development optimizes the interest of both employees and Nokia. Therefore we provide a variety of mandatory and voluntary training opportunities for our employees to help them develop a broad range of skills for the workplace, as well as the competencies specific to their roles.

*Performance and rewarding employees.* We offer a variety of recognition plans with levels of compensation determined by local labor markets and taking into account both individual contribution and company performance. We encourage managers to coach employees continually and to have at least one formal performance review every year.

Our equity program includes performance shares, restricted shares and stock options. In early 2013, we also introduced an employee share purchase plan as part of the program. There are also other plans, including cash incentive plans for all employees as well as small monetary bonuses as recognition awards.

*Health, safety and well-being.* In 2012, Nokia introduced a new Occupational Health and Safety (OHS) policy, renewing our commitment to provide safe and healthy working conditions for all our employees and partners, and to promote wellbeing at work. We expanded our global OHS Injury and Illness Reporting to not only include internal Nokia employees, but our external contractors and service providers as well. Our global Total Incident Frequency Rate (TIFR) for all our major manufacturing facilities for 2012 with this expanded population was 0.2, down from 0.5 in 2011. In other words, for every 100 employees, contractors and service providers, there were only 0.2 incidents of injury or illness. This figure includes external contractors and providers from June 2012 onwards. As a global company, we have selected the Occupational Safety & Health Administration (OSHA) guidelines for accident and illness reporting. Our global Occupational Health & Safety Injury and Illness Reporting has since 2011 included all cases that require some type of medical treatment, not just those that result in absence from work.

---

## **Table of Contents**

*Labor Conditions at manufacturing facilities.* At December 31, 2012, Nokia had close to 18000 employees working directly in production, including manufacturing, packaging and shipping. A healthy, motivated workforce is vital for Nokia's success and as part of this management we carry out third-party in-depth assessments of our factories' labor conditions every second year. The latest assessment round started in 2012 and six of our seven major facilities had been assessed by the end of February 2013. Our focus this year has been on emphasizing a proper root cause analysis in order to sustain the high level of compliance in social responsibility. During the intervening period of third-party assessments, we conduct internal reassessments to ensure any necessary corrective actions have been made.

All assessments at our manufacturing facilities are carried out against the Nokia Labour Requirements, as well as all local laws. The Nokia Labour Requirements provide a framework to monitor and assess labor conditions in a consistent manner and are based on recognized international standards such as the International Labour Organization and UN Human Rights conventions. A revision of the Nokia Labour Requirements was launched in our manufacturing facilities in 2012. The update was done to respond to the need for specifications in areas such as sick leave and maternity leave practices, and protection of pregnant women at work. We also recognize the right of employees to join unions and enter into collective bargaining agreements. Almost all of our manufacturing facilities have collective agreements in place with one or more labor unions. At December 31, 2012, approximately 60% of our production employees were covered by collective bargaining agreements.

*Nokia Code of Conduct.* In 2012 we continued our ongoing commitment to actively fight improper business practices, including corruption, and believe that as a global company, we can play an important role in this area. We also believe that our efforts can provide us with a competitive advantage with customers who demand high ethical standards in their supply chain. For these reasons, the Nokia Code of Conduct is available in 34 languages and can be found on our website. Since 2009, we have conducted a program to train each employee on our Code of Conduct using an e-learning that is offered in 14 languages as well as classroom training. By the end of 2012, 95% of eligible non-manufacturing-based employees completed their training and in our manufacturing facilities 98% of eligible employees completed their classroom training. For the first time, we now formally track and measure our former NAVTEQ employees (now in HERE) completion of the mandatory Code of Conduct training. We have several communications channels available to employees and others to get help in understanding and applying the Code of Conduct, or to report concerns of violations, including a "Contact the Board" channel for contacting the Board of Directors anonymously.

*Human rights.* Improved communications provide better opportunities for freedom of expression, and therefore promote civil and political rights as well as economic and social rights. At the same time, we have specific human rights responsibilities toward our employees, customers, the communities where we work, and within our supply chain. We apply UN Human Rights special representative John Ruggie's business and human rights framework to our business practices. The "Protect, Respect and Remedy" framework has been widely welcomed by industry and governments. Since 2011, we have had in place the Nokia Human Rights Approach, which is based on Ruggie's framework and which is also available on our website.

*Suppliers.* Our sustainability efforts relating to our supply chain are discussed below under *Impact on the environment: Devices & Services and HERE*.

*Customer privacy.* As the Internet has expanded and new services for consumers have emerged, user privacy has become increasingly important. Consumers have increasing possibilities to use and share their personal information in new contexts. To remain a trusted brand, we work proactively to ensure that this custodial information is protected. Respect for privacy is part of our commitment to observing high standards of integrity and ethical conduct in all our operations. We have a formal privacy program with a senior executive accountable for it.



---

**Table of Contents**

*Product safety.* Product safety is a top priority for Nokia. All our mobile products operate below relevant international exposure guidelines and limits that are set by public health authorities. Since 1995, expert panels and government agencies around the world have performed more than 110 reviews of the scientific evidence regarding health effects from exposure to radio frequencies (RF). These reviews consistently support the scientific conclusion that RF fields operated at levels below the exposure guidelines pose no adverse effects to humans. We are responsive to our customers' questions about mobile device safety and are committed to making information available transparently for consumers.

*Disaster response and preparedness.* As a global business, we have a disaster response plan in place and evaluate every crisis situation separately. We focus on disaster preparedness and rehabilitation, especially where mobile-based tools and applications can help.

*Partnering with non-governmental organizations.* In 2012, we started a global partnership with UNICEF in the area of safe and beneficial use of online media by young people. We also have global partnerships in place with Oxfam, IUCN (International Union for Conservation of Nature), UNESCO (United Nations Educational, Scientific and Cultural Organization), and WWF (World Wide Fund for Nature).

***Impact on the Environment: Devices & Services and HERE***

At Nokia, we believe that our approach to looking after our environment not only reflects ethical, moral and legal responsibilities, but also makes good business sense. Environmental issues are integrated in our business practices and furthermore, our environmental goals are not driven solely by regulatory compliance but are aimed to go beyond legal requirements as explained in more detail below. In 2012, we continued to focus on the materials used, energy-efficiency, take-back of used products, the overall environmental performance of our activities and the supply chain.

*Environmentally-leading mobile product range.* Nokia has long been the pioneer in phasing out substances of concern from our products. In product creation, we also look at energy efficiency, using renewable materials, smart packaging and creating environmental services, which encourage people to adopt more sustainable lifestyles. Our product creation is guided by life cycle thinking to minimize environmental impacts of a product at every stage of its life, from manufacturing, through use to disposal. For example, over the last decade, the greenhouse gas footprint of our phones has been reduced by up to 50%. Life cycle assessments help us focus on the areas where we can make the biggest contribution to reducing impacts. Our method of assessing our products' greenhouse gas footprint has been externally audited. In 2012, we introduced four new Eco Hero devices, the Nokia 808 Pureview, the Nokia Lumia 610 and 820, and the Nokia Asha 311.

*Reducing our environmental impact with mobile technology.* Nokia mobile devices comprise multiple functionalities; for instance a digital camera, music player, web browser, navigation, as well as other features. This helps consumers reduce their own environmental footprint and avoid buying, using and charging several separate devices when one device can be used for many different purposes. Mobile devices can be used for attending meetings and working remotely, reducing the need for travel. Car navigation services help to save fuel by finding the shortest route. In addition, our HERE Transport (HERE Transit in the US) application offers mass transit route planning in hundreds of cities all over the world, demonstrating how mass transit can reduce the impact of travel on the environment. We aim to raise awareness about sustainable lifestyles, health, well-being and social responsibility, mainly through the People & Planet pages on our website, but also via eco applications such as the Climate Mission 3D game in the Nokia Store.

*Energy-savings in our mobile products.* Since 2004 we have reduced the no-load consumption of our chargers by more than 73%, and in our best-in-class chargers by over 90%. During 2012, we introduced two new energy efficient USB chargers, the AC-20 and AC-50. Today, all new Nokia

---

## **Table of Contents**

devices are shipped with four or five-star chargers. Although we have moved in lower price points to more energy efficient chargers we did not fully meet our reduction target for year 2012. The target for the average no-load was 0.07W and we reached 0.098W which is a reduction of 13% from last year. The charger no-load power consumption values are calculated as volume weighted average charger no-load power consumption for phone products per year.

*Reporting eco performance of our mobile products.* We provide eco declarations or profiles for all our products, containing some useful information on their environmental impact, materials, energy efficiency, packaging, disassembly and recycling.

*Substance and materials management in our mobile products.* Our main objective is to know all the substances in our products, not just those that raise concerns. Our products must be safe for people and the environment when used in the proper way. All our mobile devices and accessories worldwide are fully compliant with the EU Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (EU RoHS), and all national requirements of the same type as RoHS. Our approach is that Nokia's products do not contain substances included in the Candidate List of Substances of Very High Concern (SVHC), by the EU Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (EU REACH), which the EU REACH regulation requires to be reported. We evaluate the approach against the new versions of Candidate List of SVHC and additionally take the notification method into use when necessary. Since 2009, all our new products must be free of BFR (brominated flame retardants) and RFR (restricted flame retardants), as defined in the Nokia Substance List (NSL). In case of compliance failures we always clarify and document the cases and set up corrective and preventive actions. The full NSL, with information about our substance management, including legal requirements and our voluntary phase-outs, is available on our website.

*Packaging.* We continued to improve our packaging, increasing our use of renewable, paper-based materials to over 95% of total packaging materials. Our packages are 100% recyclable and each part is individually marked with ISO standard recycle markings. To enable easy recycling, we choose not to combine plastic and paper materials into single components. For fiber based printing and packaging materials our aim is to use 100% certified renewable or recycled materials by 2015. We accept certifications by Forest Stewardship Council (FSC) and The Programme for the Endorsement of Forest Certification (PEFC), with priority on the former.

*Take-back and recycling.* Connecting the next billion to the Internet and information through our mobile products is a critical opportunity for Nokia, but also a key concern in the sense that more products sold means more e-waste from old devices as well. We take part in collective recycling schemes with other equipment manufacturers in Europe, Canada and Australia. We also engage in local recycling awareness with retailers, operators, other manufacturers, authorities and various local partners in order to build a recycling culture around the world. Our own take-back and recycling efforts are thus intended to ensure not only compliance with the European Union Waste Electrical and Electronic Equipment (WEEE) Directive, but also to ensure we go above and beyond legally set requirements. Of the materials in a mobile device, 100% can be recovered and used to make new products or generate energy. Our challenge is now to engage people to make recycling of mobile products easy and desirable.

*Energy efficiency and emissions of our operations.* In 2012, our facilities consumed 518 GWh of energy in total. This energy consumption caused 13 000 tonnes of direct and 224 800 tonnes of indirect greenhouse gas (CO<sub>2</sub>e) gross emissions. Direct energy means our use of gas and oil, while indirect energy refers to our use of electricity and district heating/cooling. Nokia Group as a whole consumed 1 074 GWh of energy. In 2012 our share of renewable electricity was 169 GWh.

---

**Table of Contents**

*Business travel.* Nokia's CO2 emissions from air travel were 38 500 tonnes in 2012 which is a 54% reduction from 2011.

*Reducing waste.* In 2012, Nokia produced a total of 31 400 tons of waste, a 30% reduction from 2011.

*Water usage.* Water is not a significant environmental issue for our own operations, but used mainly for sanitary and catering purposes, and in gardening and facilities management, e.g. cooling towers. Production processes use relatively small amounts of water, under 1 000 liters per year in each factory. In 2012, we withdrew 1 092 mega liters of water for use in our facilities. Nokia Group as whole withdrew 1 674 mega liters of water.

*Suppliers*

For over a decade Nokia has required its suppliers to adhere to strict ethical and sustainable business practices. These have been laid out in the Nokia Supplier Requirements, enforced through contractual agreements and verified by assessments. In 2012, Nokia also published its Supplier Code of Conduct. This Code, available on our website, establishes the basic principles for business conduct with Nokia. It is based on Nokia's Supplier Requirements, which suppliers regardless of location and size must fulfill.

To monitor compliance and performance, Nokia uses a wide range of approaches and means. External risk tools help to point out potential environmental, ethical, health and safety and labor risk areas in regards to the industry or the countries where we or our suppliers operate. Supplier self-assessments again provide an indication of the supplier's own understanding of its level of compliance. Regular on-site assessments to supplier sites on the other hand, are conducted for a variety of reasons, including identified risk, non-conformance or strategic importance. At the end of 2012, altogether 345 supplier facilities had been risk self-assessed in relation to labor, ethics, health and safety and environmental practices (292 in 2011 and 26 in 2010). This accounts for around 90% of our hardware and mechanics estimated business value for 2012. In addition, 23 Nokia Supplier Requirements on-site assessments and 10 Environmental and Ethical on-site in-depth assessments were carried out.

Internally environmental, ethical, health and safety, as well as labor practices have been integrated into Nokia sourcing's daily business operations including supplier selection and contracting, relationship development, procurement decisions and steering meetings. Sustainability key performance indicators and targets are part of the supplier performance review. These specific KPIs have focused throughout the years on e.g. environmental management system status, code of conduct implementation, transparency and communications, environmental impacts and recently labor practices and health and safety issues. All active hardware suppliers are requested to report and results are regularly reviewed.

In recent years, Nokia has also taken continuous action to ensure that our products are manufactured from ethically sourced materials. We do not tolerate any activity in our supply chain that fuels conflict, violates human rights or leads to serious environmental degradation. The issue is currently especially acute with the extraction and trade of minerals in Democratic Republic of Congo (DRC) and surrounding countries. During 2012 Nokia focused on validating the suppliers' due diligence activities towards conflict-free sourcing, and ensuring that its own due diligence process remains in line with international requirements.

There are many sustainability challenges that might arise from a global supply chain consisting of thousands of suppliers. Clear requirements and different approaches and training programs to monitor performance and compliance are essential. For the sake of a sustainable and continuous business development it is important to identify possible risks and improvement areas. In case of any non-compliance against Nokia's requirements, suppliers are requested to analyze possible root causes and

## **Table of Contents**

take corrective actions. This way we want to ensure that suppliers provide a safe work environment, exercise good labor practices, use environmentally sustainable manufacturing processes, and aim to reduce the environmental impact of their own operations.

*Environmental management systems (EMS).* Our EMS is an integral part of our common global management structure. The international ISO14001 standard has been the foundation for our certified EMS for more than 15 years and it covers all of our manufacturing facilities. Its goal is to improve our environmental performance, focusing on energy consumption, waste management, water management and air emissions. We require a certified EMS according to ISO 14001 from our contract manufacturers, and a certified EMS from all our direct suppliers.

### **Corporate Responsibility: Nokia Siemens Networks**

Nokia Siemens Networks aims to minimize the adverse impacts of its business while also maximizing the positive social and environmental impacts its products can have.

#### ***Impact on people: Nokia Siemens Networks***

Nokia Siemens Networks has an impact on people including employees, suppliers and communities. The company's five values guide the actions and behavior of employees and define our company culture. The values are: focus on the customer; communicate openly; win together; inspire; and innovate.

*Global workforce.* The changes to Nokia Siemens Networks' strategy announced in November 2011 have had a significant impact on employees. Nokia Siemens Networks has been consulting with employee representatives and local Works Councils where needed and communicated with employees about the changes that affect them throughout the restructuring process. Nokia Siemens Networks has followed country-specific legal requirements to find socially responsible means of reducing its workforce and treated those affected with dignity and respect. Where possible, Nokia Siemens Networks transferred employees to new roles inside the company to support businesses that are core to its strategy.

At the end of 2012, Nokia Siemens Networks had 58 411 employees, of which 2 098 worked in production. During the year, the rate of voluntary attrition was 9.9%, involuntary attrition was 14.2% and attrition due to common agreement was 5.8%.

*Diversity and inclusion.* At the end of 2012, 12.5% of senior management positions within Nokia Siemens Networks were held by women, an increase of one percentage point from 2011. Employees of non-Finnish or non-German nationality held 54% of senior management positions.

*Training and development.* During 2012, Nokia Siemens Networks spent approximately EUR 50 million on training for employees through its training organization.

*Health, safety and labor conditions.* Providing safe and decent working conditions for employees is a priority for Nokia Siemens Networks. Our Code of Conduct and Global Labor Standard set out clear requirements for labor conditions, based on the International Labor Organisation (ILO) conventions. Nokia Siemens Networks is implementing the global standard at country level, focusing on the highest risk countries for labor violations. Internal audits are used to confirm compliance.

Nokia Siemens Networks' health and safety management system, based on the international standard OHSAS 18001, safeguards employees with appropriate safety procedures, equipment and training. Contractors must comply with our health and safety standards and Nokia Siemens Networks trains contractors to ensure they understand the procedures. Regular audits are used to check compliance.

---

**Table of Contents**

*Nokia Siemens Networks Code of Conduct.* The Code of Conduct sets out Nokia Siemens Networks' commitment to uphold high ethical standards wherever it operates. Nokia Siemens Networks trains its employees on ethical business conduct every year and concerns can be reported anonymously. Any reported ethical concerns are investigated thoroughly by Nokia Siemens Networks' Ethics and Compliance Office. In 2012, 86% of employees completed ethical business conduct training and 74% of employees that work with customers and suppliers received further training on anti-corruption.

*Community*

Nokia Siemens Networks' community strategy focuses on three key areas where it believes it can have the greatest impact: first; education and ICT, second; disaster preparedness and relief and third; the environment. Nokia Siemens Networks has policies in place relating to disaster relief and to employee volunteering. During 2012 its efforts were focused on restructuring and internal activities.

*Human rights*

Nokia Siemens Networks recognizes its responsibility to help ensure that the communications technologies it provides are used to respect, and not infringe, human rights. Nokia Siemens Networks' Code of Conduct spells out the company's zero tolerance for the violation of human rights. This commitment is reinforced in its human rights policy, which establishes due diligence processes to identify and address relevant human rights risks across the company's global operations. Employees are trained on human rights through ethical business training and those in high-risk roles such as procurement are given additional training on the company's human rights policy.

*Suppliers:* All suppliers must meet Nokia Siemens Networks' global supplier requirements, which set standards for the management of ethical, environmental and social issues. This commitment is part of contractual agreements with suppliers. In 2012 Nokia Siemens Networks rolled out revised supplier requirements including additional points on human rights and conflict minerals. Compliance with global supplier requirements is monitored through system audits, of which 57 were conducted in 2012.

More detailed audits focusing on social and environmental issues are undertaken with some suppliers, selected through a risk assessment process. Nokia Siemens Networks' focus in 2012 was on working closely with suppliers to bring them up to our standards and closing open audits from previous years. Nokia Siemens Networks closed 20 in-depth audits and conducted two new additional audits.

Nokia Siemens Networks' updated supplier requirements clearly state its policy on conflict minerals and the company does not accept their use in our products. Nokia Siemens Networks requires suppliers who manufacture components containing metals associated with conflict minerals to adopt a zero tolerance policy with their respective suppliers. In 2012, Nokia Siemens Networks approached 125 key suppliers for due diligence as part of its involvement in the EICC/GeSI Extractives Working Group's Conflict Free Smelters' program, and completed due diligence with 40 suppliers.

***Impact on the Environment: Nokia Siemens Networks***

*Environmental strategy.* Nokia Siemens Networks' environmental strategy has two key elements:

Designing products and services that help telecoms operators reduce the environmental impact of their networks; and

Ensuring maximized efficiency in the company's own operations to minimize our environmental impact.

Nokia Siemens Networks offers a comprehensive range of energy solutions for telecoms operators, combining products and services. The portfolio is designed to reduce the network operating costs of new and legacy telecommunications networks, using more efficient technology and renewable energy to reduce power consumption and the resultant GHG (greenhouse gas) emissions.

## Table of Contents

To achieve improved environmental performance, Nokia Siemens Networks operates a company-wide Environmental Management System (EMS) certified to the internationally recognized standard ISO 14001. Nokia Siemens Networks' global supplier requirements state that suppliers need to have a documented EMS in place which is compliant with ISO 14001.

*Reducing our environmental impact.* Nokia Siemens Networks continued to reduce the environmental impact of products and operations. By the end of 2012, Nokia Siemens Networks had improved the energy efficiency of GSM base station products by 21% from 2007 best performance BST to 2012 equivalent capacity configuration BST. Also the company managed to reduce the energy consumption of buildings by 8% compared to a 2012 business as usual scenario created in 2007 as agreed with WWF. These surpass the WWF commitment made five years ago, although Nokia Siemens Networks did not fully achieve its target energy efficiency improvements for WCDMA base stations from 2007 best performance BST to 2012 equivalent capacity configuration BST. The company has so far applied energy efficient measures to more than 4 200 radio mobile broadband sites.

Renewable energy continues to form a substantial part of the energy used in Nokia Siemens Networks' own facilities' more than 38% of the used energy is from certified renewable sources.

*Radio waves and health.* Wireless communications technologies operate well within the limits recommended by the International Commission on Non-Ionizing Radiation Protection and endorsed by the WHO, and we work to ensure continued compliance of our products with these requirements. Nokia Siemens Networks engages with its stakeholders and in public discussions on this topic as well as monitoring scientific studies.

### 4C. Organizational Structure

The following is a list of Nokia's significant subsidiaries at December 31, 2012. See also, Item 4A. History and Development of the Company Organizational Structure and Reportable Segments.

Company	Country of Incorporation	Nokia Ownership Interest	Nokia Voting Interest
Nokia Sales International Oy.	Finland	100%	100%
Nokia Inc.	United States	100%	100%
Nokia GmbH	Germany	100%	100%
Nokia UK Limited	England & Wales	100%	100%
Nokia TMC Limited	Republic of Korea	100%	100%
Nokia (China) Investment Co. Ltd.	China	100%	100%
Nokia Telecommunications Ltd.	China	83.9%	83.9%
Nokia Finance International B.V.	The Netherlands	100%	100%
Nokia India Pvt. Ltd.	India	100%	100%
Nokia do Brasil Tecnologia Ltda	Brazil	100%	100%
OOO Nokia	Russia	100%	100%
NAVTEQ Corporation	United States	100%	100%
NAVTEQ B.V.	The Netherlands	100%	100%
NAVTEQ Europe B.V.	The Netherlands	100%	100%
Nokia Siemens Networks B.V.	The Netherlands	50% <sup>(1)</sup>	50% <sup>(1)</sup>
Nokia Siemens Networks Oy	Finland	50%	50%
Nokia Siemens Networks GmbH & Co KG	Germany	50%	50%
Nokia Siemens Networks Pvt. Ltd.	India	50%	50%
Nokia Siemens Networks Japan Corp.	Japan	50%	50%
US Nokia Siemens Networks US LLC	United States	50%	50%

- (1) Nokia Siemens Networks B.V., the ultimate parent of the Nokia Siemens Networks group, is owned approximately 50% by each of Nokia and Siemens. Nokia effectively controls Nokia Siemens Networks as it has the ability to appoint key officers and the majority of the members of its Board of Directors and, accordingly, Nokia consolidates Nokia Siemens Networks.



**Table of Contents****4D. Property, Plants and Equipment**

At December 31, 2012, we operated seven manufacturing facilities in six countries for the production of Nokia-branded mobile devices, and Nokia Siemens Networks had ten manufacturing facilities in four countries. We consider the production capacity of our manufacturing facilities to be sufficient to meet the requirements of our devices and networks infrastructure business. The extent of utilization of our manufacturing facilities varies from plant to plant and from time to time during the year. None of these facilities is subject to a material encumbrance.

The following is a list of the location, use and capacity of major manufacturing facilities for Nokia mobile devices and Nokia Siemens Networks infrastructure equipment at December 31, 2012. In connection with the implementation of our strategy for our Devices & Services business, we have announced a number of changes to our operations resulting in the closure and reconfiguration of certain Nokia facilities. See, Item 4B.

Business Overview    Devices & Services and HERE    Production.

Country	Location and Products	Productive Capacity, Net (m <sup>2</sup> ) <sup>(1)</sup>
BRAZIL	Manaus: mobile devices	9 026
CHINA	Beijing: mobile devices	29 272
	Dongguan: mobile devices	25 644
	Beijing: switching systems	6 749
	Shanghai: base stations, broadband access systems, transmission systems	15 954
	Suzhou: base stations	8 940
	Tianjin: Wireless base stations, mobile core systems, radio controllers, broadband access equipment	10 000
FINLAND	Oulu: base stations	16 000
GERMANY	Berlin: optical transmission systems	15 011
	Bruchsal: switching systems, transmission systems, broadband access systems	18 815
HUNGARY	Komárom: mobile devices	12 150
INDIA	Chennai: mobile devices	35 323
	Chennai: base stations and radio controllers, microwave radio products.	8 364
	Kolkata: fixed switching	3 457
MEXICO	Reynosa: mobile devices	8 889
REPUBLIC OF KOREA	Masan: mobile devices	3 743
RUSSIA	Tomsk: base stations	1 494

(1) Productive capacity equals the total area allotted to manufacturing and to the storage of manufacturing-related materials.

**ITEM 4A. UNRESOLVED STAFF COMMENTS**

Not applicable.

**ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS****5A. Operating Results**

This section begins with an overview of the principal factors and trends affecting our results of operations. The overview is followed by a discussion of our critical accounting policies and estimates that we believe are important to understanding the assumptions and judgments reflected in our reported financial results. We then present an analysis of our results of operations for the last three fiscal years.





---

**Table of Contents**

We have three businesses: Devices & Services, HERE (formerly Location & Commerce) and Nokia Siemens Networks, and four operating and reportable segments for financial reporting purposes: Smart Devices and Mobile Phones within our Devices & Services business; HERE; and Nokia Siemens Networks.

Our Devices & Services business includes two operating and reportable segments – Smart Devices, which focuses on our most advanced products, including Lumia smartphones, and Mobile Phones, which focuses on our most affordable products, including Asha full touch smartphones – as well as Devices & Services Other. Devices & Services Other includes intellectual property income, net sales of spare parts and related cost of sales and operating expenses and common research and development expenses. Devices & Services Other also included our luxury phone business Vertu until October 12, 2012, when we sold most of our shareholding in Vertu to the private equity fund EQT VI.

We acquired NAVTEQ in July 2008 which was a separate reportable segment until the end of the third quarter of 2011. As of October 1, 2011, the Location & Commerce business was formed as a new operating and reportable segment by combining NAVTEQ and our Devices & Services social location services operations. In November 2012, we introduced HERE as the new brand for Nokia’s location-based products and services. As of January 1, 2013 our Location & Commerce business and reportable segment was renamed as the HERE reportable segment. HERE focuses on the development of location-based products and services for a broad range of devices and operating systems, including our Lumia smartphones and local commerce.

Prior period results were regrouped and recast for comparability purposes according to the new reporting format that became effective on April 1, 2011 for our Devices & Services business and October 1, 2011 for our location-based business.

In the discussion below of our Results of Operations, we provide information on the average selling price (ASP) of our mobile devices. ASP is a commonly used measure in our industry to track price developments generally from period to period and also in comparison to our competitors. We provide our ASP at two levels: (i) total mobile device ASP at the Devices & Services business level and (ii) mobile device ASP at each of our Smart Devices and Mobile Phones business unit levels. We believe that our total mobile device ASP provides investors with an overall view of pricing developments at a time when the distinction between different product classifications of mobile devices is blurring. Also, we have a long history of providing ASP at the Devices & Services level, which allows investors to follow the progress of this measure over a long period of time. At the same time, we provide transparency on the ASP developments for our products within each of the Smart Devices and Mobile Phones classifications.

Our total mobile device ASP represents total Devices & Services net sales – comprised of our Smart Devices, Mobile Phones and Devices & Services Other net sales – divided by total Devices & Services volumes. Devices & Services Other net sales includes net sales of Nokia’s luxury phone business Vertu through October 12, 2012, spare parts, as well as IPR income. As IPR income is included in Devices & Services Other net sales, we provide our total mobile device ASP both including and excluding IPR income. Smart Devices ASP represents Smart Devices net sales divided by Smart Devices volumes. Mobile Phones ASP represents Mobile Phones net sales divided by Mobile Phones volumes. IPR income is not recognized at the Smart Devices and Mobile Phone business unit levels.

The presentation of Nokia Siemens Networks’ restructuring and other associated expenses has been aligned with other Nokia businesses and included within other expenses instead of impacting functions. Accordingly, included in other expenses in 2011 is EUR 126 million of restructuring charges, previously reflected within cost of sales (EUR 40 million), R&D (EUR 28 million), selling and marketing (EUR 22 million) and administrative expenses (EUR 36 million). Included in other expenses in 2010 is

---

## **Table of Contents**

EUR 289 million of restructuring charges previously reflected within cost of sales (EUR 173 million), R&D (EUR 19 million), selling and marketing (EUR 21 million) and administrative expenses (EUR 76 million).

For a description of our organizational structure see Item 4A. History and Development of the Company Organizational Structure and Reportable Segments. Business segment data in the following discussion is prior to inter-segment eliminations. See Note 2 to our consolidated financial statements included in Item 18 of this annual report. The following discussion should be read in conjunction with our consolidated financial statements included in Item 18 of this annual report, Item 3D. Risk Factors and Forward-Looking Statements. Our financial statements have been prepared in accordance with IFRS.

### **Principal Factors & Trends Affecting our Results of Operations**

#### *Devices & Services*

Devices & Services is responsible for developing and managing our portfolio of mobile products, which we make for all major consumer segments, as well as designing and developing services, including applications and content, that enrich the experience people have with their mobile devices. Currently, we are addressing all key geographical markets except Japan. Devices & Services also manages our supply chain, sales channels, brand and marketing activities and explores corporate strategic and future growth opportunities for Nokia.

In 2012, the worldwide industry mobile device volumes increased by 2% year-on-year while the market value in US dollar terms increased by 12%, according to Strategy Analytics. Smartphones continued to show strong volume and value growth, as well as continued to capture the public focus in the mobile products market. According to Strategy Analytics, Nokia's mobile device volume market share was 21% in 2012, compared to 27% in 2011, with the decline primarily driven by market share losses in the smartphones segment. In 2013, Strategy Analytics forecast that the worldwide industry mobile device volumes will increase by 6% and the market value in US dollar terms by 7%.

In the following sections, we describe the factors and trends that we believe are currently driving our Devices & Services net sales and profitability.

#### *Transition and Restructuring*

In 2012 our Devices & Services business continued to be in transition, following the announcement of our partnership with Microsoft in February 2011 where we adopted Windows Phone as our primary smartphone platform and have phased out the Symbian smartphone platform. We continued to sell Symbian devices during 2012, with decreasing volumes every quarter due to the deteriorating competitiveness of our Symbian devices. We do not expect to sell any significant volumes of Symbian devices in 2013. At the same time, during 2012, we built out our Windows Phone 7 portfolio and considerably broadened the geographical reach from the initial launch in six Western European countries. Towards the end of the year we introduced mobile devices based on the new Windows Phone 8 operating system. We launched the Nokia Lumia 920 and Nokia Lumia 820, our first smartphones based on the Windows Phone 8 platform, in September 2012 which started shipping to customers in select markets in November 2012. The Nokia 620, an affordable Windows Phone 8 device, was launched in December 2012 and became available in select markets in January 2013.

In 2012, our Mobile Phones unit continued to introduce new innovations to the market. In June 2012, we introduced the first full touch device based on the Series 40 operating system, taking the full touch experience to lower price points. The first new Asha full touch smartphones started shipping at the end of the second quarter 2012.

In 2012, we announced additional restructuring measures to those announced during 2011 as a result of our new Devices & Services strategy. We announced in June 2012 that Nokia targets to reduce its

## Table of Contents

Devices & Services operating expenses, excluding special items and purchase price accounting related items, to an annualized run rate of approximately EUR 3.0 billion by the end of 2013. We have pursued a range of measures, including:

Reductions within certain research and development projects, resulting in the closure of our facilities in Ulm, Germany and Burnaby, Canada;

Consolidation of certain manufacturing operations, resulting in the closure of our manufacturing facility in Salo;

Focusing of marketing and sales activities, including prioritizing key markets;

Streamlining information technology, corporate and support functions; and

Divestments of non-core assets, such as the sale of Vertu and Nokia's headquarters in Finland completed in the second half of 2012. Since we outlined our new Devices & Services strategy in February 2011, as of December 2012, we have reduced our total Nokia Group level headcount by a total of approximately 34 600 employees. Of this, approximately 25 800 reductions came from Devices & Services and corporate common.

As of December 31, 2012, we had recognized cumulative net charges in Devices & Services of approximately EUR 1.4 billion related to our restructuring activities under in 2011 and 2012, which included restructuring charges and associated impairments. While the total extent of the restructuring activities is still to be determined, we currently anticipate cumulative charges in Devices & Services of approximately EUR 1.6 billion before the end of 2013. We also currently anticipate cumulative restructuring related cash outflows in Devices & Services of approximately EUR 1.4 billion before the end of 2013, of which approximately EUR 1.1 billion had been incurred as of December 31, 2012.

In the past, our cost structure has benefited from the cost of components eroding more rapidly than the price of our mobile products. Recently, however, component cost erosion has been generally slowing primarily driven by Devices & Services' smaller scale, a trend that adversely affected our profitability in 2010, 2011 and 2012, and may do so in the future.

Our Devices & Services business is expected to continue to be subject to risks and uncertainties, as our Smart Devices business unit continues to broaden its portfolio of Windows Phone 8 based products and our Mobile Phones business unit continues to bring more smartphone features and design to our Mobile Phones portfolio. Those risks and uncertainties include, among others, the timing, ramp-up, quality and demand for our new products, including our Lumia and Asha devices; further pressure on margins as competitors endeavor to capitalize on our transition; and uncertainty in the macroeconomic environment. Please see section Item 3D, Risk Factors and Forward-Looking Statements .

Longer-term, we continue to target:

Devices & Services net sales to grow faster than the market, and

Devices & Services operating margin to be 10% or more, excluding special items and purchase price accounting related items.

### *Microsoft Partnership*

In February 2011, we announced our partnership with Microsoft to bring together our respective complementary assets and expertise to build a new global mobile ecosystem for smartphones. The partnership, under which we have adopted and are licensing Windows Phone from Microsoft as our primary smartphone platform, was formalized in April 2011.



---

**Table of Contents**

We are contributing our expertise on hardware, design and language support to the Microsoft partnership, and plan to bring Nokia products with Windows Phone to an increasing range of price points, market segments and geographies. We and Microsoft are closely collaborating on joint marketing initiatives and on a shared development roadmap on the future evolution of mobile products. The goal for both partners is that by bringing together our complementary assets in software, search, maps, location-based services, e-commerce, social networking, entertainment, unified communications and advertising, we can jointly create an entirely new consumer proposition. We are also collaborating on our developer ecosystem activities to accelerate developer support for the Windows Phone platform on our mobile products. Although Microsoft will continue to license Windows Phones to other mobile manufacturers, the Microsoft partnership allows us to customize the Windows Phone platform with a view to differentiating Nokia smartphones from those of our competitors that also use the Windows Phone platform.

Our agreement with Microsoft includes platform support payments from Microsoft to us as well as software royalty payments from us to Microsoft. Under the terms of the agreement governing the platform support payments, the amount of each quarterly platform support payment is USD 250 million. We have a competitive software royalty structure, which includes annual minimum software royalty commitments that vary over the life of the agreement. Software royalty payments, with minimum commitments are paid quarterly. Over the life of the agreement, both the platform support payments and the minimum software royalty commitments are expected to measure in the billions of US dollars. Over the life of the agreement the total amount of the platform support payments is expected to slightly exceed the total amount of the minimum software royalty commitment payments. As of the end of 2012, the amount of platform support payments received by Nokia has exceeded the amount of minimum software royalty commitment payments made to Microsoft, thus the net cash flows have been in our favor. As a result, the remaining minimum software royalty commitment payments are expected to exceed the remaining platform support payments by a total of approximately EUR 0.5 billion over the remaining life of the agreement. However, in 2013 the amount of the platform support payments is expected to slightly exceed the total amount of the minimum software royalty commitment payments, thus the net cash flows are still expected to be slightly in our favor. In accordance with the terms of the agreement, the platform support payments and annual minimum software royalty commitment payments continue for a corresponding period of time. We have recognized a portion of the received platform support payments as a benefit to our Smart Devices cost of goods sold and the remainder as a liability as part of accrued expenses and other liabilities on our balance sheet.

*Continued Convergence of the Mobile Communications, Computing, Consumer Electronics and Internet Industries*

Value in the mobile products market continues to be increasingly driven by the convergence of the mobile communications, computing, consumer electronics and Internet industries. As consumer demand and interest for smartphones, tablets and hybrids of the two with access to a range of content has accelerated, new opportunities to create and capture value through innovative new service offerings and user experiences have arisen, with a greater emphasis and importance on software and ecosystem-driven innovation, rather than standalone devices. These opportunities seek to capitalize on various elements of ecosystems such as search services, maps, location-based services, e-commerce, social networking, entertainment, communications and advertising. Capturing these opportunities requires capabilities to manage the increased complexity and to provide an integrated user experience where all these various elements interact seamlessly either in one device or across multiple devices and, increasingly, other products such as televisions and game consoles. We expect these new opportunities to continue to emerge in 2013. We aim to capture a number of these opportunities with our strategy and partnership with Microsoft, including our collective goal to build a global mobile ecosystem for smartphones. In Mobile Phones, we plan to leverage our innovation and strength in

**Table of Contents**

growth markets to connect the next billion people to the Internet and information. We also plan to drive third-party innovation through working with our partners to engage in building strong, local ecosystems for our Mobile Phones devices.

*Importance of Competing on an Ecosystem to Ecosystem Basis*

The increasing importance of ecosystems is, to a large degree, driven by the convergence trends mentioned above and the implications for the competencies and business model adjustments required for longer-term success. In the market for smartphones, we have seen significant momentum and emphasis on the creation and evolution of ecosystems around major software platforms, including Apple's iOS platform and Google's Android platform, bringing together devices, software, applications and services. As Android is available free of charge and a significant part of the source code is available as open source software, entry and expansion in the smartphone market has become easier for a number of hardware manufacturers that have chosen to leverage the Android ecosystem. However, Samsung has emerged as a dominant participant in the Android ecosystem, making the growth of other ecosystems increasingly more difficult and possibly raising the barriers to enter the Android ecosystem with any compelling degree of profitability. Additionally, the success of an ecosystem and its ability to continue to grow may depend on the support it lends to different kinds of devices and, increasingly, other products such as televisions and game consoles. With multiple products available to suit different needs, such as mobile devices, tablets, personal computers and televisions, there is demand for greater seamless interaction among these devices. A number of vendors across different ecosystems, including Apple, Google and Samsung, are pursuing multi-screen strategies and building cloud technologies to capitalize on these opportunities.

Our partnership with Microsoft brings together complementary assets and competencies with the aim of creating a competitive smartphone ecosystem. We believe that together with Microsoft we can succeed in attracting the necessary elements for the creation of a successful ecosystem and that by extending the price points, market segments and geographies of our Windows Phone smartphones, we will be able to significantly strengthen the scale and attractiveness of that ecosystem to developers, operators and partners.

In the low-end phone market, other ecosystems have emerged, including that based around Nokia's own Series 40 operating system which powers feature phones and our Asha full touch smartphones. A growing number of developers are writing Java-based applications for Series 40 which are available through the Nokia Store. Another ecosystem is the one which is based around mobile solutions chipsets from low-cost reference design chipset manufacturers which have enabled the very rapid and low-cost production of feature phones by numerous manufacturers especially in China and India, which are making the business landscape more competitive, as well as bringing some locally relevant innovations to market.

*Increasing dominance by Apple and Samsung/Google's Android platform in the smartphone market*

During 2012, the ongoing trend in the smartphone market continued as Apple and Android further grew their value market share driven by successful product launches. Apple and Samsung together captured the majority of the smartphone market industry profits in 2012. These two entrenched ecosystems also captured the vast majority of smartphone applications and services and through that much of the industry profits made on applications and services. This also helps them attract third-party software developers to their ecosystems. Also, hardware component suppliers and integrators find the leading suppliers/ecosystems very attractive with their high volumes leading to better and more diverse component supply availability. This increased dominance is making it increasingly more difficult for other global ecosystem to emerge. However, due to the dominance of these two entrenched ecosystems there is an increasing desire by mobile operators and other distribution partners to see a

## **Table of Contents**

third ecosystem emerge to balance their dominance. We see a clear opportunity for Windows Phone to become that third ecosystem, and we are working towards that goal with our mobile operator and other distribution partners.

### *Pervasiveness of Smartphones and Smartphone-like Experiences Across the Price Spectrum*

During the past year, we saw the increasing availability of more affordable smartphones, particularly Android-based smartphones, connected devices and related services which were able to reach lower price points contributing to a decline in the average selling prices of smartphones in the industry.

This trend affects us in two ways. First, it puts pressure on the price of our smartphones and potentially our profitability as we need to price our smartphones competitively. In 2012, we partially addressed this with our Symbian device offering in specific regions and distribution channels, and we plan to introduce and bring to markets new and more affordable Nokia products with Windows Phone in 2013, such as the Nokia Lumia 510 announced in October 2012. Second, lower-priced smartphones put pressure on our smartphone and higher-end feature phone offering from our Mobile Phones unit. We are addressing this with introductions in 2013 of smarter, competitively priced Asha full touch smartphones with more modern user experiences, including software, services and application experiences. In support of our Mobile Phones business, we also plan to drive third-party innovation through working with our partners to engage in building strong, local ecosystems.

From a geographical perspective the Chinese market continued to be a very difficult market for us in 2012. Devices & Services net sales declined 78% year-on-year in Greater China in the second half of 2012. In the past, the distribution of mobile devices in China was primarily through networks of distributors and resellers. However, operators are now rapidly driving bundled purchases of devices and data plans, all at price points designed to increase the number of 3G data subscribers. This accelerated market trend towards lower-priced smartphones with specifications that are different from our current strengths has been negatively affecting our Devices & Service business throughout 2012.

### *Challenges of Achieving Sustained Differentiation and Impact on Overall Industry Gross Margin Trends*

We expect the mobile products market to continue to deliver some attractive revenue growth opportunities, but the uncertainty around gross margin trends going forward remains for the industry. The creation and momentum of new ecosystems, especially from established Internet players with disruptive business models, has enabled device vendors that do not have substantial software expertise or investment in software development to develop an increasingly broad and affordable range of smartphones and other connected devices that feature a certain user interface, application development and mobile service ecosystems. At the same time, this has significantly reduced the amount of differentiation in the user experience in the eyes of consumers. Our ability to achieve sustained differentiation with our mobile products is a key driver of consumer retention, net sales growth and margins. We believe that as it becomes increasingly difficult for many of our competitors to achieve sustained differentiation, overall industry gross margin trends may be depressed going forward.

Through our partnership with Microsoft and development of the Windows Phone ecosystem, we are focusing more of our investments in areas where we believe we can differentiate and less on areas where we cannot, leveraging the assets and competencies of our ecosystem partners. Areas where we believe we can achieve sustained product differentiation and leadership include distinctive design with compelling hardware, leading camera and other sensor experiences and leading location-based products and services, in these areas we also hold IPR to support such differentiation. Other ways for us to differentiate our products include using our localization capabilities, global reach, brand and marketing. We expect to continue to introduce new and more differentiated products into our Lumia product family in multiple markets throughout 2013.



---

## **Table of Contents**

In our Mobile Phones business, we believe our competitive advantages including our scale, brand, quality, design, manufacturing and logistics, strategic sourcing and partnering, distribution, research and development and software user experience and intellectual property continue to be important to our competitive position. Additionally, we plan to extend our Mobile Phones offerings and capabilities during 2013 in order to bring a modern mobile experience software, services and applications to aspirational consumers in key growth markets as part of our strategy to bring the Internet and information to the next billion people. At the same time, we plan to drive third-party innovation through working with our partners to engage in building strong, local ecosystems.

### *Emergence of New Business Models*

We believe that the traditional industry monetization model capturing the value of the overall experience through the sale of a mobile device will continue to dominate in the near to medium term. However, we are also seeing the emergence of new indirect monetization models where the value is captured through indirect sources of revenue such as advertising revenue through applications rather than the actual sale of a device. These indirect monetization models could become more prominent in the industry in the longer-term. Accordingly, we believe that developing a range of indirect monetization opportunities, such as advertising-based business models, will be part of successful ecosystems over the coming years. Obtaining and analyzing a complex array of customer feedback, information on consumer usage patterns and other personal and consumer data over the largest possible user-base is essential in gaining greater consumer understanding. We believe this understanding is a key element in developing new monetization opportunities and generating new sources of revenue, as well as in facilitating future innovations, including the delivery of new and more relevant user experiences ahead of the competition.

### *Supply Chain, Distribution and Operator Relationships*

The industry in which we operate is one of the most innovative, with a broad range of industry participants contributing product and technological innovations. In particular, the role of component suppliers has grown in importance. We believe that there continues to be substantial room to innovate in hardware. From that perspective and in order to deliver market-leading innovations and sustainable differentiation through hardware, it is critical to have good relationships with high quality suppliers. With good supplier relationships, allied with the strength of our world-class manufacturing and logistics system, we believe we are well-positioned to deliver high-quality hardware as well as to respond quickly to customer and consumer demand.

Amid rapid change in the industry, we have also seen new sourcing models emerge. Especially in smartphones, our competitors have shifted from traditional multi-sourcing strategies where you have multiple suppliers for each component, to more focused sourcing strategies where they integrate key strategic suppliers closer to their operations as well as use advance cash payments to secure supply for several quarters in advance in order to have more unique and differentiated components as well as more predictability in their sourcing. This means that we also need to look for new and more innovative ways of sourcing key components, particularly in our Smart Devices business unit.

As in any global consumer business, distribution continues to be an important asset in the mobile products market. We believe the breadth of our global distribution network is one of our key competitive advantages. We continue to have one of the industry's largest distribution networks. Compared to our competitors, we have a large distribution and care network.

Strategically, we want to be the preferred ecosystem partner for mobile operators. By building a global mobile ecosystem with Microsoft and focusing on driving operator data plan adoption in lower price points with our feature phone and Asha full touch smartphone offering, we believe we will be able to

---

**Table of Contents**

create a greater balance for mobile operators and provide attractive opportunities to share the economic benefits from services and applications sales compared to other competing ecosystems, thereby improving our long-standing relationships with mobile operators around the world.

*Speed of Innovation, Product Development and Execution*

As the mobile communications industry continues to undergo significant changes, we believe that speed of innovation and product development are important drivers of competitive strength. For example, a number of our competitors have been able to successfully leverage their software expertise to continuously bring innovations to market at a pace faster than typical hardware cycles. This has placed increasing pressure on all industry participants to continue to shorten product creation cycles and to execute in a timely, effective and consistent manner.

*Active Monetization Strategies of Patents and Intellectual Property Rights, or IPR*

Success in our industry requires significant research and development investments, with intellectual property rights filed to protect those investments and related inventions. In recent years, we have seen new entrants in the industry as new ecosystems have lowered the barriers to entry. In 2012, we continued to see intensified and more active licensing and enforcement strategies of patents and IPR emerge through a series of legal disputes between several industry participants as patent holders sought to protect their IPR against infringements by other device OEMs. It is not only traditional industry participants that have sought to safeguard their IPR; non-manufacturing IPR licensing entities owning relevant technology patents have also actively been enforcing their patents against device OEMs. These companies' sole business model is to buy patents from the innovators and to maximize the value from those patents. As a result, the industry's focus on patents and intellectual property has increased significantly and patent portfolios have become increasingly valuable for industry participants. Increased activity has also created lucrative opportunities to monetize patents by selling them to others. We expect this trend to continue in 2013. We believe we are well-positioned to both protect our existing business as well as generate incremental value to our shareholders through our industry-leading IPR portfolio.

We are a world leader in the development of mobile devices and mobile communications technologies, which is also demonstrated by our strong patent position. During the last two decades, we have invested approximately EUR 50 billion in research and development and built one of the products market's strongest and broadest IPR portfolios, with approximately 10 000 patent families. In 2012, we continued to work hard to enforce our patents against unlawful infringement and realize the value of our IPR. Our 2012 initiatives included, among other things, patent suits filed against HTC, BlackBerry (formerly Research in Motion) and Viewsonic in the US and Germany. We also monetized selected parts of our patent portfolio through divestments. Furthermore, Nokia acquired additional IPR in the imaging area in conjunction with the Scalado acquisition, completed in July 2012.

*HERE (formerly Location & Commerce)*

Our HERE business develops a range of location-based products and services for consumers, as well as platform services and local commerce services for device manufacturers, application developers, Internet services providers, merchants and advertisers. The business was initially formed under the name Location & Commerce during 2011 by the combination of our Devices & Services social location services operations and our NAVTEQ business. Beginning October 1, 2011, this business assumed profit-and-loss responsibility and end-to-end accountability for the full consumer experience. While continuing to serve NAVTEQ's existing customers both in terms of provision of content and as a business-to-business provider of map data, the business is also developing location-based offerings in support of our strategic goals in feature phones and smartphones, as well as developing a platform for

---

## **Table of Contents**

the broader Internet ecosystem, including products and applications for our direct competitors and their ecosystems. Our HERE business aims to positively differentiate its digital map data and location-based offerings from those of our competitors and create competitive business models for our customers.

In November 2012 Nokia introduced HERE as the new brand for its location-based products and services. HERE is the first location cloud aiming to deliver maps and location experiences across multiple screens and operating systems. With the new brand, HERE, we aim to inspire a new generation of location-based products and services that make the mobile experience more personally significant for people everywhere. To further extend its location services, we launched a maps application for iOS under the HERE brand. Furthermore, we also demonstrated an Android OS-based reference application and announced plans for the availability of a HERE Software Development Kit (SDK) for Android OEMs in early 2013.

HERE's resources are primarily focused on the development of (i) content, which involves the mapping of the physical world and places such as roads and points of interest, as well as the collection of activity data generated and authorized for use by our users; (ii) the platform, which adds functionality on top of the content and includes the development tools for us and others to create experiences on top of it; and (iii) applications built on the content and platform.

Our Devices & Services business is a key customer of HERE. Devices & Services purchases map and application licenses from HERE for the HERE Maps service sold in combination with GPS enabled smartphones. The internal sales amounted to EUR 374 million in 2012. Due to changes in Devices & Services competitive position and other factors, HERE has been and may be affected by lower recognized revenue from internal sales which generally carry a higher gross margin compared to external sales.

In the following sections we describe the factors and trends that we believe are currently driving our HERE business net sales and profitability.

### *Location-Based Products and Services Proliferation*

A substantial part of net sales in 2012 came from the licensing of digital map data and related location-based content and services for use in in-vehicle navigation systems, geographical information system applications, mobile devices and other location-based products and services. HERE's success depends upon the rate at which consumers and businesses use location-based products and services. In recent years, there has been a strong increase in the availability of such products and services, particularly in in-vehicle navigation systems and mobile devices. Furthermore, as the use of the Internet through mobile devices has been growing rapidly, the anchor of the Internet is moving from the desktops to mobiles. This shift is making location-based content a key element of most Internet experiences. We expect this trend to continue, but we also expect that the level of quality required for these products and services and the ability to charge license fees for the use of map data incorporated into such products and services may vary significantly. We believe our HERE business will be well positioned to capture emerging business opportunities with its broad offering.

### *Importance of Creating an Ecosystem around Location-Based Services Offering*

We believe that creating a winning ecosystem around our HERE's services offering will be critical for the success of this business. The announcement of the HERE platform and business focus in late 2012 is an important step, as the platform becomes more widely available for different smartphone users. We believe that the longer-term success of the HERE business will be determined by our ability to attract strategic partners and developers to support our ecosystem. HERE is aiming to support its ecosystem by enabling strategic partners and independent developers to foster innovation on top of

---

## **Table of Contents**

the HERE location platform. We believe that making it possible for other vendors to innovate on top of HERE's high quality location-based assets will further strengthen the overall experience and make our offering stronger and more attractive.

### *Emergence of the Intelligent Sensor Network*

Mobile devices are increasingly being enabled with a rich set of sensors such as a GPS, a camera and an accelerometer which enable interaction with the real world. This interaction also enables the collection of large volumes of rich data which, when combined with analytics, enable the development of increasingly sophisticated, contextually-aware devices and services. We believe the combination of NAVTEQ with our Devices & Services social location services operations will enable HERE to participate in this industry development and seize new opportunities to deliver new experiences that bridge the virtual with the real world.

### *Price Pressure for Navigable Map Data Increasing*

HERE's net sales are also affected by the highly competitive pricing environment. Google is offering turn-by-turn navigation in many countries to its business customers and consumers on certain mobile devices at no charge to the consumer. While we expect these offerings will increase the adoption of location-based services in the mobile products market, we also expect that they may lead to additional price pressure from HERE's business customers, including device manufacturers, navigation application developers, mobile operators and personal navigation device (PND) manufacturers, which are seeking ways to offer lower-cost or free turn-by-turn navigation to consumers. Turn-by-turn navigation solutions that are free to consumers on mobile devices may also put pressure on automotive OEMs and automotive navigation system manufacturers to have lower cost navigation alternatives. This price pressure is expected to result in an increased focus on advertising revenue as a way to supplement or replace license fees for map data.

In response to the pricing pressure, HERE focuses on offering a digital map database with superior quality, detail and coverage; providing value-added services to its customers such as distribution and technical services; enhancing and extending its product offering by adding additional content to its map database, such as 3D landmarks; and providing business customers with alternative business models that are less onerous to the business customer than those provided by competitors. HERE's future results will also depend on HERE's ability to adapt its business models to generate increasing amounts of advertising revenues from its map and other location-based content.

We believe that HERE's PND customers will continue to face competitive pressure from smartphones and other mobile devices that now offer navigation, but that PNDs continue to offer a viable option for consumers based on the functionality, user interface, quality and overall ease of use.

### *Quality and Richness of Location-Based Content and Services Will Continue to Increase*

HERE's profitability is also driven by its expenses related to the development of its database and expansion. HERE's development costs are comprised primarily of the purchase and licensing of source maps, employee compensation and third-party fees related to the construction, maintenance and delivery of its database.

In order to remain competitive and notwithstanding the price pressure discussed above, HERE will need to continue to expand the geographic scope of its map data, maintain the quality of its existing map data and add an increasing amount of new location-based content and services, as well as using innovative ways like crowd sourcing to collect data. The trends for such location-based content and services include real-time updates to location information, more dynamic information, such as traffic,

---

**Table of Contents**

weather, events and parking availability and imagery consistent with the real world. We expect that these requirements will cause HERE's map development expenses to continue to grow, although a number of productivity initiatives are underway designed to improve the efficiency of our database collection processing and delivery. In addition, we will need to continue making investments in this fast paced and innovative location-based content and services industry, for instance through research and development, licensing arrangements, acquiring businesses and technologies, recruiting specialized expertise and partnering with third parties.

***Nokia Siemens Networks***

Nokia Siemens Networks is a leading global provider of telecommunications infrastructure, with a focus on the mobile broadband market. In its target market, Nokia Siemens Networks is the second largest company worldwide, by revenue. It has a strong position in the newer infrastructure technologies of 3G and 4G (LTE). In 3G, Nokia Siemens Networks is the industry leader by customers served. More than a billion subscribers connect through Nokia Siemens Networks' 3G networks. In LTE, Nokia Siemens Networks had 77 commercial contracts at the end of 2012.

Nokia Siemens Networks' net sales depend on various developments in the global mobile infrastructure and related services market, such as network operator investments, the pricing environment and product and services mix. In developed markets, investments by operators are primarily driven by capacity and coverage upgrades, which, in turn, are driven by greater usage of the networks primarily through the rapid growth in data usage. Increasingly, mobile operators are targeting investments in technology and services that allow them to provide end-users with fast and faultless network performance in the most efficient manner possible, which optimizes their investment. Such developments are facilitated by the evolution of network technologies that promote greater efficiency and flexibility, such as the current shift from 2G and 3G networks to 4G (LTE) technologies.

In addition, mobile operators are investing in software and services that provide them with the means to better manage end-users on their network and also allow them additional access to the value of the large amounts of subscriber data under their control. In emerging markets, the principal factors influencing investments by operators are the continued growth in customer demand for telecommunications services, including data, as well as new subscriber growth. In many emerging markets, this growth in demand and subscribers continues to drive growth in network coverage and capacity requirements.

The telecommunications infrastructure market is characterized by intense competition and price erosion caused in part by the successful entry into the market of vendors from China, Huawei Technologies Co. Ltd. ( Huawei ), in particular, and ZTE Corporation ( ZTE ), both of which have gained market share by leveraging their low-cost advantage in tenders for customer contracts. In recent years, the technological capabilities of those vendors, particularly Huawei, has improved significantly, resulting in competition not only on price but also on quality. In 2012, we witnessed further competition emerging from Samsung Electronics, which has expanded its network infrastructure business out of its domestic Korean market with limited gains in Europe and the United States.

The pricing environment has remained intense in 2012. In particular, the wave of network modernization that has taken place, particularly in Europe but increasingly also in other regions including Asia Pacific, has led to aggressive pricing as all vendors fight for market share.

Nokia Siemens Networks' net sales are impacted by these pricing developments, which show some regional variation, and in particular by the balance between sales in developed and emerging markets. While price erosion is evident across most geographical markets, it continues to be particularly intense in a number of emerging markets where many mobile operator customers have been subject to financial pressure, both from the lack of availability of financing facilities as well as profound pricing pressure in their domestic markets.

## **Table of Contents**

Pricing pressure is evident in the traditional products markets, in particular, where competitors have products with similar technological capabilities, leading to commoditization in some areas. Nokia Siemens Networks' ability to compete in those markets is determined by its ability to remain price competitive with its industry peers. To remain competitive and differentiate Nokia Siemens Networks from its competitors, it is therefore essential that Nokia Siemens Networks constantly improves its technology while continuously reducing product costs to keep pace with price erosion. Nokia Siemens Networks has continued to make progress in reducing product and procurement costs in 2012 and will need to focus on this area in order to provide its customers with high-quality products at competitive prices.

Over recent years, the telecommunications infrastructure industry has entered a more mature phase characterized by the completion of the greenfield roll-outs of mobile network infrastructure across many markets, although this is further advanced in developed markets. Notwithstanding, there is still a significant market for traditional network infrastructure products to meet coverage and capacity requirements, even as older technologies such as 2G are supplanted by 3G and 4G (LTE). As growth in traditional network products sales slows, there is an emphasis on the provision of network upgrades, often through software, as well as applications, such as billing, charging and subscriber management and services, particularly the outsourcing of non-core activities to companies that provide extensive telecommunications expertise and strong managed service offerings.

In the following sections we describe the factors and trends that we believe are currently driving Nokia Siemens Networks' net sales and profitability.

### *Mobility and Data Usage*

Over recent years the two most evident trends in the mobile and fixed network market—the rise in use of mobile services and the exponential increase in data traffic—have converged. One result is that services once regarded as available primarily, if not exclusively, through fixed or wireline networks are increasingly in demand from mobile on wireless networks also.

Alongside traditional voice and data services, such as text messaging, end-users access a wealth of media services through communications networks, including email and other business data, entertainment services, including games and music, visual media, including high definition films and television programming and social media sites. End-users increasingly expect that such services are available to them everywhere, through both mobile and fixed networks, and a wealth of new devices, optimized to allow them to do so, have become available including tablets, highly sophisticated smartphones, mobile broadband data dongles, set-top boxes and mobile and fixed line telephones.

The widespread availability of devices has been matched by a proliferation of products and services in the market that both meet and feed end-user demand. These continue to drive dramatic increases in data traffic and signaling through both mobile access and transport networks that carry the potential to cause network congestion and complexity. During 2012, this increase continued to gain momentum as more users moved towards smartphones and tablets and even more devices that require constant connectivity were introduced to the market.

While the growth in traffic is clear, it has not been met by corresponding growth in operators' revenues from data traffic, where growth appears to be slowing. This presents operators with a challenge: to cope with the growing traffic load within networks, it is fundamental that operators continue to invest in their networks, but within the financial constraints that their current business models dictate.

This means that while the addition of capacity, speed and coverage is crucial, it is critical that networks are built efficiently and effectively in a manner that optimizes capital investment and delivers networks with architecture sufficiently flexible to cope with evolving requirements.

## **Table of Contents**

In November 2011, Nokia Siemens Networks put emphasis on the centrality of mobile networks to the future development of telecommunications and announced that it would place mobile broadband at the heart of its strategy, articulating an ambition to provide the world's most efficient mobile networks, the intelligence to maximize the value of those networks and the services capability to make them work seamlessly. In line with its strategy, Nokia Siemens Networks has significantly increased its investment in mobile broadband. This goal was at the heart of its strategy in 2012.

Also during 2011, Nokia Siemens Networks launched the network architecture designed to equip operators to meet the challenges they are facing. Liquid Net architecture provides flexibility across networks to adapt to changing customer needs instantly, using existing resources more efficiently. This optimizes capital investment and allows operators to seek new revenue opportunities. Liquid Net uses automated, self-adapting broadband optimization to remain constantly aware of the network's operational status, as well as the services and content being consumed, to ensure the best user experience. Liquid Net consists of three areas: Liquid Radio, Liquid Core and Liquid Transport.

### *Strategy and Restructuring Program*

Nokia Siemens Networks is focused on becoming the strongest, most innovative and highest quality mobile broadband and services business in the world. Rather than targeting the full spectrum of telecommunications equipment and services, Nokia Siemens Networks is the first of the telecommunications companies to refocus on providing the most efficient mobile networks, the intelligence to maximize the value of those networks and the services to make them work seamlessly. In November 2011, Nokia Siemens Networks announced a new strategy, including changes to its organizational structure and an extensive restructuring program, aimed at maintaining and developing its position as one of the leaders in mobile broadband and services and improving its competitiveness and profitability.

Nokia Siemens Networks continues to target to reduce its annualized operating expenses and production overheads, excluding special items and purchase price accounting related items, by more than EUR 1 billion by the end of 2013, compared to the end of 2011. While these savings are expected to come largely from organizational streamlining, it has also targeted areas such as real estate, information technology, product and service procurement costs, overall general and administrative expenses and a significant reduction of suppliers in order to further lower costs and improve quality.

2012 was a year of transition for Nokia Siemens Networks as it implemented its new strategy and restructuring program. During the course of 2012, Nokia Siemens Networks has significantly reduced its headcount, operating expenses and other costs. Since the announcement of our new strategy Nokia Siemens Networks said that it plans to reduce its global workforce by approximately 17 000 by the end of 2013. These planned reductions are designed to align its workforce with its new strategy as part of a range of productivity and efficiency measures.

During 2012, Nokia Siemens Networks also enacted a number of planned measures including the elimination of the matrix organizational structure, site consolidation, transfer of activities to global delivery centers, consolidation of certain central functions, cost synergies from the integration of acquired Motorola Solutions' networks assets, efficiencies in service operations and company-wide process simplification.

To improve profitability of its business, Nokia Siemens Networks has also sought to reduce its exposure to loss-making contracts, either through turning them around, if possible, or terminating them. Nokia Siemens Networks terminated various contracts in 2012, including a managed services agreement in Brazil and a public safety network contract in Norway.

---

## **Table of Contents**

As a result of its focus on Mobile Broadband, Nokia Siemens Networks divested a number of businesses which were not in line with this strategy in 2011 and 2012.

As part of our strategy announced in November 2011, Nokia Siemens Networks also articulated a regional strategy, identifying three markets, Japan, Korea and the United States, as priority countries, where it has been and is targeting growth. The Middle East and Africa, where political, financial and competitive pressures have led to particular weakness in 2011, have in turn been the focus of turnaround efforts in 2012. In these regions, Nokia Siemens Networks has restricted business to certain markets and certain customers focusing on profitability and improved asset management rather than sales growth. This has contributed to a decline in net sales in both regions. In the remaining regions, Latin America, China, Asia-Pacific and Europe, its goal has been to defend market share and find areas for future profitable growth.

During 2012, Nokia Siemens Networks recognized restructuring charges and other associated items of EUR 1.3 billion related to this restructuring program, resulting in cumulative charges of approximately EUR 1.3 billion. In total we now expect cumulative Nokia Siemens Networks restructuring charges of approximately EUR 1.3 billion by the end of 2013, virtually all of which have now been recognized. By the end of 2012, Nokia Siemens Networks had cumulative restructuring related cash outflows of approximately EUR 650 million related to this restructuring program. Nokia Siemens Networks expects restructuring-related cash outflows to be approximately EUR 450 million for the full year 2013, and approximately EUR 200 million for the full year 2014 related to this restructuring program.

### *Targets and Priorities*

Nokia Siemens Networks plans to continue to prioritize the improvement of its profitability and cash generation over growth in revenue. In addition, it plans to target increasing its market share in certain growth areas such as 4G (LTE), in particular in priority countries, Japan, Korea and the United States.

Longer-term, Nokia Siemens Networks continues to target Nokia Siemens Networks operating margin to be between 5% and 10%, excluding special items and purchase price accounting related items.

### *Cost of components and raw materials*

There are several factors that drive Nokia Siemens Networks profitability. Scale, operational efficiency and cost control have been and will continue to be important factors affecting its profitability and competitiveness. Its product costs are comprised of the cost of components, manufacturing, labor and overhead, royalties and license fees, the depreciation of product machinery, logistics costs as well as warranty and other quality costs.

### *Product mix*

Nokia Siemens Networks profitability is also impacted by the pricing environment, product mix, including higher margin software sales and regional mix.

Its products, solutions and services have varying profitability profiles. Its mobile broadband business offers a combination of hardware and software. These products, in particular software products, have higher gross margins; however, the products require much higher research and development investments. Its global services offerings are typically labor intensive while carrying low research and development cost and have relatively low gross margins compared to its hardware and software products. Many of its product service offerings combine elements from all business units and several factors can influence relative gross margin.



**Table of Contents**

Regional sales also carry varying profitability. Overall profitability for certain regions should only be seen as indicative, as profitability can vary from country to country within a particular region and even from customer to customer within a particular country. During 2011 and 2012, Nokia Siemens Networks has pursued a policy of prioritizing markets such as Japan, Korea and the United States, as these markets typically offer vendors more value than other markets. In general, developed markets provide relatively high margins while emerging markets, where end-users and therefore mobile operators are often more financially constrained, provide lower margins.

**Certain Other Factors*****Exchange Rates***

Our business and results of operations are from time to time affected by changes in exchange rates, particularly between the euro, our reporting currency, and other currencies such as the US dollar, the Japanese yen and the Chinese yuan. See Item 3A. Selected Financial Data Exchange Rate Data. Foreign currency denominated assets and liabilities, together with highly probable purchase and sale commitments, give rise to foreign exchange exposure.

The magnitude of foreign exchange exposures changes over time as a function of our presence in different markets and the prevalent currencies used for transactions in those markets. The majority of our non-euro based sales are denominated in the US dollar, but our strong presence in emerging markets like China, India, Brazil and Russia also gives rise to substantial foreign exchange exposure in the Chinese yuan, Indian rupee, Brazilian real and Russian ruble. The majority of our non-euro based purchases are denominated in US dollars and Japanese yen. In general, depreciation of another currency relative to the euro has an adverse effect on our sales and operating profit, while appreciation of another currency relative to the euro has a positive effect, with the exception of the Japanese yen and US dollar, being the only significant foreign currencies in which we have more purchases than sales.

In addition to foreign exchange risk of our own sales and costs, our overall risk depends on the competitive environment in our industry and the foreign exchange exposures of our competitors.

To mitigate the impact of changes in exchange rates on net sales as well as average product cost, we hedge material transaction exposures on a gross basis, unless hedging would be uneconomical due to market liquidity and/or hedging cost. We hedge significant forecasted cash flows typically with a 6- to 12-month hedging horizon. For the majority of these hedges, hedge accounting is applied to reduce income statement volatility. We also hedge significant balance sheet exposures. Our balance sheet is also affected by the translation into euro for financial reporting purposes of the shareholders' equity of our foreign subsidiaries that are denominated in currencies other than the euro. In general, this translation increases our shareholders' equity when the euro depreciates, and affects shareholders' equity adversely when the euro appreciates against the relevant other currencies (year-end rate to previous year-end rate). To mitigate the impact to shareholders' equity, we hedge selected net investment exposures from time to time.

Global currency markets, were less volatile in 2012 than in 2011. Overall, hedging costs remained relatively low in 2012 due to the low interest rate environment.

During the first half of 2012, the US dollar appreciated against the euro by 7.2%, but subsequently depreciated. At the end of 2012, the US dollar was 2.9% stronger against the euro than at the end of 2011.

The stronger US dollar in 2012 had a positive impact on our net sales expressed in euro, as approximately 50% of our net sales are generated in US dollars and currencies closely following the US dollar. The appreciation of the US dollar also contributed to a higher average product cost, as approximately 60% of the components we use are sourced in US dollars. In total, the movement of the US dollar against the euro had a slightly negative effect on our operating profit in 2012.

---

## **Table of Contents**

In 2012, the Japanese yen depreciated by 5.7% against the euro. During that year, approximately 10% of the devices components we used were sourced in Japanese yen and, consequently, the depreciation of the Japanese yen had a positive impact on our operating profit in 2012.

In 2012, emerging market currencies performance was mixed. The Chinese yuan and the Russian ruble performed the best appreciating by 4.9% and 3.4%, respectively, against the euro. The Indian rupee and the Brazilian real depreciated by 2.3% and 11.4%, respectively, against the euro.

In general, the depreciation of an emerging market currency has a negative impact on our operating profit due to reduced revenue in euro terms and/or the reduced purchasing power of customers in the emerging market. The appreciation of an emerging market currency generally has a positive impact on our operating profit.

Significant changes in exchange rates may also impact our competitive position and related price pressures through their impact on our competitors.

For a discussion on the instruments used by Nokia in connection with our hedging activities, see Note 34 to our consolidated financial statements included in Item 18 of this annual report. See also Item 11. Quantitative and Qualitative Disclosures About Market Risk and Item 3D. Risk Factors.

### ***Seasonality***

Our Devices & Services sales are somewhat affected by seasonality. Historically, the first quarter of the year has been the lowest quarter and the fourth quarter has been the strongest quarter, mainly due to the effect of holiday sales. However, over time we have seen a trend towards less pronounced seasonality. The difference between the sequential holiday seasonal increase in the Western hemisphere in fourth quarter and subsequent decrease in first quarter sequential volumes has moderated. The moderation in seasonality has been caused by shifts in the regional make-up of the overall market. Specifically, there has been a larger mix of industry volumes coming from markets where the fourth quarter holiday seasonality is much less prevalent.

Our HERE (formerly Location & Commerce) sales to the automotive industry are not significantly affected by seasonality. However, HERE sales to navigation device and mobile device manufacturers typically see strong fourth quarter seasonality due to holiday sales.

Nokia Siemens Networks also experiences seasonality. Its sales are generally higher in the last quarter of the year compared with the first quarter of the following year due to network operators' planning, budgeting and spending cycles.

### ***Accounting Developments***

The International Accounting Standards Board, or IASB, has and will continue to critically examine current IFRS, with a view towards improving existing IFRS as well as increasing international harmonization of accounting rules. This process of improvement and convergence of worldwide accounting standards has resulted in amendments to existing rules effective during the year ended December 31, 2012. These are discussed in more detail under New accounting pronouncements under IFRS in Note 1 to our consolidated financial statements included in Item 18 of this annual report. The adopted 2012 amendments to IFRS did not have a material impact on our results of operations or financial position.

---

## **Table of Contents**

### **Critical Accounting Policies**

As of January 1, 2013 our Location & Commerce business and reportable segment was renamed HERE. The name Location & Commerce is used in the following discussion of critical accounting policies.

Our accounting policies affecting our financial condition and results of operations are more fully described in Note 1 to our consolidated financial statements included in Item 18 of this annual report. Some of our accounting policies require the application of judgment by management in selecting appropriate assumptions for calculating financial estimates, which inherently contain some degree of uncertainty. Management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances. The related results form the basis for making judgments about reported carrying values of assets and liabilities and reported amounts of revenues and expenses that may not be readily apparent from other sources. The Group will revise material estimates if changes occur in the circumstances on which an estimate was based or as a result of new information or more experience. Actual results may differ from current estimates under different assumptions or conditions. The estimates affect all our businesses equally unless otherwise indicated.

The following paragraphs discuss critical accounting policies and related judgments and estimates used in the preparation of our consolidated financial statements. We have discussed the application of these critical accounting estimates with our Board of Directors and Audit Committee.

#### ***Revenue Recognition***

Majority of the Group's sales are recognized when the significant risks and rewards of ownership have transferred to the buyer, continuing managerial involvement usually associated with ownership and effective control have ceased, the amount of revenue can be measured reliably, it is probable that economic benefits associated with the transaction will flow to the Group, and the costs incurred or to be incurred in respect of the transaction can be measured reliably. The remainder of revenue is recorded under the percentage of completion method.

Devices & Services and certain Location & Commerce and Nokia Siemens Networks revenues are generally recognized when the significant risks and rewards of ownership have transferred to the buyer, continuing managerial involvement usually associated with ownership and effective control have ceased, the amount of revenue can be measured reliably, it is probable that economic benefits associated with the transaction will flow to the Group and the costs incurred or to be incurred in respect of the transaction can be measured reliably. This requires us to assess at the point of delivery whether these criteria have been met. When management determines that such criteria have been met, revenue is recognized. We record estimated reductions to revenue for special pricing agreements, price protection and other volume based discounts at the time of sale, mainly in the mobile device business. Sales adjustments for volume based discount programs are estimated largely based on historical activity under similar programs. Price protection adjustments are based on estimates of future price reductions and certain agreed customer inventories at the date of the price adjustment. Devices & Services and certain Nokia Siemens Networks service revenue is generally recognized on a straight line basis over the service period unless there is evidence that some other method better represents the stage of completion. Devices & Services and Location & Commerce license fees from usage are recognized in the period when they are reliably measurable which is normally when the customer reports them to the Group.

Devices & Services, Location & Commerce and Nokia Siemens Networks may enter into multiple component transactions consisting of any combination of hardware, services and software. The commercial effect of each separately identifiable element of the transaction is evaluated in order to reflect the substance of the transaction. The consideration from these transactions is allocated to each

**Table of Contents**

separately identifiable component based on the relative fair value of each component. The consideration allocated to each component is recognized as revenue when the revenue recognition criteria for that element have been met. The Group determines the fair value of each component by taking into consideration factors such as the price when the component is sold separately by the Group, the price when a similar component is sold separately by the Group or a third party and cost plus a reasonable margin.

Nokia Siemens Networks revenue and cost of sales from contracts involving solutions achieved through modification of complex telecommunications equipment is recognized on the percentage of completion basis when the outcome of the contract can be estimated reliably. This occurs when total contract revenue and the cost to complete the contract can be estimated reliably, it is probable that economic benefits associated with the contract will flow to the Group, and the stage of contract completion can be measured. When we are not able to meet one or more of those conditions, the policy is to recognize revenues only equal to costs incurred to date, to the extent that such costs are expected to be recovered. Completion is measured by reference to costs incurred to date as a percentage of estimated total project costs using the cost-to-cost method.

The percentage of completion method relies on estimates of total expected contract revenue and costs, as well as the dependable measurement of the progress made towards completing the particular project. Recognized revenues and profit are subject to revisions during the project in the event that the assumptions regarding the overall project outcome are revised. The cumulative impact of a revision in estimates is recorded in the period such revisions become probable and can be estimated reliably. Losses on projects in progress are recognized in the period they become probable and can be estimated reliably.

Nokia Siemens Networks' current sales and profit estimates for projects may change due to the early stage of a long-term project, new technology, changes in the project scope, changes in costs, changes in timing, changes in customers' plans, realization of penalties and other corresponding factors.

***Customer Financing***

We have provided a limited number of customer financing arrangements and agreed extended payment terms with selected customers. In establishing credit arrangements, management must assess the creditworthiness of the customer and the timing of cash flows expected to be received under the arrangement. However, should the actual financial position of our customers or general economic conditions differ from our assumptions, we may be required to reassess the ultimate collectability of such financings and trade credits, which could result in a write-off of these balances in future periods and thus negatively impact our profits in future periods. Our assessment of the net recoverable value considers the collateral and security arrangements of the receivable as well as the likelihood and timing of estimated collections. From time to time, the Group endeavors to mitigate this risk through transfer of its rights to the cash collected from these arrangements to third-party financial institutions on a non-recourse basis in exchange for an upfront cash payment. The financial impact of the customer financing related assumptions mainly affects the Nokia Siemens Networks business. See also Note 34(b) to our consolidated financial statements included in Item 18 of this annual report for a further discussion of long-term loans to customers and other parties.

***Allowances for Doubtful Accounts***

We maintain allowances for doubtful accounts for estimated losses resulting from the subsequent inability of our customers to make required payments. If financial conditions of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required in future periods. Management specifically analyzes accounts receivables and historical bad

---

**Table of Contents**

debt, customer concentrations, customer creditworthiness, current economic trends and changes in our customer payment terms when evaluating the adequacy of the allowance for doubtful accounts. Based on these estimates and assumptions the allowance for doubtful accounts was EUR 248 million at the end of 2012 (EUR 284 million at the end of 2011).

***Inventory-related Allowances***

We periodically review our inventory for excess, obsolescence and declines in market value below cost and record an allowance against the inventory balance for any such declines. These reviews require management to estimate future demand for our products. Possible changes in these estimates could result in revisions to the valuation of inventory in future periods. Based on these estimates and assumptions, the allowance for excess and obsolete inventory was EUR 471 million at the end of 2012 (EUR 457 million at the end of 2011). The financial impact of the assumptions regarding this allowance affects mainly the cost of sales of the Devices & Services and Nokia Siemens Networks businesses. During 2012 the Group also recognized an expense of EUR 55 million (EUR 0 in 2011) within Devices & Services cost of sales to write-down the inventories to net realizable value.

***Warranty Provisions***

We provide for the estimated cost of product warranties at the time revenue is recognized. Our products are covered by product warranty plans of varying periods, depending on local practices and regulations. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligations are affected by actual product failure rates (field failure rates) and by material usage and service delivery costs incurred in correcting a product failure. Our warranty provision is established based upon our best estimates of the amounts necessary to settle future and existing claims on products sold as of the balance sheet date. As we continuously introduce new products which incorporate complex technology, and as local laws, regulations and practices may change, it will be increasingly difficult to anticipate our failure rates, the length of warranty periods and repair costs. While we believe that our warranty provisions are adequate and that the judgments applied are appropriate, the ultimate cost of product warranty could differ materially from our estimates. When the actual cost of quality of our products is lower than we originally anticipated, we release an appropriate proportion of the provision, and if the cost of quality is higher than anticipated, we increase the provision. Based on these estimates and assumptions the warranty provision was EUR 407 million at the end of 2012 (EUR 688 million at the end of 2011). The financial impact of the assumptions regarding this provision mainly affects the cost of sales of our Devices & Services business.

***Provision for Intellectual Property Rights, or IPR, Infringements***

We provide for the estimated past costs related to alleged asserted IPR infringements based on the probable outcome of each potential future settlement.

Our products include increasingly complex technologies involving numerous patented and other proprietary technologies. Although we proactively try to ensure that we are aware of any patents and other IPR related to our products under development and thereby avoid inadvertent infringement of proprietary technologies, the nature of our business is such that patent and other IPR infringements may and do occur. We identify potential IPR infringements through contact with parties claiming infringement of their patented or otherwise exclusive technology, or through our own monitoring of developments in patent and other IPR cases involving our competitors.

We estimate the outcome of all potential IPR infringements made known to us through assertion by third parties, or through our own monitoring of patent- and other IPR-related cases in the relevant legal

---

## **Table of Contents**

systems. To the extent that we determine that an identified potential infringement will result in a probable outflow of resources, we record a liability based on our best estimate of the expenditure required to settle infringement proceedings. Based on these estimates and assumptions the provision for IPR infringements was EUR 388 million at the end of 2012 (EUR 431 million at the end of 2011). The financial impact of the assumptions regarding this provision mainly affects our Devices & Services business.

Our experience with claims of IPR infringement is that there is typically a discussion period with the accusing party, which can last from several months to years. In cases where a settlement is not reached, the discovery and ensuing legal process typically lasts a minimum of one year. For this reason, IPR infringement claims can last for varying periods of time, resulting in irregular movements in the IPR infringement provision. In addition, the ultimate outcome or actual cost of settling an individual infringement may materially vary from our estimates.

### ***Legal Contingencies***

As discussed in Item 8A7. *Litigation* and in Note 29 to the consolidated financial statements included in Item 18 of this annual report, legal proceedings covering a wide range of matters are pending or threatened in various jurisdictions against the Group. We record provisions for pending litigation when we determine that an unfavorable outcome is probable and the amount of loss can be reasonably estimated. Due to the inherent uncertain nature of litigation, the ultimate outcome or actual cost of settlement may materially vary from estimates.

### ***Business Combinations***

We apply the acquisition method of accounting to account for acquisitions of businesses. The consideration transferred in a business combination is measured as the aggregate of the fair values of the assets transferred, liabilities incurred towards the former owners of the acquired business and equity instruments issued. Acquisition-related costs are recognized as expense in profit and loss in the periods when the costs are incurred and the related services are received. Identifiable assets acquired and liabilities assumed are measured separately at their fair value as of the acquisition date. Non-controlling interests in the acquired business are measured separately based on their proportionate share of the identifiable net assets of the acquired business. The excess of the cost of the acquisition over our interest in the fair value of the identifiable net assets acquired is recorded as goodwill.

The determination and allocation of fair values to the identifiable assets acquired and liabilities assumed is based on various assumptions and valuation methodologies requiring considerable management judgment. The most significant variables in these valuations are discount rates, terminal values, the number of years on which to base the cash flow projections, as well as the assumptions and estimates used to determine the cash inflows and outflows. Management determines the discount rates to be used based on the risk inherent in the related activity's current business model and industry comparisons. Terminal values are based on the expected life of products and forecasted life cycle and forecasted cash flows over that period. Although we believe that the assumptions applied in the determination are reasonable based on information available at the date of acquisition, actual results may differ from the forecasted amounts and the difference could be material.

### ***Valuation of Long-lived Assets, Intangible Assets and Goodwill***

We assess the carrying amount of identifiable intangible assets and long-lived assets if events or changes in circumstances indicate that such carrying amount may not be recoverable. We assess the carrying amount of our goodwill at least annually, or more frequently based on these same indicators. Factors that we consider important, and which could trigger an impairment review, include the following:

significant underperformance relative to historical or projected future results;

## Table of Contents

significant changes in the manner of our use of these assets or the strategy for our overall business; and

significantly negative industry or economic trends.

When we determine that the carrying amount of intangible assets, long-lived assets or goodwill may not be recoverable based upon the existence of one or more of the above indicators of impairment, we measure any impairment based on discounted projected cash flows.

This review is based upon our projections of anticipated discounted future cash flows. The most significant variables in determining cash flows are discount rates, terminal values, the number of years on which to base the cash flow projections, as well as the assumptions and estimates used to determine the cash inflows and outflows. Management determines discount rates to be used based on the risk inherent in the related activity's current business model and industry comparisons. Terminal values are based on the expected life of products and forecasted life cycle and forecasted cash flows over that period. While we believe that our assumptions are appropriate, such amounts estimated could differ materially from what will actually occur in the future. In assessing goodwill, these discounted cash flows are prepared at a cash generating unit level. Amounts estimated could differ materially from what will actually occur in the future.

Goodwill is allocated to the Group's cash-generating units (CGU) and discounted cash flows are prepared at CGU level for the purpose of impairment testing. The allocation of goodwill to our CGUs is made in a manner that is consistent with the level at which management monitors operations and the CGUs are expected to benefit from the synergies arising from each of our acquisitions. Accordingly, goodwill has been allocated to the Group's reportable segments; Smart Devices CGU, Mobile Phones CGU, Location & Commerce CGU and Nokia Siemens Networks CGU. Goodwill amounting to EUR 899 million, EUR 530 million, EUR 3 270 million and EUR 183 million was allocated to the Smart Devices CGU, Mobile Phones CGU, Location & Commerce CGU and Nokia Siemens Networks CGU, respectively, at the date of the 2012 impairment testing.

In the fourth quarter of 2012, we conducted our annual impairment testing to assess if events or changes in circumstances indicated that the carrying amount of our goodwill may not be recoverable. The impairment testing was carried out based on management's assessment of financial performance and future strategies in light of current and expected market and economic conditions.

The recoverable amounts for the Smart Devices CGU and the Mobile Phones CGU are based on value in use calculations. A discounted cash flow calculation was used to estimate the value in use for both CGUs. Cash flow projections determined by management are based on information available, to reflect the present value of the future cash flows expected to be derived through the continuing use of the Smart Devices CGU and the Mobile Phones CGU.

The recoverable amounts for the Location & Commerce CGU and the Nokia Siemens Networks CGU are based on fair value less costs to sell. A discounted cash flow calculation was used to estimate the fair value less costs to sell for both CGUs. The cash flow projections employed in the discounted cash flow calculation have been determined by management based on the information available, to reflect the amount that an entity could obtain from separate disposal of each of the Location & Commerce CGU and the Nokia Siemens Networks CGU, in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal.

The cash flow projections employed in the value in use and the fair value less costs to sell calculations are based on detailed financial plans approved by management, covering a three-year planning horizon. Cash flows in subsequent periods reflect a realistic pattern of slowing growth that declines towards an estimated terminal growth rate utilized in the terminal period. The terminal growth rate utilized does not

**Table of Contents**

exceed long-term average growth rates for the industry and economies in which the CGU operates. All cash flow projections are consistent with external sources of information, wherever available.

The key assumptions applied in the impairment testing for each CGU in the annual goodwill impairment testing for each year indicated are presented in the table below:

	Cash generating units							
	Smart Devices		Mobile Phones		Location & Commerce		Nokia Siemens Networks	
	%		%		%		%	
	2012	2011	2012	2011	2012	2011	2012	2011
Terminal growth rate	<b>2.3</b>	1.9	<b>(2.3)</b>	1.5	<b>1.7</b>	3.1	<b>0.7</b>	1.0
Post-tax discount rate	<b>10.5</b>	9.0	<b>10.5</b>	9.0	<b>9.9</b>	9.7	<b>10.3</b>	10.4
Pre-tax discount rate	<b>12.8</b>	12.2	<b>15.5</b>	13.1	<b>12.8</b>	13.1	<b>14.2</b>	13.8

Both value in use of Smart Devices CGU and Mobile Phones CGU and fair value less costs to sell for Location & Commerce CGU and Nokia Siemens Networks CGU are determined on a pre-tax value basis using pre-tax valuation assumptions including pre-tax cash flows and pre-tax discount rate. As market-based rates of return for the Group's CGUs are available only on a post-tax basis, the pre-tax discount rates are derived by adjusting the post-tax discount rates to reflect the specific amount and timing of future tax cash flows. The discount rates applied in the impairment testing for each CGU have been determined independently of capital structure reflecting current assessments of the time value of money and relevant market risk premiums. Risk premiums included in the determination of the discount rate reflect risks and uncertainties for which the future cash flow estimates have not been adjusted.

The recoverable amount of the Location & Commerce CGU exceeds its carrying amount by a small margin in the fourth quarter 2012. The related valuation is deemed most sensitive to the changes in both discount and long-term growth rates. A discount rate increase in excess of 0.5 percentage point or long-term growth decline in excess of 1 percentage point would result in impairment loss in the Location & Commerce CGU. Management's estimates of the overall automotive volumes and market share, customer adoption of the new location-based platform and related service offerings, projected device sales volumes and fair value of the services sold within the Group as well as continued focus on cost efficiency are the main drivers for the Location & Commerce net cash flow projections. The Group's cash flow forecasts reflect the current strategic views that license fee based models will remain important in both near and long term. Management expects that license fee based models which are augmented with software and services and monetized via license fees, transactions fees and advertising, will grow in the future as more customers demand complete, end-to-end location solutions. Actual short and long-term performance could vary from management's forecasts and impact future estimates of recoverable value. Since the recoverable amount exceeds the carrying amount only by a small margin, any material adverse changes such as market deterioration or changes in the competitive landscape could impact management's estimates of the main drivers and result in impairment loss.

A charge to operating profit of EUR 1 090 million was recorded for the impairment of goodwill in our Location & Commerce business in the fourth quarter 2011. The impairment loss was allocated in its entirety to the carrying amount of goodwill in the balance sheet of the Location & Commerce CGU. This impairment loss is presented as impairment of goodwill in the consolidated income statement. As a result of the impairment loss, the amount of goodwill allocated to the Location & Commerce CGU was reduced to EUR 3 274 million at December 31, 2011.

The impairment charge was the result of an evaluation of the projected financial performance and net cash flows of the Location & Commerce CGU. The main drivers for management's net cash flow projections included license fees related to digital map data, fair value of the services sold within the



---

**Table of Contents**

Group and estimated average revenue per user with regard to mobile media advertising. The average revenue per user was estimated based on peer market data for mobile advertising revenue. Projected device sales volumes impacted the overall forecasted intercompany and advertising revenues. This took into consideration the market dynamics in digital map data and related location-based content markets, including the Group's long-term view at the time of the 2011 annual impairment testing, that the market will move from fee-based models towards advertising-based models especially in some more mature markets. It also reflected recently announced results and related competitive factors in local search and advertising market resulting in lower estimated growth prospects from location-based assets integrated with different advertising platforms. After consideration of all relevant factors, the Group reduced the net sales projections for the Location & Commerce CGU which, in turn, reduced projected profitability and cash flows.

The Group's goodwill impairment testing did not result in impairment charges for the years ended December 31, 2012 or 2010. An impairment loss was recorded with respect to the Group's Location & Commerce CGU in 2011, as discussed above. No further impairment charges were recorded with respect to the other CGUs in 2011.

See Note 8 to our consolidated financial statements included in Item 18 of this annual report for further information regarding Valuation of long-lived and intangible assets and goodwill.

***Fair Value of Derivatives and Other Financial Instruments***

The fair value of financial instruments that are not traded in an active market, for example unlisted equities, are determined using valuation techniques. We use judgment to select an appropriate valuation methodology and underlying assumptions based principally on existing market conditions. If quoted market prices are not available for unlisted shares, fair value is estimated by using various factors, including, but not limited to: (1) the current market value of similar instruments, (2) prices established from a recent arm's length financing transaction of the target companies, (3) analysis of market prospects and operating performance of the target companies taking into consideration of public market comparable companies in similar industry sectors. Changes in these assumptions may cause the Group to recognize impairments or losses in the future periods. During 2012 the Group received distributions of EUR 49 million (EUR 45 million in 2011) included in other financial income from a private fund held as non-current available-for-sale. Due to a reduction in estimated future cash flows the Group also recognized an impairment loss of EUR 7 million (EUR 38 million in 2011) for the fund included in other financial expenses.

***Income Taxes***

The Group is subject to income taxes both in Finland and in numerous other jurisdictions. Significant judgment is required in determining income tax expense, tax provisions, deferred tax assets and liabilities recognized in the consolidated financial statements. We recognize deferred tax assets to the extent that it is probable that sufficient taxable income will be available in the future against which the temporary differences, tax losses and unused tax credits can be utilized. We have considered future taxable income and tax planning strategies in making this assessment. Deferred tax assets are assessed for realizability each reporting period, and when circumstances indicate that it is no longer probable that deferred tax assets will be utilized, they are adjusted as necessary. In 2012 Nokia taxes continued to be unfavorably affected by Nokia Siemens Networks taxes as no tax benefits are recognized for certain Nokia Siemens Networks deferred tax items. Additionally Nokia taxes were adversely affected by allowances related to Devices & Services' Finnish deferred tax assets and discontinuation of recognizing tax benefits for Devices & Services' Finnish deferred tax items due to uncertainty of utilization of these items.

**Table of Contents**

At December 31, 2012, the Group had tax losses carry forward, temporary differences and tax credits of EUR 10 294 million (EUR 4 302 million in 2011) for which no deferred tax assets were recognized in the consolidated financial statements due to uncertainty of utilization of these items.

We recognize tax provisions based on estimates and assumptions when, despite our belief that tax return positions are supportable, it is more likely than not that certain positions will be challenged and may not be fully sustained upon review by tax authorities. The Group has ongoing tax investigations in multiple jurisdictions, including Hungary and India. If the final outcome of these matters differs from the amounts initially recorded, differences may positively or negatively impact the current taxes and deferred taxes in the period in which such determination is made.

***Pensions***

The determination of our pension benefit obligation and expense for defined benefit pension plans is dependent on our selection of certain assumptions used by actuaries in calculating such amounts. Those assumptions are described in Note 5 to our consolidated financial statements included in Item 18 of this annual report and include, among others, the discount rate, expected long-term rate of return on plan assets and annual rate of increase in future compensation levels. A portion of our plan assets is invested in equity securities. The equity markets have experienced volatility, which has affected the value of our pension plan assets. This volatility may make it difficult to estimate the long-term rate of return on plan assets. Actual results that differ from our assumptions are accumulated and amortized over future periods and therefore generally affect our recognized expense and recorded obligation in such future periods. Our assumptions are based on actual historical experience and external data regarding compensation and discount rate trends. While we believe that our assumptions are appropriate, significant differences in our actual experience or significant changes in our assumptions may materially affect our pension obligation and our future expense. The financial impact of the pension assumptions affects mainly the Devices & Services and Nokia Siemens Networks businesses.

***Share-based Compensation***

We have various types of equity-settled share-based compensation schemes for employees mainly in Devices & Services and Location & Commerce. Employee services received, and the corresponding increase in equity, are measured by reference to the fair value of the equity instruments as at the date of grant, excluding the impact of any non-market vesting conditions. Fair value of stock options is estimated by using the Black-Scholes model on the date of grant based on certain assumptions. Those assumptions are described in Note 24 to our consolidated financial statements included in Item 18 of this annual report and include, among others, the dividend yield, expected volatility and expected life of stock options. The expected life of stock options is estimated by observing general option holder behavior and actual historical terms of Nokia stock option programs, whereas the assumption of the expected volatility has been set by reference to the implied volatility of stock options available on Nokia shares in the open market and in light of historical patterns of volatility. These variables make estimation of fair value of stock options difficult. Non-market vesting conditions attached to the performance shares are included in assumptions about the number of shares that the employee will ultimately receive relating to projections of sales and earnings per share. On a regular basis, we review the assumptions made and revise the estimates of the number of performance shares that are expected to be settled, where necessary. At the date of grant, the number of performance shares granted that are expected to be settled is assumed to be two times the amount at threshold. Any subsequent revisions to the estimates of the number of performance shares expected to be settled may increase or decrease total compensation expense. Such increase or decrease adjusts the prior period compensation expense in the period of the review on a cumulative basis for unvested performance shares for which compensation expense has already been recognized in the profit and loss account, and in subsequent periods for unvested performance shares for which the expense has not yet been recognized in the profit and loss

**Table of Contents**

account. Significant differences in employee option activity, equity market performance, and our projected and actual net sales and earnings per share performance may materially affect future expense. In addition, the value, if any, an employee ultimately receives from share-based payment awards may not correspond to the expense amounts recorded by the Group.

The Group has also issued certain stock options for the employees of Nokia Siemens Networks, which are accounted for as cash-settled. Related employee services received, and the liability incurred, are measured at the fair value of the liability. The fair value of stock options is estimated based on the reporting date market value less the exercise price of the stock options. The fair value of the liability is remeasured at each reporting date and at the date of settlement and related change in fair value is recognized in the income statement over the relevant service periods.

**Results of Operations***2012 compared with 2011**Nokia Group*

The following table sets forth selective line items and the percentage of net sales that they represent for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Percentage of Net Sales	Year Ended December 31, 2011	Percentage of Net Sales	Percentage Increase/ (Decrease)
	(EUR millions, except percentage data)				
Net sales	30 176	100.0%	38 659	100.0%	(22)%
Cost of sales	(21 786)	(72.2)%	(27 300)	(70.6)%	(20)%
Gross profit	8 390	27.8%	11 359	29.4%	(26)%
Research and development expenses	(4 782)	(15.8)%	(5 584)	(14.4)%	(14)%
Selling and marketing expenses	(3 205)	(10.6)%	(3 769)	(9.8)%	(15)%
Administrative and general expenses	(959)	(3.2)%	(1 085)	(2.8)%	(12)%
Other operating income and expenses	(1 747)	(5.8)%	(1 994)	(5.2)%	(12)%
Operating profit	(2 303)	(7.6)%	(1 073)	(2.8)%	

Net Sales

Our net sales and profitability were negatively affected by the increasing momentum of competing smartphone platforms relative to our Symbian smartphones in all regions as we continued on our platform transition to Windows Phone, as well as our pricing actions due to the competitive environment in both the smartphone and feature phone markets. In addition, during the first half of 2012 our net sales and profitability were adversely affected by our lack of affordable full touch devices which continued to be a growing part of the market. For Nokia Siemens Networks, net sales decrease was driven primarily by Nokia Siemens Networks' strategy to focus on mobile broadband, and services.

**Table of Contents**

The following table sets forth the distribution by geographical area of our net sales for the fiscal years 2012 and 2011.

	<b>Year Ended December 31,</b>	
	<b>2012</b>	<b>2011</b>
Europe	29%	31%
Middle East & Africa	14%	14%
Greater China	10%	17%
Asia-Pacific	27%	23%
North America	7%	4%
Latin America	13%	11%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The 10 markets in which we generated the greatest net sales in 2012 were, in descending order of magnitude, China, India, Japan, the United States, Brazil, Germany, Russia, the United Kingdom, Indonesia and Italy, together representing approximately 52% of total net sales in 2012. In comparison, the 10 markets in which we generated the greatest net sales in 2011 were China, India, Brazil, Russia, Germany, Japan, the United States, the United Kingdom, Italy and Spain, together representing approximately 52% of total net sales in 2011.

**Gross Margin**

Our gross margin in 2012 was 27.8%, compared to 29.4% in 2011. The lower gross margin in 2012 resulted primarily from the decreased gross margin in Devices & Services compared to 2011, which was partially offset by increased gross margin in Nokia Siemens Networks.

**Operating Expenses**

Our research and development ( R&D ) expenses were EUR 4 782 million in 2012, compared to EUR 5 584 million in 2011. Research and development costs represented 15.8% of our net sales in 2012 compared to 14.4% in 2011. The increase in research and development expenses as a percentage of net sales largely resulted from a relative decline in net sales in 2012. Research and development expenses included purchase price accounting items of EUR 378 million in 2012 compared to EUR 412 million in 2011. At December 31, 2012, we employed 27 551 people in research and development, representing approximately 28% of our total workforce.

In 2012, our selling and marketing expenses were EUR 3 205 million, compared to EUR 3 769 million in 2011. Selling and marketing expenses represented 10.6% of our net sales in 2012 compared to 9.8% in 2011. The increase in selling and marketing expenses as a percentage of net sales reflected a decline in net sales in 2012. Selling and marketing expenses included purchase price accounting items of EUR 314 million in 2012 compared to EUR 422 million in 2011.

Administrative and general expenses were EUR 959 million in 2012, compared to EUR 1 085 million in 2011. Administrative and general expenses were equal to 3.2% of our net sales in 2012 compared to 2.8% in 2011. The increase in administrative and general expenses as a percentage of net sales reflected a decline in net sales in 2012. Administrative and general expenses included no purchase price accounting items in 2012 compared to EUR 1 million in 2011.

In 2012, other income and expenses included restructuring charges of EUR 1 807 million, including EUR 42 million related to country and contract exits, impairments of assets of EUR 32 million, a negative adjustment of EUR 4 million to purchase price allocations related to the final payment from Motorola, amortization of acquired intangible assets of EUR 23 million, benefit from cartel claim

---

**Table of Contents**

settlements of EUR 56 million, a net gain on sale of Vertu business of EUR 52 million and a net gain on sale of real estate of EUR 79 million. In 2011, other income and expenses included restructuring charges of EUR 626 million, impairment of assets of EUR 90 million, consideration related to the Accenture transaction of EUR 251 million, impairment of shares in an associated company of EUR 41 million and a benefit from a cartel claim settlement of EUR 49 million.

**Operating Margin**

Our 2012 operating loss was EUR 2 303 million, compared with an operating loss of EUR 1 073 million in 2011. The increased operating loss resulted primarily from restructuring charges and associated items of EUR 1.8 billion, a decrease in the operating performance of our Devices & Services business, which was partially offset by an increase in the operating performance of Nokia Siemens Networks. Our 2012 operating margin was negative 7.6% compared to negative 2.8% in 2011. Our operating loss in 2012 included purchase price accounting items, restructuring charges and other special items of net negative EUR 2.4 billion compared to net negative EUR 2.9 billion in 2011.

**Corporate Common**

Corporate Common Functions expenses totaled EUR 103 million in 2012, compared to EUR 131 million in 2011.

**Net Financial Income and Expenses**

Financial income and expenses, net, was an expense of EUR 340 million in 2012 compared to an expense of EUR 102 million in 2011. The higher net expense in 2012 was primarily driven by foreign exchange losses. Nokia expects financial income and expenses, net, in 2013 to be an expense of approximately EUR 300 million.

Our net debt to equity ratio was negative 46% at December 31, 2012, compared with a net debt to equity ratio of negative 40% at December 31, 2011. See Item 5B. Liquidity and Capital Resources below.

**Profit Before Taxes**

Loss before tax was EUR 2 644 million in 2012, compared to a loss of EUR 1 198 million in 2011. Taxes amounted to EUR 1 145 million in 2012 and EUR 290 million in 2011. Nokia taxes continued to be unfavorably affected by Nokia Siemens Networks taxes as no tax benefits are recognized for certain Nokia Siemens Networks deferred tax items. Additionally, in 2012, Nokia taxes were adversely affected by allowances related to Devices & Services Finnish deferred tax assets and discontinuation of recognizing tax benefits for Devices & Services Finnish deferred tax items due to uncertainty of utilization of these items.

**Non-controlling interests**

Loss attributable to non-controlling interests totaled EUR 683 million in 2012, compared with a loss attributable to non-controlling interests of EUR 324 million in 2011. This change was primarily due to an increase in Nokia Siemens Networks losses.

**Profit Attributable to Equity Holders of the Parent and Earnings per Share**

Loss attributable to equity holders of the parent in 2012 totaled EUR 3 106 million, compared with a loss of EUR 1 164 million in 2011. Earnings per share in 2012 decreased to EUR (0.84) (basic) and EUR (0.84) (diluted), compared with EUR (0.31) (basic) and EUR (0.31) (diluted) in 2011.

**Table of Contents***Results by Segments**Devices & Services*

The following table sets forth selective line items and the percentage of net sales that they represent for Devices & Services for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Percentage of Net Sales	Year Ended December 31, 2011	Percentage of Net Sales	Percentage Increase/ (Decrease)
	(EUR millions, except percentage data)				
Net sales <sup>(1)</sup>	15 686	100.0%	23 943	100.0%	(34)%
Cost of sales	(12 340)	(78.7)%	(17 303)	(72.3)%	(29)%
Gross profit	3 346	21.3%	6 640	27.7%	(50)%
Research and development expenses	(1 852)	(11.8)%	(2 441)	(10.2)%	(24)%
Selling and marketing expenses	(1 857)	(11.8)%	(2 180)	(9.1)%	(15)%
Administrative and general expenses	(292)	(1.9)%	(362)	(1.5)%	(19)%
Other operating income and expenses	(445)	(2.8)%	(773)	(3.2)%	(42)%
Operating profit	(1 100)	(7.0)%	884	3.7%	

(1) Includes IPR income recognized in Devices & Services Other net sales.

Net Sales

The following table sets forth our Devices & Services net sales and year-on-year growth rate by geographic area for the fiscal years 2012 and 2011. The IPR income referred to in the paragraph below has been allocated to the geographic area contained in this chart.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
	(EUR millions, except percentage data)		
Europe	4 643	(34)%	7 064
Middle East & Africa	2 827	(31)%	4 098
Greater China	1 610	(68)%	5 063
Asia-Pacific	3 811	(22)%	4 896
North America	453	28%	354
Latin America	2 342	(5)%	2 468
Total	15 686	(34)%	23 943

The 34% year-on-year decline in Devices & Services net sales in 2012 resulted from lower volumes in both Smart Devices and Mobile Phones as well as a lower ASP in Mobile Phones, partially offset by a higher ASP in Smart Devices. Devices & Services Other net sales decreased in 2012 due to lower non-recurring IPR income, the divestment of Vertu during the fourth quarter 2012 and lower spare parts sales.

Smart Devices continued to transition as Symbian volumes decreased sequentially every quarter in 2012. Lumia device volumes grew in the first half of 2012 by expanding geographical distribution as well as new product launches, but were negatively affected in the third quarter 2012 by product transitions. In the fourth quarter 2012, Smart Devices net sales grew sequentially as we started shipping new Lumia devices, although

volumes were adversely affected by supply constraints as we

**Table of Contents**

ramped up our production capacity, particularly related to the Lumia 920. Smart Devices shipped a total of 13.4 million Lumia devices in 2012. During the first half of 2012, Mobile Phones was negatively affected by aggressive price competition and the lack of affordable full touch devices. Towards the end of the second quarter 2012 Mobile Phones introduced affordable Asha full touch smartphones and sold 15.8 million units in the second half 2012.

Our overall Devices & Services net sales in 2012 benefited from the recognition in Devices & Services Other of approximately EUR 50 million (EUR 450 million in 2011) of non-recurring IPR income. The non-recurring IPR income relates to new patent license agreements for the respective years that included settlements of past royalties and accordingly is not expected to have a recurring benefit. Patent license agreements are generally multi-year arrangements and may cover both licensee's past and future sales. Typically, when a patent license agreement is signed it includes an agreement or settlement on past royalties that the licensor is entitled to. Such income for past periods is typically recognized as a non-recurring item. The license payments relating to the future royalties are typically recognized over the remaining contract period based on the contract terms. The future license payments may fluctuate based on the terms of the license.

During the last two decades, we have invested approximately EUR 50 billion in research and development and built one of the wireless industry's strongest and broadest IPR portfolios, with approximately 10 000 patent families. We are a world leader in the development of handheld device and mobile communications technologies, which is also demonstrated by our strong patent position. Within Devices & Services Other, we estimate that our current annual IPR income run-rate is approximately EUR 0.5 billion.

**Volume**

The following chart sets out the mobile device volumes for our Devices & Services business and year-on-year growth rates by geographic area for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
	(Units in millions, except percentage data)		
Europe	67.3	(23)%	87.8
Middle East & Africa	81.7	(14)%	94.6
Greater China	27.5	(58)%	65.8
Asia-Pacific	113.5	(5)%	118.9
North America	2.2	(44)%	3.9
Latin America	43.4	(6)%	46.1
<b>Total</b>	<b>335.6</b>	<b>(20)%</b>	<b>417.1</b>

On a year-on-year basis, the decline in our total Devices & Services volumes in 2012 was driven by lower volumes in both Smart Devices and Mobile Phones discussed below.

**Average Selling Price**

See *Item 5A. Operating Results* or the glossary of this annual report for information on the calculation of our average selling prices.

Our total mobile device ASP, including IPR income, in 2012 was EUR 47, down 18% from EUR 57 in 2011. The decrease in our mobile device ASP in 2012 was due to a higher proportion of Mobile Phones volumes and lower Mobile Phones ASPs, partially offset by higher Smart Devices ASPs. Our total mobile device ASP, excluding IPR income, in 2012 was EUR 45, down 18% from EUR 55 in 2011.



---

## **Table of Contents**

### **Gross Margin**

Our Devices & Services gross margin in 2012 was 21.3%, compared to 27.7% in 2011. On a year-on-year basis, the decline in our Devices & Services gross margin in 2012 was due to gross margin declines in Smart Devices and to a lesser degree in Mobile Phones and Devices & Services Other.

### **Operating Expenses**

Devices & Services operating expenses decreased 20% year-on-year in 2012. On a year-on-year basis, operating expenses related to Smart Devices decreased 32% in 2012, where Mobile Phones remained approximately on the same level. In addition to the factors described below, the year-on-year changes were affected by the proportionate allocation of operating expenses being affected by the relative mix of sales and gross profit performance between Mobile Phones and Smart Devices. This resulted in higher and lower relative allocations to Mobile Phones and Smart Devices, respectively.

Devices & Services research and development expenses decreased 24% year-on-year in 2012 due to declines in Smart Devices and Devices & Services Other research and development expenses. The decreases in research and development expenses were due primarily to a focus on priority projects and cost controls as well as business divestments.

Devices & Services sales and marketing expenses decreased 15% year-on-year in 2012 primarily due to lower overall business activity, improved efficiency in general marketing activities and business divestments.

Devices & Services administrative and general expenses decreased 19% year-on-year in 2012, primarily due structural cost savings as well as business divestments.

In 2012, Devices & Services other income and expense had a negative year-on-year impact on profitability. In 2012, we recognized special items of net EUR 393 million in Devices and Services Other, comprised of restructuring charges of EUR 550 million and related impairments of EUR 30 million, a benefit from cartel claim settlements of EUR 56 million, a net gain from the sale of a real estate of EUR 79 million and a net gain from the divestment of the Vertu business of EUR 52 million. In 2011, we recognized special items of net EUR 287 million in Devices and Services Other, comprised of restructuring charges of EUR 456 million, impairment of assets of EUR 90 million, Accenture deal consideration of EUR 251 million, impairment of shares in an associated company of EUR 41 million and a benefit from a cartel claim settlement of EUR 49 million.

### **Cost Reduction Activities and Planned Operational Adjustments**

We continue to target to reduce our Devices & Services operating expenses to an annualized run rate of approximately EUR 3.0 billion, excluding special items and purchase price accounting related items, by the end of 2013.

In June, 2012, we announced additional restructuring measures to those announced in 2011, including targeted investments in key growth areas, operational changes, divestment of non-core assets and significantly increased our cost reduction target. The measures included the closure of our manufacturing facility in Salo, Finland as well as the closure of our research and development facilities in Ulm, Germany and Burnaby, Canada. We also focused our sales and marketing activities and streamlined its information technology corporate and support functions to align with the sharpened strategy. In addition, we completed the divestment of Vertu and our headquarters building in Finland.

As of December 31, 2012, we had recognized cumulative net charges in Devices & Services in 2011 and 2012 of approximately EUR 1.4 billion related to restructuring activities, which included restructuring charges and associated impairments. While the total extent of the restructuring activities

**Table of Contents**

is still to be determined, we currently anticipate cumulative charges in Devices & Services of approximately EUR 1.6 billion before the end of 2013. We also expect the total cash outflows related to our Devices & Services restructuring activities to be approximately EUR 1.4 billion of which approximately EUR 1.1 billion had been incurred as of December 31, 2012.

**Operating Margin**

Devices & Services reported an operating loss of EUR 1 100 million in 2012, compared with an operating profit of EUR 884 million in 2011. Devices & Services operating margin in 2012 was negative 7.0%, compared with positive 3.7% in 2011. The year-on-year decrease in operating margin in 2012 was driven primarily by the lower net sales and gross margin compared to 2011 in both Smart Devices and Mobile Phones.

**Smart Devices**

The following table sets forth selective line items for Smart Devices for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
Net sales (EUR millions) <sup>(1)</sup>	5 446	(50)%	10 820
Smart Devices volume (millions units)	35.1	(55)%	77.3
Smart Devices ASP (EUR)	155	11%	140
Gross margin (%)	8.8%		23.7%
Operating expenses (EUR millions)	2 018	(32)%	2 974
Contribution margin (%)	(28.6)%		(3.8)%

(1) Does not include IPR income. IPR income is recognized in Devices & Services Other net sales.

**Net Sales**

Smart Devices net sales decreased 50% to EUR 5 446 million in 2012, compared to EUR 10 820 million in 2011. The year-on-year decline in our Smart Devices net sales in 2012 was primarily due to significantly lower volumes, partially offset by higher ASPs.

**Volume**

Smart Devices volume decreased 55% to 35.1 million units in 2012, compared to 77.3 million units in 2011. The year-on-year decrease in our Smart Device volumes in 2012 was driven by the strong momentum of competing smartphone platforms relative to our Symbian devices. On a geographical basis, the decrease in volumes was due to lower volumes in Greater China, Europe, Asia Pacific, Middle East & Africa and Latin America, partially offset by slightly higher volumes in North America.

**Average Selling Price**

Smart Devices ASP increased 11% to EUR 155 in 2012, compared to EUR 140 in 2011. The year-on-year increase in our Smart Devices ASP in 2012 was primarily due to a positive mix shift towards sales of our Lumia devices, which had a higher ASP, a positive impact related to deferred revenue on services sold in combination with our devices as well as the net positive impact related to foreign currency fluctuations, partially offset by general price erosion and our pricing actions.

**Gross Margin**

Smart Devices gross margin was 8.8% in 2012, down from 23.7% in 2011. The year-on-year decline in our Smart Devices gross margin in 2012 was primarily due to greater price erosion than cost erosion due to the competitive environment, inventory related allowances of EUR 220 million in the second



**Table of Contents**

quarter 2012 and EUR 120 million in the third quarter 2012, higher fixed costs per unit because of lower sales volumes, and a negative product mix shift towards lower gross margin devices.

*Mobile Phones*

The following table sets forth selective line items for Mobile Phones for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
Net sales (EUR millions) <sup>(1)</sup>	9 436	(21)%	11 930
Mobile Phones volume (millions units)	300	(12)%	340
Mobile Phones ASP (EUR)	31	(11)%	35
Gross margin (%)	23.4%		26.1%
Operating expenses (EUR millions)	1 661	1%	1 640
Contribution margin (%)	5.6%		12.4%

(1) Does not include IPR income. IPR income is recognized in Devices & Services Other net sales.

Net Sales

Mobile Phones net sales decreased 21% to EUR 9 436 million in 2012, compared to EUR 11 930 million in 2011. On a year-on-year basis, our Mobile Phones net sales decreased in 2012 due to lower volumes and ASPs.

Volume

Mobile Phones volume decreased 12% to 300 million units in 2012, compared to 340 million units in 2011. The year-on-year decline in our Mobile Phones volumes in 2012 was due to the challenging competitive environment and market environment, which negatively affected our volumes across the Mobile Phones portfolio. In particular, low-end smartphones powered by the Android operating system proliferated at lower price points throughout 2012. During the second half of 2012, Mobile Phones started shipping Asha full touch smartphones, which improved the competitiveness of our higher end Mobile Phones product portfolio. During the second half of 2012, Mobile Phones shipped 15.8 million Asha full touch smartphones.

Average Selling Price

Mobile Phones ASP decreased 11% to EUR 31 in 2012, compared to EUR 35 in 2011. The year-on-year decline in our Mobile Phones ASP in 2012 was primarily due to a higher proportion of sales of lower priced devices and general price erosion.

Gross Margin

Mobile Phones gross margin was 23.4% in 2012, down from 26.1% in 2011. The year-on-year decline in our Mobile Phones gross margin in 2012 was primarily due to a higher proportion of sales of lower gross margin devices as well as the net negative impact related to foreign currency fluctuations.

*Location & Commerce*

*As of January 1, 2013 our Location & Commerce business and reportable segment was renamed HERE. The name Location & Commerce is used in the following discussion of the operating results for this segment for the fiscal years 2012 and 2011.*

**Table of Contents**

The following table sets forth selective line items and the percentage of net sales that they represent for Location & Commerce for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Percentage of Net Sales	Year Ended December 31, 2011	Percentage of Net Sales	Percentage Increase/ (Decrease)
(EUR millions, except percentage data)					
Net sales	1 103	100.0%	1 091	100.0%	1%
Cost of sales	(228)	(20.7)%	(214)	(19.6)%	7%
Gross profit	875	79.3%	877	80.4%	0%
Research and development expenses	(883)	(80.0)%	(958)	(87.8)%	(8)%
Selling and marketing expenses	(186)	(16.9)%	(259)	(23.7)%	(28)%
Administrative and general expenses	(77)	(7.0)%	(68)	(6.3)%	13%
Other operating income and expenses	(30)	(2.7)%	(1 118)	(102.5)%	
Operating profit	(301)	(27.3)%	(1 526)	(139.9)%	

Net Sales

The following table sets forth Location & Commerce net sales and year-on-year growth rate by geographic area for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
(EUR millions, except percentage data)			
Europe	477	2%	488
Middle East & Africa	74	0%	74
Greater China	63	(51)%	128
Asia-Pacific	82	11%	74
North America	335	18%	284
Latin America	72	67%	43
Total	1 103	1%	1 091

Location & Commerce net sales increased 1% to EUR 1 103 million in 2012, compared to EUR 1 091 million in 2011. The year-on-year increase in Location & Commerce external net sales in 2012 was primarily driven by higher sales of map content licenses to vehicle customers, partially offset by lower sales to personal navigation devices customers. The year-on-year decline in Location & Commerce internal net sales was primarily due to lower sales related to the large decline in our Symbian device volumes experienced since 2010.

Gross Margin

On a year-on-year basis, the decrease in Location & Commerce gross margin in 2012 was primarily due to lower personal navigation device sales which carry a higher gross margin, partially offset by a higher gross margin in the vehicle segment.

Operating Expenses

## Edgar Filing: NOKIA CORP - Form 20-F

Location & Commerce research and development expenses decreased 8% primarily driven by a focus on cost controls, lower project spending and a shift of research and development operating expenses to cost of sales as a result of the divestiture of the media advertising business.

**Table of Contents**

Location & Commerce sales and marketing expenses decreased 28% primarily driven by a focus on cost controls and lower marketing spending.

Location & Commerce administrative and general expenses increased 13% primarily driven by higher use of services provided by shared support functions.

In 2012, Location & Commerce other income and expense had a positive year-on-year impact on profitability. In 2012, we recognized special items of EUR 31 million in Location & Commerce, comprised of restructuring charges of EUR 31 million. In 2011, we recognized special items of EUR 1.1 billion in Location & Commerce, comprised of restructuring charges of EUR 25 million and impairment of goodwill of EUR 1.1 billion.

**Operating Margin**

Location & Commerce operating loss decreased to EUR 301 million in 2012, compared with a loss of EUR 1 526 million in 2011. Location & Commerce operating margin in 2012 was negative 27.3%, compared with negative 139.9% in 2011. The year-on-year improvement in operating margin in 2012 was driven primarily by the lower other operating expenses due to the impairment of Location & Commerce's goodwill of EUR 1.1 billion in 2011.

***Nokia Siemens Networks***

*Nokia Siemens Networks completed the acquisition of the majority of Motorola Solutions' wireless network infrastructure assets on April 30, 2011. Accordingly, the results of Nokia Siemens Networks for 2012 are not directly comparable to 2011.*

The following table sets forth selective line items and the percentage of net sales that they represent for Nokia Siemens Networks for the fiscal years 2012 and 2011.

	Year Ended	Year Ended	Percentage	Year Ended	Percentage	Percentage
	December 31, 2012	Percentage of Net Sales	December 31, 2011	Percentage of Net Sales	Increase/ (Decrease)	
	(EUR millions, except percentage data)					
Net sales	13 779	100.0%	14 041	100.0%	(2)%	
Cost of Sales	(9 610)	(69.7)%	(10 199)	(72.6)%	(6)%	
Gross profit	4 169	30.3%	3 842	27.4%	9%	
Research and development expenses	(2 046)	(14.9)%	(2 185)	(15.6)%	(6)%	
Selling and marketing expenses	(1 158)	(8.4)%	(1 328)	(9.4)%	(13)%	
Administrative and general expenses	(474)	(3.4)%	(517)	(3.7)%	(8)%	
Other income and expenses	(1 290)	(9.4)%	(112)	(0.8)%		
Operating profit	(799)	(5.8)%	(300)	(2.1)%	(166)%	

**Table of Contents****Net Sales**

The following table sets forth Nokia Siemens Networks' net sales and year-on-year growth rate by geographic area for the fiscal years 2012 and 2011.

	Year Ended December 31, 2012	Change 2011 to 2012	Year Ended December 31, 2011
	(EUR millions, except percentage data)		
Europe	3 896	(13)%	4 469
Middle East & Africa	1 287	(7)%	1 391
Greater China	1 278	(13)%	1 465
Asia-Pacific	4 347	13%	3 848
North America	1 294	20%	1 077
Latin America	1 677	(6)%	1 791
<b>Total</b>	<b>13 779</b>	<b>(2)%</b>	<b>14 041</b>

Nokia Siemens Networks' net sales decreased 2% to EUR 13 779 million in 2012, compared to EUR 14 041 million in 2011. The year-on-year decline in Nokia Siemens Networks' net sales was primarily due to the decline in sales of business areas not consistent with Nokia Siemens Networks' strategic focus and lower infrastructure equipment sales, partially offset by higher services net sales. On a full year basis, services represented slightly more than 50% of Nokia Siemens Networks' net sales in 2012 and 2011.

**Gross Margin**

Nokia Siemens Networks' gross margin was 30.3% in 2012, compared to 27.4% in 2011. The increase in Nokia Siemens Networks' gross margin in 2012 was primarily due to the better gross margin in both infrastructure equipment and services. Within infrastructure equipment, the increase was primarily due to favorable region and product mix consistent with Nokia Siemens Networks' strategy to focus on mobile broadband. Within services, the increase was primarily due to structural cost actions and efforts to align the services business with the focused strategy.

**Operating Expenses**

Nokia Siemens Networks' research and development expenses decreased 6% year-on-year in 2012 primarily due to structural cost saving actions and overall research and development efficiency.

Nokia Siemens Networks' sales and marketing expenses decreased 13% year-on-year in 2012 primarily due to structural cost saving actions.

Nokia Siemens Networks' administrative and general expenses decreased 8% year-on-year in 2012 primarily due to structural cost saving actions.

In 2012, Nokia Siemens Networks' other and income and expense had a negative year-on-year impact on profitability. In 2012, we recognized special items of EUR 1.2 billion in Nokia Siemens Networks, comprised of net restructuring charges and associated items of EUR 1.2 billion. In 2011, we recognized special items of EUR 145 million in Nokia Siemens Networks, comprised of restructuring charges of EUR 145 million.

**Operating Margin**

Nokia Siemens Networks' operating loss in 2012 was EUR 799 million, compared with an operating loss of EUR 300 million in 2011. Nokia Siemens Networks' operating margin in 2012 was negative 5.8%, compared with negative 2.1% in 2011 primarily due to restructuring charges of EUR 1.2 billion in 2012.





**Table of Contents**Strategy and Restructuring Program

In November, 2011, Nokia Siemens Networks announced its strategy to focus on mobile broadband and services and the launch of an extensive global restructuring program. Nokia Siemens Networks continues to target to reduce its annualized operating expenses and production overheads, excluding special items and purchase price accounting related items, by more than EUR 1 billion by the end of 2013, compared to the end of 2011. While these savings are expected to come largely from organizational streamlining, it has also targeted areas such as real estate, information technology, product and service procurement costs, overall general and administrative expenses, and a significant reduction of suppliers in order to further lower costs and improve quality.

During 2012, Nokia Siemens Networks recognized restructuring charges and other associated items of EUR 1.3 billion related to this restructuring program, resulting in cumulative charges of approximately EUR 1.3 billion. In total we now expect cumulative Nokia Siemens Networks restructuring charges of approximately EUR 1.3 billion by the end of 2013, virtually all of which have now been recognized. By the end of 2012, Nokia Siemens Networks had cumulative restructuring related cash outflows of approximately EUR 650 million related to this restructuring program. Nokia Siemens Networks expects restructuring-related cash outflows to be approximately EUR 450 million for the full year 2013, and approximately EUR 200 million for the full year 2014 related to this restructuring program.

**2011 compared with 2010***Nokia Group*

The following table sets forth selective line items and the percentage of net sales that they represent for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Percentage of Net Sales	Year Ended December 31, 2010	Percentage of Net Sales	Percentage Increase/ (Decrease)
	(EUR millions, except percentage data)				
Net sales	38 659	100.0%	42 446	100.0%	(9)%
Cost of sales	(27 300)	(70.6)%	(29 456)	(69.4)%	(7)%
Gross profit	11 359	29.4%	12 990	30.6%	(3)%
Research and development expenses	(5 584)	(14.4)%	(5 844)	(13.8)%	(4)%
Selling and marketing expenses	(3 769)	(9.8)%	(3 856)	(9.1)%	(2)%
Administrative and general expenses	(1 085)	(2.8)%	(1 039)	(2.4)%	4%
Other operating income and expenses	(1 994)	(5.2)%	(181)	(0.4)%	
Operating profit	(1 073)	(2.8)%	2 070	4.9%	

Net Sales

Although the mobile products market continued to see volume growth in 2011, our net sales and profitability were negatively affected by the increasing momentum of competing smartphone platforms relative to our Symbian smartphones in all regions as we embarked on our platform transition to Windows Phone, as well as our pricing actions due to the competitive environment in both the smartphone and feature phone markets. In addition, during the first half of 2011 our net sales and profitability were adversely affected by our lack of dual SIM products, which continued to be a growing

**Table of Contents**

part of the market. For Nokia Siemens Networks, net sales growth was driven primarily by the contribution from the acquired Motorola Solutions network infrastructure assets, which was completed In April, 2011. On a year-on-year basis the movement of the euro relative to relevant currencies had almost no impact on our overall net sales.

The following table sets forth the distribution by geographical area of our net sales for the fiscal years 2011 and 2010.

	Year Ended December 31,	
	2011	2010
Europe	31%	34%
Middle East & Africa	14%	13%
Greater China	17%	18%
Asia-Pacific	23%	21%
North America	4%	5%
Latin America	11%	9%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The 10 markets in which we generated the greatest net sales in 2011 were, in descending order of magnitude, China, India, Brazil, Russia, Germany, Japan, the United States, the United Kingdom, Italy and Spain, together representing approximately 52% of total net sales in 2011. In comparison, the 10 markets in which we generated the greatest net sales in 2010 were China, India, Germany, Russia, the United States, Brazil, the United Kingdom, Spain, Italy and Indonesia, together representing approximately 52% of total net sales in 2010.

**Gross Margin**

Our gross margin in 2011 was 29.4%, compared to 30.6% in 2010. The lower gross margin in 2011 resulted primarily from the decrease in gross margin in Devices & Services compared to 2010, which was partially offset by increased gross margin in Nokia Siemens Networks.

**Operating Expenses**

Our research and development ( R&D ) expenses were EUR 5 584 million in 2011, compared to EUR (5 844) million in 2010. Research and development costs represented 14.4% of our net sales in 2011 compared to 13.8% in 2010. The increase in research and development expenses as a percentage of net sales largely resulted from a relative decline in net sales in 2011 compared to an increase in net sales and a decrease in research and development expenses in 2010. Research and development expenses included purchase price accounting items of EUR 412 million in 2011 compared to EUR 556 million in 2010. At December 31, 2011, we employed 34 876 people in research and development, representing approximately 27% of our total workforce, and had a strong research and development presence in 16 countries.

In 2011, our selling and marketing expenses were EUR 3 769 million, compared to EUR 3 856 million in 2010. Selling and marketing expenses represented 9.8% of our net sales in 2011 compared to 9.1% in 2010. The increase in selling and marketing expenses as a percentage of net sales reflected a decline in net sales in 2011 compared to an increase in net sales and a decrease in selling and marketing expenses in 2010. Selling and marketing expenses included purchase price accounting items of EUR 422 million in 2011 compared to EUR 408 million in 2010.

Administrative and general expenses were EUR 1 085 million in 2011, compared to EUR 1 039 million 2010. Administrative and general expenses were equal to 2.8% of our net sales in 2011 compared to

---

**Table of Contents**

2.4% in 2010. The increase in administrative and general expenses as a percentage of net sales reflected the decrease in net sales in 2011. Administrative and general expenses included purchase price accounting items of EUR 1 million in 2011, which was unchanged compared to 2010.

In 2011, other income and expenses included restructuring charges of EUR 626 million, impairment of assets of EUR 90 million, consideration related to the Accenture transaction of EUR 251 million, impairment of shares in an associated company of EUR 41 million and a benefit from a cartel claim settlement of EUR 49 million in 2011. In 2010, other income and expenses included restructuring charges of EUR 401 million, a prior year-related refund of customs duties of EUR 61 million, a gain on sale of assets and businesses of EUR 29 million and a gain on sale of the wireless modem business of EUR 147 million.

**Operating Margin**

Our 2011 operating loss was EUR 1 073 million, compared with an operating profit of EUR 2 070 million in 2010. The decreased operating profit resulted primarily from an impairment of goodwill of EUR 1.1 billion in our Location & Commerce business, a decrease in the operating profit in our Devices & Services business, which was partially offset by a decrease in the operating loss in Nokia Siemens Networks. Our 2011 operating margin was negative 2.8%, compared to 4.9% in 2010. Our operating profit in 2011 included purchase price accounting items and other special items of net negative EUR 2 898 million compared to net negative EUR 1 134 million in 2010.

**Corporate Common**

Corporate Common Functions expenses totaled EUR 131 million in 2011, compared to EUR 113 million in 2010.

**Net Financial Income and Expenses**

Financial income and expenses, net, was an expense of EUR 102 million in 2011 compared to an expense of EUR 285 million in 2010. The lower net expense in 2011 was primarily driven by lower net costs related to hedging our cash balances and favorable fluctuations in certain foreign exchange rates. Nokia expects financial income and expenses, net, in 2012 to be an expense of approximately EUR 300 million primarily due to higher expected net costs related to hedging our cash balances, as well as higher costs related to Nokia Siemens Networks financing.

Our net debt to equity ratio was negative 40% at December 31, 2011, compared with a net debt to equity ratio of negative 43% at December 31, 2010. See Item 5B. Liquidity and Capital Resources below.

**Profit Before Taxes**

Loss before tax was EUR 1 198 million in 2011, compared to profit of EUR 1 786 million in 2010. Taxes amounted to EUR 290 million in 2011 and EUR 443 million in 2010. The effective tax rate decreased to negative 24.2% in 2011, compared with 24.8% in 2010. In 2011, our taxes continued to be unfavorably affected by Nokia Siemens Networks taxes as no tax benefits are recognized for certain Nokia Siemens Networks deferred tax items due to uncertainty of utilization of these items.

**Non-controlling interests**

Loss attributable to non-controlling interests totaled EUR 324 million in 2011, compared with loss attributable to non-controlling interests of EUR 507 million in 2010. This change was primarily due to a decrease in Nokia Siemens Networks losses.

**Table of Contents**Profit Attributable to Equity Holders of the Parent and Earnings per Share

Loss attributable to equity holders of the parent in 2011 totaled EUR 1 164 million, compared with profit of EUR 1 850 million in 2010. Earnings per share in 2011 decreased to EUR (0.31) (basic) and EUR (0.31) (diluted), compared with EUR 0.50 (basic) and EUR 0.50 (diluted) in 2010.

*Results by Segments**Devices & Services*

The following table sets forth selective line items and the percentage of net sales that they represent for Devices & Services for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Percentage of Net Sales	Year Ended December 31, 2010	Percentage of Net Sales	Percentage Increase/ (Decrease)
	(EUR millions, except percentage data)				
Net sales <sup>(1)</sup>	23 943	100.0%	29 134	100.0%	(18)%
Cost of sales	(17 303)	(72.3)%	(20 412)	(70.1)%	(15)%
Gross profit	6 640	27.7%	8 722	29.9%	(24)%
Research and development expenses	(2 441)	(10.2)%	(2 694)	(9.2)%	(9)%
Selling and marketing expenses	(2 180)	(9.1)%	(2 270)	(7.8)%	(4)%
Administrative and general expenses	(362)	(1.5)%	(388)	(1.3)%	(7)%
Other operating income and expenses	(773)	(3.2)%	170	0.6%	
Operating profit	884	3.7%	3 540	12.2%	(75)%

(1) Includes IPR income recognized in Devices & Services Other net sales.

Net Sales

The following table sets forth our Devices & Services net sales and year-on-year growth rate by geographic area for the fiscal years 2011 and 2010. The IPR income referred to in the paragraph below has been allocated to the geographic areas contained in this chart.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
	(EUR millions, except percentage data)		
Europe	7 064	(27)%	9 736
Middle East & Africa	4 098	1%	4 046
Greater China	5 063	(18)%	6 167
Asia-Pacific	4 896	(19)%	6 014
North America	354	(61)%	901
Latin America	2 468	9%	2 270
Total	23 943	(18)%	29 134

## Edgar Filing: NOKIA CORP - Form 20-F

The 18% year-on-year decline in Devices & Services net sales in 2011 resulted from lower volumes and ASPs in both Smart Devices and Mobile Phones discussed below, partially offset by higher IPR income discussed below.

**Table of Contents**

During the second quarter of 2011, Devices & Services net sales were negatively affected by unexpected sales and inventory patterns, resulting in distributors and operators purchasing fewer of our devices across our portfolio as they reduced their inventories of Nokia devices. Devices & Services net sales were also affected during the second quarter of 2011 by a negative mix shift towards devices with lower average selling prices and lower gross margins. Our actions enabled us to create healthier sales channel dynamics during the latter weeks of the second quarter 2011. Devices & Services net sales increased sequentially in the fourth quarter 2011, supported by broader product renewal in both Mobile Phones, for example dual SIM devices, and Smart Devices as well as overall industry seasonality.

Our overall Devices & Services net sales in 2011 benefited from the recognition in Devices & Services Other of approximately EUR 450 million (approximately EUR 70 million in 2010) of non-recurring IPR income, as well as strong growth in the underlying recurring IPR income. We believe these developments underline Nokia's industry leading patent portfolio. During the last two decades, we have invested more than EUR 45 billion in research and development and built one of the wireless industry's strongest and broadest IPR portfolios, with over 10 000 patent families. Nokia is a world leader in the development of mobile device and mobile communications technologies, which is also demonstrated by our strong patent position.

**Volume**

The following chart sets out the mobile device volumes for our Devices & Services business and year-on-year growth rates by geographic area for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
	(Units in millions, except percentage data)		
Europe	87.8	(22)%	112.7
Middle East & Africa	94.6	13%	83.8
Greater China	65.8	(20)%	82.5
Asia-Pacific	118.9	0%	119.1
North America	3.9	(65)%	11.1
Latin America	46.1	5%	43.7
<b>Total</b>	<b>417.1</b>	<b>(8)%</b>	<b>452.9</b>

On a year-on-year basis, the decline in our total Devices & Services volumes in 2011 was driven by lower volumes in both Smart Devices and Mobile Phones discussed below.

**Average Selling Price**

See *Item 5A. Operating Results* or the glossary of this annual report for information on the calculation of our average selling prices.

Our total mobile device ASP, including IPR income, in 2011 was EUR 57, down 11% from EUR 64 in 2010. The decrease in our mobile device ASP in 2011 was driven primarily by the increase in the proportion of Mobile Phone sales partially offset by the positive effect of higher IPR income and the lower deferral of revenue related to services sold in combination with our devices. On a year-on-year basis, the impact from the appreciation of the euro against certain currencies had a slightly negative impact, almost entirely offset by the positive impact from foreign currency hedging. Our total mobile device ASP, excluding IPR income, in 2011 was EUR 55, down 14% from EUR 64 in 2010.

**Table of Contents****Gross Margin**

Our Devices & Services gross margin in 2011 was 27.7%, compared to 29.9% in 2010. On a year-on-year basis, the decline in our Devices & Services gross margin in 2011 was driven primarily by gross margin declines in both Smart Devices and, to a lesser extent, in Mobile Phones, as discussed below, which was partially offset by higher IPR income.

**Operating Expenses**

Devices & Services research and development expenses in 2011 decreased 9% to EUR 2 441 million, compared with EUR 2 694 million in 2010. In 2011, research and development expenses represented 10.2% of Devices & Services net sales, compared with 9.2% in 2010. The decrease in Devices & Services research and development expenses was primarily due to declines in Smart Devices and Devices & Services Other research and development expenses, partially offset by an increase in Mobile Phones research and development expenses. The decreases in Smart Devices and Devices & Services Other research and development expenses were due primarily to a focus on priority projects and cost controls. The increase in Mobile Phones research and development expenses was due primarily to investments to accelerate product development to bring new innovations to the market faster and at lower price-points, consistent with the Mobile Phones Internet for the next billion strategy. This increase was partially offset by a focus on priority projects and cost controls. Devices & Services research and development expenses included amortization of acquired intangible assets of EUR 8 million and EUR 10 million in 2011 and 2010, respectively.

In 2011, Devices & Services selling and marketing expenses decreased 4% to EUR 2 180 million, compared with EUR 2 270 million in 2010. The decrease was primarily due to lower Smart Devices sales and marketing expenses. In 2011, selling and marketing expenses represented 9.1% of Devices & Services net sales, compared with 7.8% of its net sales in 2010.

Devices & Services administrative and general expenses in 2011 decreased 7% to EUR 362 million, compared with EUR 388 million in 2010. The decrease in Devices & Services administrative and general expenses was primarily driven by lower Smart Devices administrative and general expenses, which more than offset an increase in Devices & Services Other administrative and general expenses. In 2011, administrative and general expenses represented 1.5% of Devices & Services net sales, compared with 1.3% in 2010.

Other operating income and expenses were expense of EUR 773 million in 2011 and included restructuring charges of 456 million, impairment of assets of EUR 90 million, Accenture deal consideration related to the Accenture transaction of EUR 251 million, impairment of shares in an associated company of EUR 41 million and a benefit from a cartel claim settlement of EUR 49 million. In 2010, other operating income and expenses were EUR 170 million and included restructuring charges of EUR 85 million, a prior year-related refund of customs duties of EUR 61 million, a gain on sale of assets and business of EUR 29 million and a gain on sale of the wireless modem business of EUR 147 million.

**Cost Reduction Activities and Planned Operational Adjustments**

As of December 31, 2011, we had recognized cumulative net charges in Devices & Services of EUR 797 million related to restructuring activities in 2011, which included restructuring charges and associated impairments.

**Operating Margin**

Devices & Services operating profit decreased 75% to EUR 884 million in 2011, compared with EUR 3 540 million in 2010. Devices & Services operating margin in 2011 was 3.7%, compared with



**Table of Contents**

12.2% in 2010. The year-on-year decrease in operating margin in 2010 was driven primarily by the lower net sales and gross margin compared to 2010 in both Smart Devices and Mobile Phones as well as higher restructuring charges and Accenture transaction related consideration.

*Smart Devices*

The following table sets forth selective line items for Smart Devices for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
Net sales (EUR millions) <sup>(1)</sup>	10 820	(27)%	14 874
Smart Devices volume (millions units)	77.3	(25)%	103.6
Smart Devices ASP (EUR)	140	(3)%	144
Gross margin (%)	23.7%		30.8%
Operating expenses (EUR millions)	2 974	(12)%	3 392
Contribution margin (%)	(3.8)%		9.3%

(1) Does not include IPR income. IPR income is recognized in Devices & Services Other net sales.

Net Sales

Smart Devices net sales decreased 27% to EUR 10 820 million in 2011, compared to EUR 14 874 million in 2010. The year-on-year decline in our Smart Devices net sales in 2011 was primarily due to significantly lower volumes and, to a lesser extent, lower ASPs.

Volume

Smart Devices volume decreased 25% to 77.3 million units in 2011, compared to 103.6 million units in 2010. The year-on-year decrease in our Smart Device volumes in 2011 was driven by the strong momentum of competing smartphone platforms relative to our higher priced Symbian devices, particularly in Europe and Asia Pacific, as well as pricing tactics by certain of our competitors. During the second quarter of 2011, our Smart Device volumes were also negatively affected by distributors and operators purchasing fewer of our smartphones as they reduced their inventories of those devices, which were slightly above normal levels at the end of the first quarter of 2011, particularly in China. During the second half of 2011, our Symbian competitiveness continued to be challenged across the portfolio driving the significant year-on-year volume decline.

Average Selling Price

Smart Devices ASP decreased 3% to EUR 140 in 2011, compared to EUR 144 in 2010. The year-on-year decline in our Smart Devices ASP in 2011 was driven primarily by price actions due to the competitive environment and the negative impact from foreign currency hedging, partially offset by a positive mix shift towards higher priced smartphones, such as the Nokia N8, Nokia N9 and Lumia devices, and the lower deferral of revenue related to services sold in combination with our devices, particularly in the second half of 2011.

Although Smart Devices ASP declined progressively during the first three quarters of 2011, Smart Devices ASP increased sequentially in the fourth quarter of 2011, supported by sales of the higher priced Nokia N9 and Nokia Lumia devices.

Gross Margin

Smart Devices gross margin was 23.7% in 2011, down from 30.8% in 2010. The year-on-year decline in our Smart Devices gross margin in 2011 was driven primarily by greater price erosion than cost

**Table of Contents**

erosion due to the competitive environment, our tactical pricing actions during the second and third quarters of 2011 and an increase in Symbian-related allowances during the fourth quarter of 2011.

Following the announcement of our partnership with Microsoft in February 2011, we expected to sell approximately 150 million more Symbian devices in the years to come. However, changing market conditions have put increasing pressure on Symbian and contributed to a faster decline of our Symbian volumes than we anticipated. We expected this trend to continue in 2012. As a result of the changing market conditions, combined with our increased focus on Lumia, we believed we will sell fewer Symbian devices than previously anticipated. Thus, in the fourth quarter 2011, we recognized allowances related to excess component inventory and future purchase commitments.

*Mobile Phones*

The following table sets forth selective line items for Mobile Phones for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
Net sales (EUR millions) <sup>(1)</sup>	11 930	(13)%	13 696
Mobile Phones volume (millions units)	339.8	(3)%	349.2
Mobile Phones ASP (EUR)	35	(10)%	39
Gross margin (%)	26.1%		28.0%
Operating expenses (EUR millions)	1 640	9%	1 508
Contribution margin (%)	12.4%		17.0%

(1) Does not include IPR income. IPR income is recognized in Devices & Services Other net sales.

Net Sales

Mobile Phones net sales decreased 13% to EUR 11 930 million in 2011, compared to EUR 13 696 million in 2010. On a year-on-year basis, our Mobile Phones net sales decrease in 2011 was due to lower ASPs and, to a lesser extent, lower volumes.

Volume

Mobile Phones volume decreased 3% to 339.8 million units in 2011, compared to 349.2 million units in 2010. The year-on-year decline in our Mobile Phones volumes in 2011 was driven by the challenging competitive environment, especially during the first half of the year due to our lack of dual SIM phones, which continued to be a growing part of the market, and pressure from a variety of price aggressive competitors, which adversely affected our Mobile Phones volumes. During 2011, Mobile Phones volumes were also negatively affected by our reduced portfolio of higher priced feature phones, as well as by distributors and operators purchasing fewer of our feature phones during the second quarter of 2011 as they reduced their inventories of those devices, which were slightly above normal levels at the end of the first quarter of 2011.

During the second half of 2011, our Mobile Phones volumes increased year-on-year, driven by the introduction and broader availability of our first dual SIM devices and the ongoing product renewal across the feature phones portfolio, which more than offset our reduced portfolio of higher priced feature phones.

Average Selling Price

Mobile Phones ASP decreased 10% to EUR 35 in 2011, compared to EUR 39 in 2010. The year-on-year decline in our Mobile Phones ASP in 2011 was primarily due to a higher proportion of sales of lower priced devices driven by a reduced portfolio of higher priced feature phones and our tactical pricing

**Table of Contents**

actions across the portfolio, which partially affected the second quarter of 2011 and fully affected the third quarter of 2011. In addition, the appreciation of the euro against certain currencies contributed to the decline, which was partially offset by the positive impact from foreign currency hedging.

**Gross Margin**

Mobile Phones gross margin was 26.1% in 2011, down from 28.0% in 2010. The year-on-year decline in our Mobile Phones gross margin in 2011 was due primarily to greater price erosion than cost erosion due to the competitive environment and our tactical pricing actions across the portfolio which partially affected the second quarter of 2011 and fully affected the third quarter of 2011, a negative impact from foreign currency hedging and the appreciation of the euro against certain currencies, which were partially offset by a product mix shift towards higher margin feature phones.

**Location & Commerce**

As of January 1, 2013 our Location & Commerce business and reportable segment was renamed HERE. The name Location & Commerce is used in the following discussion of the operating results for this segment for the fiscal years 2011 and 2010.

The following table sets forth selective line items and the percentage of net sales that they represent for Location & Commerce for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Percentage of Net Sales	Year Ended December 31, 2010	Percentage of Net Sales	Percentage Increase/ (Decrease)
	(EUR millions, except percentage data)				
Net sales	1 091	100.0%	869	100.0%	26%
Cost of sales	(214)	(19.6)%	(169)	(19.4)%	27%
Gross profit	877	80.4%	700	80.6%	25%
Research and development expenses	(958)	(87.8)%	(1 011)	(116.3)%	(5)%
Selling and marketing expenses	(259)	(23.7)%	(274)	(31.5)%	(5)%
Administrative and general expenses	(68)	(6.2)%	(75)	(8.6)%	(9)%
Other operating income and expenses	(1 118)	(102.5)%	(3)	(0.3)%	
Operating profit	(1 526)	(139.9)%	(663)	(76.3)%	(130)%

**Net Sales**

The following table sets forth Location & Commerce net sales and year-on-year growth rate by geographic area for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
	(EUR millions, except percentage data)		
Europe	488	28%	380
Middle East & Africa	74	68%	44
Greater China	128	125%	57
Asia-Pacific	74	48%	50
North America	284	(12)%	322

Edgar Filing: NOKIA CORP - Form 20-F

Latin America	43	169%	16
Total	1 091	26%	869

125

## **Table of Contents**

Location & Commerce net sales increased 26% to EUR 1 091 million in 2011, compared to EUR 869 million in 2010. The year-on-year increase in net sales in 2011 was primarily driven by higher sales of map content licenses to vehicle customers due to increased consumer uptake of navigation systems and higher recognition of deferred revenue related to sales of map platform licenses to Smart Devices.

### *Gross Margin*

On a year-on-year basis the gross margin in Location & Commerce was virtually unchanged. In 2011, the gross margin benefited from an increased proportion of higher gross margin sales compared to 2010, which were offset by a reclassification of certain data-related charges from operating expenditure to cost of sales in the fourth quarter of 2011.

### *Operating Expenses*

Location & Commerce research and development expenses decreased 5% to EUR 958 million, compared to EUR 1 011 million in 2010. The decrease was primarily driven by a focus on cost controls, lower project spending and a shift of research and development operating expenses to cost of sales as a result of the divestiture of the media advertising business.

Location & Commerce selling and marketing expenses decreased 5% to EUR 259 million, compared to EUR 274 million in 2010. The decrease was primarily driven by a focus on cost controls and lower product marketing spending.

Location & Commerce administrative and general expenses decreased 9% to EUR 68 million, compared to EUR 75 million in 2010. The decrease was primarily driven by a focus on cost controls, partially offset by increased depreciation costs related to closure of offices.

### *Operating Margin*

Location & Commerce operating loss increased to EUR 1 526 million in 2011, compared with a loss of EUR 663 million in 2010. Location & Commerce operating margin in 2011 was negative 139.9%, compared with negative 76.3% in 2010. The year-on-year decrease in operating margin in 2011 was driven primarily by the higher other operating expenses due to the impairment of Location & Commerce's goodwill of EUR 1.1 billion offset to some extent by higher net sales and lower operating expenses compared to 2010.

In the fourth quarter of 2011, we conducted our annual impairment testing to assess if events or changes in circumstances indicated that the carrying amount of our goodwill may not be recoverable. As a result, we recorded the above-noted impairment of goodwill in our Location & Commerce business.

The impairment charge was the result of an evaluation of the projected financial performance of our Location & Commerce business. This took into consideration the market dynamics in digital map data and related location-based content markets, including our estimate of the market moving long-term from fee-based towards advertising-based models especially in some more mature markets. It also reflected recently announced results and related competitive factors in the local search and advertising market resulting in lower estimated growth prospects from our location-based assets integrated with different advertising platforms. After consideration of all relevant factors, we reduced the net sales projections for Location & Commerce which, in turn, reduced projected profitability and cash flows.

**Table of Contents***Nokia Siemens Networks*

Nokia Siemens Networks completed the acquisition of the majority of Motorola Solutions wireless network infrastructure assets on April 30, 2011. Accordingly, the results of Nokia Siemens Networks for 2011 are not directly comparable to 2010.

The following table sets forth selective line items and the percentage of net sales that they represent for Nokia Siemens Networks for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Percentage of Net Sales	Year Ended December 31, 2010	Percentage of Net Sales	Percentage Increase/ (Decrease)
(EUR millions, except percentage data)					
Net sales	14 041	100.0%	12 661	100.0%	11%
Cost of Sales	(10 199)	(72.6)%	(9 093)	(71.8)%	12%
Gross profit	3 842	27.4%	3 568	28.2%	8%
Research and development expenses	(2 185)	(15.6)%	(2 137)	(16.9)%	2%
Selling and marketing expenses	(1 328)	(9.4)%	(1 307)	(10.3)%	2%
Administrative and general expenses	(517)	(3.7)%	(477)	(3.8)%	8%
Other income and expenses	(112)	(0.8)%	(333)	(2.6)%	(66)%
Operating profit	(300)	(2.1)%	(686)	(5.4)%	(56)%

*Net Sales*

The following table sets forth Nokia Siemens Networks net sales and year-on-year growth rate by geographic area for the fiscal years 2011 and 2010.

	Year Ended December 31, 2011	Change 2010 to 2011	Year Ended December 31, 2010
(EUR millions, except percentage data)			
Europe	4 469	(3)%	4 628
Middle East & Africa	1 391	(4)%	1 451
Greater China	1 465	1%	1 451
Asia-Pacific	3 848	32%	2 915
North America	1 077	47%	735
Latin America	1 791	21%	1 481
Total	14 041	11%	12 661

Nokia Siemens Networks net sales increased 11% to EUR 14 041 million in 2011, compared to EUR 12 661 million in 2010. The year-on-year increase in Nokia Siemens Networks net sales in 2011 was driven primarily by the contribution from the acquired Motorola Solutions networks assets, which was completed on April 29, 2011. Excluding the acquired Motorola Solutions networks assets, net sales would have increased 4% year-on-year, primarily driven by growth in services, which represented approximately 50% of Nokia Siemens Networks net sales in 2011.

*Gross Margin*

## Edgar Filing: NOKIA CORP - Form 20-F

Nokia Siemens Networks gross margin was 27.4% in 2011, compared to 28.2% 2010. Nokia Siemens Networks gross margin in 2011 reflected the positive impact from the acquired Motorola Solutions networks assets offset to a large extent by the negative effects of the competitive industry environment and an unfavorable sales mix towards lower gross margin revenues.

---

**Table of Contents****Operating Expenses**

Nokia Siemens Networks' research and development expenses increased 2% to EUR 2 185 million, compared to EUR 2 137 million in 2010. The increase was primarily due to the addition of research and development operations relating to the acquired Motorola Solutions' networks assets as well as investments in strategic initiatives.

Nokia Siemens Networks' selling and marketing expenses, as well as administrative and general expenses, were virtually flat year-on-year in 2011, as the increase from the acquired Motorola Solutions networks assets was offset by ongoing cost control initiatives.

**Operating Margin**

Nokia Siemens Networks' operating loss in 2011 was EUR 300 million, compared with an operating loss of EUR 686 million in 2010. Nokia Siemens Networks' operating margin in 2011 was negative 2.1%, compared with negative 5.4% in 2010 primarily because of higher net sales, which were offset by higher operating expenses.

**Strategy and Restructuring Program**

On November 23, 2011, Nokia Siemens Networks announced its current strategy to focus on mobile broadband and services and the launch of an extensive global restructuring program.

**5B. Liquidity and Capital Resource**

At December 31, 2012, our cash and other liquid assets (bank and cash; available-for-sale investments, cash equivalents; available-for-sale investments, liquid assets; and investments at fair value through profit and loss, liquid assets) decreased to EUR 9 909 million, compared with EUR 10 902 million at December 31, 2011, primarily due to cash outflows related to restructuring, the payment of the dividend and cash outflows related to the net financial expenses and taxes as well as capital expenditures. This was partially offset by positive overall net cash from operating activities, excluding cash outflows related to restructuring, net financial expenses and taxes, as well as cash flows related to the receipt of quarterly platform support payments from Microsoft (which commenced in the fourth quarter 2011), proceeds from the sale of fixed assets and proceeds from the issuance of a convertible bond. At December 31, 2010, cash and other liquid assets totaled EUR 12 275 million.

At December 31, 2012, cash and cash equivalents (bank and cash and available-for-sale investments, cash equivalent) decreased to EUR 8 952 million, compared with EUR 9 236 million at December 31, 2011. We hold our cash and cash equivalents predominantly in euro. Cash and cash equivalents totaled EUR 7 592 million at December 31, 2010.

Net cash used in operating activities was EUR 354 million in 2012, compared with net cash from operating activities of EUR 1 137 million in 2011 and EUR 4 774 million in 2010. In 2012, net cash from operating activities decreased to net cash used in operating activities primarily due to a decrease in profitability and cash outflows relating to restructuring. In 2011, net cash from operating activities decreased primarily due to a decrease in profitability and an increase in net working capital partially offset by an increase in cash inflows of IPR royalty income, the receipt of a platform support payment from Microsoft in the fourth quarter of 2011 and an increase in other financial income. Net cash from investing activities was EUR 562 million in 2012, compared with EUR 1 499 million in 2011 and a usage of EUR 2 421 million in 2010. Net cash from acquisitions of businesses, net of acquired cash, was EUR 13 million, compared to net cash used in acquisitions of businesses, net of acquired cash, of EUR 817 million in 2011 and EUR 110 million in 2010. Cash flow from investing activities in 2012 included purchases of current available-for-sale investments, liquid assets of EUR 1 668 million,



**Table of Contents**

compared with EUR 3 676 million in 2011 and EUR 8 573 million in 2010. In 2012, net cash used in investing activities also included purchase of investments at fair value through profit and loss, liquid assets of EUR 40 million, compared with EUR 607 million in 2011.

Capital expenditures for 2012 were EUR 461 million, compared with EUR 597 million in 2011 and EUR 679 million in 2010. Major items of capital expenditure included production lines, test equipment and computer hardware used primarily in research and development, office and manufacturing facilities as well as services and software related intangible assets.

Proceeds from maturities and sale of current available-for-sale investments, liquid assets, decreased to EUR 2 355 million, compared with EUR 6 090 million in 2011 and EUR 7 181 million in 2010. Net cash used in financing activities decreased to EUR 465 million in 2012, compared with EUR 1 099 million in 2011, due to EUR 743 million net proceeds from the issuance of a convertible bond and a decrease in dividend payments to EUR 755 million in 2012 from EUR 1 536 million in 2011 partly offset by an increase in repayments of long-term and short-term borrowings as well as no contributions from other shareholders compared to the EUR 500 million equity investment in Nokia Siemens Networks by Siemens in 2011. Net cash used in financing activities increased to EUR 1 099 million in 2011, compared with EUR 911 million in 2010, primarily as a result of a decrease in proceeds from long-term borrowings and an increase in payment of short-term borrowings, partially offset by an increase in other contributions from shareholders. Dividends paid decreased to EUR 755 million in 2012, compared with EUR 1 536 million in 2011 and EUR 1 519 million in 2010.

At December 31, 2012, we had EUR 5 087 million in long-term interest-bearing liabilities and EUR 462 million in short-term borrowings, offset by EUR 9 909 million in cash and other liquid assets, resulting in a net liquid assets balance of EUR 4 360 million, compared with EUR 5 581 million at the end of 2011 and EUR 6 996 million at the end of 2010. The decrease in net liquid assets in 2012 was primarily due to cash outflows relating to restructuring, the payment of the dividend and cash outflows related to net financial expenses and taxes as well as capital expenditures. This was partially offset by positive overall net cash from operating activities, excluding cash outflows related to restructuring, net financial expenses and taxes, as well as cash flows related to the receipt of quarterly platform support payments from Microsoft (which commenced in the fourth quarter 2011), proceeds from sale of fixed assets and recording of the EUR 85 million equity component of the convertible bond as shareholders' equity according to IFRS. For further information regarding our long-term liabilities, see Note 16 to our consolidated financial statements included in Item 18 of this annual report. Our ratio of net interest-bearing debt, defined as short-term and long-term debt less cash and other liquid assets, to equity, defined as capital and reserves attributable to equity holders of the parent and non-controlling interests, was negative 46%, negative 40% and negative 43% at December 31, 2012, 2011 and 2010, respectively.

Our Board of Directors has proposed that no dividend be paid for the year ended December 31, 2012, compared with EUR 0.20 and EUR 0.40 per share paid for the years ended December 31, 2011 and 2010, respectively. See Item 3A. Selected Financial Data Distribution of Earnings.

We have no significant refinancing requirements in 2013. We may incur additional indebtedness from time to time as required to finance acquisitions and working capital needs, or to pre-finance future debt maturities. In 2012, we issued a convertible bond with a nominal value of EUR 750 million and net proceeds of EUR 743 million. The convertible bond carries a coupon of 5% and has a maturity date in October 2017. It is convertible to our shares with an initial conversion price of EUR 2.6116 per share. The conversion price is subject to adjustment according to customary anti-dilution provisions. In 2011 and 2010, we did not raise material new long-term debt. In February 2009, we issued EUR 1 750 million of Eurobonds (EUR 1 250 million bonds due 2014 with a coupon of 5.50% and issue price of 99.855%; and EUR 500 million bonds due 2019 with a coupon of 6.75% and issue price of 99.702%) under our Euro Medium-Term Note program to repay part of our short-term borrowings. In February 2009, we also signed and fully drew a EUR 500 million loan from the European Investment

---

**Table of Contents**

Bank. The proceeds of the loan are being used to finance part of our smartphone research and development expenses. In May 2009, we issued USD 1 500 million of US bonds (USD 1 000 million due in 2019 with a coupon of 5.375% and issue price of 99.075%; and USD 500 million due in 2039 with a coupon of 6.625% and issue price of 99.494%) under our shelf registration statement on file with the US Securities and Exchange Commission for general corporate purposes.

At December 31, 2012, we had a USD 4 000 million US Commercial Paper program, USD 4 000 million Euro Commercial Paper program, domestic Finnish commercial paper program totaling EUR 750 million, EUR 5 000 million Euro Medium-Term Note program, and a shelf registration statement for an indeterminate amount of debt securities on file with the US Securities and Exchange Commission. At December 31, 2012, we also had undrawn committed credit facility of EUR 1 500 million maturing in 2016. The credit facility has no financial covenants.

In December 2011, Nokia Siemens Networks entered into a EUR 1 255 million committed forward starting credit facility effective from the forward start date of June 1, 2012. By April 2012 the committed facility had been increased to EUR 1 500 million. The facility replaced the EUR 2 000 million revolving credit facility from 2009 that matured in June 2012. The EUR 1 500 million committed facility was comprised of two equal parts, a EUR 750 million revolving credit facility maturing in June 2015 and a EUR 750 million term loan maturing in June 2013. In December 2012, EUR 150 million of the term loan was repaid and the maturity of the remaining EUR 600 million term loan was extended to March 2014. The forward starting credit facility is used for general corporate purposes and includes financial covenants relating to financial leverage and interest coverage of Nokia Siemens Networks. At December 31, 2012, all financial covenants were satisfied.

In 2012, Nokia Siemens Networks had EUR 132 million in Finnish pension loans outstanding with final maturity in 2015, EUR 150 million loan outstanding from the European Investment Bank (EIB) with final maturity in 2015 and EUR 80 million loan outstanding from the Nordic Investment Bank (NIB) with final maturity in 2015. The proceeds of the EIB and NIB loans are being used to finance the investments in research and development in radio access network technology for mobile communication systems. The loans include similar financial covenants as the forward starting credit facility. At December 31, 2012, all financial covenants were satisfied.

At December 31, 2012, Nokia Siemens Networks had a domestic Finnish commercial paper program totaling EUR 500 million.

We have historically maintained a high level of liquid assets. Management estimates that the cash and other liquid assets level of EUR 9 909 million at the end of 2012, together with our available credit facilities, cash flow from operations, funds available from long-term and short-term debt financings, as well as the proceeds of future equity or convertible bond offerings, will be sufficient to satisfy our future working capital needs, capital expenditure, research and development, acquisitions and debt service requirements at least through 2013.

We believe that we will continue to be able to access the capital markets on terms and in amounts that will be satisfactory to us, and that we will be able to obtain bid and performance bonds, to arrange or provide customer financing as necessary to support our business and to engage in hedging transactions on commercially acceptable terms.

We primarily invest in research and development, marketing and building the Nokia brand. However, over the past few years we have increased our investment in services and software by acquiring companies with specific technology assets and expertise. In 2012, capital expenditures totaled EUR 461 million, compared with EUR 597 million in 2011 and EUR 679 million in 2010. The decrease in 2012 resulted primarily from site consolidation and increased efficiency. Principal capital expenditures during the three years included production lines, test equipment and computer hardware used primarily in research and development, office and manufacturing facilities as well as services and

**Table of Contents**

software-related intangible assets. In accordance with our current estimate, we expect the amount of capital expenditures (excluding acquisitions) during 2013 to be approximately EUR 350 million, and to be funded from cash flow from operating activities.

**Structured Finance**

Structured finance includes customer financing and other third-party financing. Network operators in some markets sometimes require their suppliers, including us, to arrange, facilitate or provide long-term financing as a condition to obtain or bid on infrastructure projects.

Credit markets in general have been tight since 2009. Requests for customer financing and especially extended payment terms have remained at a reasonably high level. However, during 2012, the amount of financing provided directly to our customers has decreased. We do not currently intend to significantly increase financing directly to our customers, which may have an adverse effect on our ability to compete successfully for their business. Rather, as a strategic market requirement, we plan to continue to arrange and facilitate financing, typically supported by export credit or guarantee agencies, and provide extended payment terms to a number of customers. Extended payment terms may continue to result in a material aggregate amount of trade credits, but the associated risk is mitigated by the fact that the portfolio relates to a variety of customers.

The following table sets forth our total customer financing, outstanding and committed, for the years indicated.

**Customer Finance**

	<b>At December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
	<b>(EUR millions)</b>		
Financing commitments	34	86	85
Outstanding long-term loans (net of allowances and write-offs)	39	60	64
Current portion of outstanding long-term loans (net of allowances and write-offs)	35	54	39
Outstanding financial guarantees and securities pledged			
<b>Total</b>	<b>108</b>	<b>200</b>	<b>188</b>

In 2012, our total customer financing, outstanding and committed, decreased to EUR 108 million from EUR 200 million in 2011 and primarily consisted of outstanding short-term and long-term loans to network operators.

In 2011, our total customer financing, outstanding and committed, increased to EUR 200 million from EUR 188 million in 2010 and primarily consisted of outstanding long-term loans to network operators.

See Note 34(b) to our consolidated financial statements included in Item 18 of this annual report for further information relating to our committed and outstanding customer financing.

We continue to make arrangements with financial institutions and investors to sell credit risk we have incurred from the commitments and outstanding loans we have made as well as from the financial guarantees we may have given. Should the demand for customer finance increase in the future, we intend to further mitigate our total structured financing exposure, market conditions permitting.

We expect our structured financing commitments to be financed mainly through the capital markets as well as through cash flow from operations.

**Table of Contents**

The structured financing commitments are available under loan facilities mainly negotiated with customers of Nokia Siemens Networks. Availability of the amounts is dependent upon the borrowers' continuing compliance with stated financial and operational covenants and compliance with other administrative terms of the facilities. The customer loans are available to fund capital expenditure relating to the purchase of network infrastructure equipment and services from Nokia Siemens Networks.

The following table sets forth the amounts of our contingent commitments for the periods indicated as at December 31, 2012. The amounts represent the maximum principal amount of commitments.

**Contingent Commitments Expiration Per Period**

	2013	2014-2015	2016-2017 (EUR millions)	Thereafter	Total
Guarantees of Nokia's performance	393	119	37	49	598

Guarantees of Nokia's performance consist of EUR 598 million of guarantees that are provided to certain Nokia Siemens Networks customers in the form of bank guarantees, or corporate guarantees issued by Nokia Siemens Networks' Group entity. These instruments entitle the customer to claim payment as compensation for non-performance by Nokia Siemens Networks of its obligations under network infrastructure supply agreements. Depending on the nature of the instrument, compensation is payable either on demand, or is subject to verification of non-performance.

Financial guarantees and securities pledged that we may give on behalf of customers represent guarantees relating to payment by certain Nokia Siemens Networks' customers and other third parties under specified loan facilities between such a customer or other third parties and their creditors. Nokia's obligations under such guarantees are released upon the earlier of expiration of the guarantee or early payment by the customer or other third party.

See Note 29 to our consolidated financial statements included in Item 18 of this annual report for further information regarding commitments and contingencies.

**5C. Research and Development, Patents and Licenses**

Success in the mobile communications industry requires continuous introduction of new products and services and their combinations based on the latest available technology. Consequently, we have made substantial research and development ( R&D ) investments in each of the last three years. Our consolidated R&D expenses for 2012 were EUR 4 782million, a decrease of 14% from EUR 5 584 million in 2011. The decrease in R&D expenses was due to decreased R&D expenses in all businesses. R&D expenses in 2010 were EUR 5 844 million. These expenses represented 15.8%, 14.4% and 13.8% of Nokia net sales in 2012, 2011 and 2010, respectively. In 2012, Devices & Services R&D expenses included EUR 3 million of purchase price accounting related items compared to EUR 8 million in 2011. In 2010, Devices & Services R&D expenses included EUR 10 million of purchase price accounting related items. In 2012, Nokia Siemens Networks R&D expenses included EUR 20 million of purchase price accounting related items compared to EUR 61 million in 2011, respectively. In 2010, Nokia Siemens Networks R&D expenses included EUR 180 million of purchase price accounting related items. In 2012, Location & Commerce (renamed HERE) R&D expenses included EUR 355 million of purchase price accounting related items compared to EUR 343 million in 2011. In 2010, R&D expenses in Location & Commerce included EUR 366 million of purchase price accounting related items.

At December 31, 2012, we employed 27 551 people in R&D, representing approximately 28% of our total workforce, and had a strong research and development presence in 17 countries, including China, Finland, Germany, India and the United States. R&D expenses of Devices & Services as a percentage

**Table of Contents**

of its net sales were 11.8% in 2012 compared with 10.2% in 2011 and 9.2% in 2010. Location & Commerce R&D expenses represented 80.1% of its net sales in 2012, compared with 87.8% of its net sales in 2011 and 116.3% in 2010. In the case of Nokia Siemens Networks, R&D expenses represented 14.8%, 15.6% and 16.9% of its net sales in 2012, 2011 and 2010, respectively.

We will continue to invest in research and development in an appropriate manner to support our strategic objectives.

**5D. Trends Information**

See Item 5A. Operating Results Principal Factors and Trends Affecting our Results of Operations for information on material trends affecting our business and results of operations.

**5E. Off-Balance Sheet Arrangements**

There are no material off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

**5F. Tabular Disclosure of Contractual Obligations**

The following table sets forth our contractual obligations for the periods indicated as at December 31, 2012.

**Contractual Obligations Payments Due by Period**

	2013	2014-2015	2016-2017 (EUR millions)	Thereafter	Total
Long-term liabilities	9	2 813	674	1 861	5 357
Operating leases	238	306	155	309	1 008
Purchase obligations	1 740	265	37		2 042
Total	1 987	3 384	866	2 170	8 407

Benefit payments related to the underfunded defined benefit plans are not expected to be material in any given period in the future. Therefore, these amounts have not been included in the table above for any of the years presented.

**ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****6A. Directors and Senior Management**

Pursuant to the provisions of the Finnish Companies Act and our Articles of Association, the control and management of Nokia is divided among the shareholders at a general meeting, the Board of Directors (or the Board), the President and CEO, and the Nokia Leadership Team chaired by the President and CEO.

**Board of Directors**

The current members of the Board of Directors were elected at the Annual General Meeting on May 3, 2012, based on the proposal of the Board's Corporate Governance and Nomination Committee. On the same date, the Chairman and Vice Chairman, as well as the Chairmen and members of the committees of the Board, were elected among the Board members and among the independent directors of the Board, respectively.



**Table of Contents**

The members of the Board of Directors are elected on an annual basis for a one-year term ending at the close of the next Annual General Meeting. The election is made by a simple majority of the shareholders' votes represented at the Annual General Meeting.

The current members of the Board of Directors and its committees are set forth below.

Chairman Risto Siilasmaa, b. 1966

*Chairman of the Board of Directors of Nokia Corporation. Board member since 2008. Chairman since 2012. Chairman of the Corporate Governance and Nomination Committee.*

Master of Science (Eng.) (Helsinki University of Technology).

President and CEO of F-Secure Corporation 1988-2006.

Chairman of the Board of Directors of F-Secure Corporation. Member of the Board of Directors of Mendor Ltd. Vice Chairman of the Board of Directors of The Federation of Finnish Technology Industries. Member of the Board of Directors of The Confederation of Finnish Industries (EK).

Chairman of the Board of Directors of Elisa Corporation 2008-2012. Member of the Board of Directors of Elisa Corporation 2007-2008.

Vice Chairman Dame Marjorie

Scardino, b. 1947

*Board member since 2001. Vice Chairman since 2007. Member of the Corporate Governance and Nomination Committee. Member of the Personnel Committee.*

Bachelor of Arts (Baylor University). Juris Doctor (University of San Francisco).

Chief Executive of Pearson plc. 1997-2012. Chief Executive of The Economist Group 1993-1997. President of the North American Operations of The Economist Group 1985-1993. Lawyer 1976-1985 and publisher of The Georgia Gazette newspaper 1978-1985.

Member of the Board of Directors of Pearson plc 1997-2012.

Bruce Brown, b. 1958

*Chief Technology Officer of The Procter & Gamble Company. Board member since May 3, 2012. Member of the Personnel Committee.*

M.B.A. (International Business) (Xavier University). B.S. (Chemical Engineering) (Polytechnic Institute of New York University).

Various executive and managerial positions in Baby Care, Feminine Care, and Beauty Care units of The Procter & Gamble Company since 1980 in the United States, Germany and Japan.

Member of the Board of Directors of Agency for Science, Technology & Research (A\*STAR). Strategy Adviser in US National Innovation. Member of the Board of Trustees of Xavier University. Chairman of the Advisory Board of MDVIP. Member of the Board of the University of Cincinnati Research Institute.

Stephen Elop, b. 1963

*President and CEO of Nokia Corporation. Chairman of the Nokia Leadership Team. Board member since 2011.*



**Table of Contents**

Bachelor of Computer Engineering and Management (McMaster University, Hamilton, Canada). Doctor of Laws, honorary (McMaster University, Hamilton, Canada).

President of Microsoft Business Division and member of senior membership team of Microsoft Corporation 2008-2010. COO, Juniper Networks, Inc. 2007-2008. President, Worldwide Field Operations, Adobe Systems Inc. 2005-2006. President and CEO (last position), Macromedia Inc. 1998-2005.

Henning Kagermann, b. 1947

*Board member since 2007. Chairman of the Personnel Committee. Member of the Corporate Governance and Nomination Committee.*

Ph.D. (Theoretical Physics) (Technical University of Brunswick).

Co-CEO and Chairman of the Executive Board of SAP AG 2008-2009. CEO of SAP 2003-2008. Co-chairman of the Executive Board of SAP AG 1998-2003. A number of leadership positions in SAP AG since 1982. Member of SAP Executive Board 1991-2009. Taught physics and computer science at the Technical University of Brunswick and the University of Mannheim 1980-1992, became professor in 1985.

Member of the Supervisory Boards of Bayerische Motoren Werke Aktiengesellschaft (BMW AG), Deutsche Bank AG, Deutsche Post AG and Münchener Rückversicherungs-Gesellschaft AG (Munich Re). Member of the Board of Directors of Wipro Ltd. President of Deutsche Akademie der Technikwissenschaften. Member of the Honorary Senate of the Foundation Lindau Nobel prizewinners.

Jouko Karvinen, b. 1957

*CEO of Stora Enso Oyj. Board member since 2011. Chairman of the Audit Committee. Member of the Corporate Governance and Nomination Committee.*

Master of Science (Eng.) (Tampere University of Technology).

CEO of Philips Medical Systems Division 2002-2006. Member of Board of Management of Royal Philips Electronics 2006 and Group Management Committee 2002-2006. Holder of executive and managerial positions at ABB Group Limited from 1987, including Executive Vice President, Head of Automation Technology Products Division and Member of Group Executive Committee 2000-2002, Senior Vice President, Business Area Automation Power Products 1998-2000, Vice President, Business Unit Drives Products & Systems 1993-1998, Vice President, Power Electronics Division of ABB Drives Oy, Global AC Drives Feeder Factory and R&D Centre 1990-1993.

Member of the Board of Directors of Aktiebolaget SKF. Member of the Board of Directors of the Finnish Forest Industries Federation and the Confederation of European Paper Industries (CEPI).

Helge Lund, b. 1962

*President and CEO of Statoil ASA. Board member since 2011. Member of the Personnel Committee.*

**Table of Contents**

MA in Business Economics (School of Economics and Business Administration, Bergen). Master of Business Administration (MBA) (INSEAD).

President and CEO of StatoilHydro 2007-2009. President and CEO of Statoil 2004-2007. President and CEO of Aker Kvaerner ASA 2002-2004, central managerial positions in the Aker RGI system from 1999. Prior to 1999, Deputy Managing Director of Nycomed Pharma AS, a political adviser to the Conservative Party of the parliamentary group of Norway and a consultant of McKinsey & Co.

Isabel Marey-Semper, b. 1967

*Director of Advanced Research of L'Oréal Group. Board member since 2009. Member of the Audit Committee.*

Ph.D. (Neuro-Pharmacology) (Université Paris Pierre et Marie Curie Collège de France). MBA (Collège des Ingénieurs, Paris).

Director of Shared Services of L'Oréal Group 2010-2011. Chief Financial Officer, Executive Vice President in charge of strategy of PSA Peugeot Citroën 2007-2009. COO, Intellectual Property and Licensing Business Unit of Thomson 2006-2007. Vice President Corporate Planning at Saint-Gobain 2004-2005. Director of Corporate Planning, High Performance Materials of Saint-Gobain 2002-2004. Principal of A.T. Kearney (Telesis, prior to acquisition by A.T. Kearney) 1997-2002.

Mårten Mickos, b. 1962

Member of the Board of Directors of Faurecia S.A. 2007-2009.

*Chief Executive Officer of Eucalyptus Systems, Inc. Board member since May 3, 2012.*

Master of Science (Eng.) (Helsinki University of Technology).

Senior Vice President, Database Group, Sun Microsystems 2008-2009. CEO, MySQL AB 2001-2008. Chairman, Vexillum Ab 2000-2001. CEO, MatchON Sports Ltd. 1999-2000. CEO, Intellitel Communications Ltd. 1997-1999.

Elizabeth Nelson, b. 1960

*Independent Corporate Advisor. Board member since May 3, 2012. Member of the Audit Committee.*

M.B.A. (Finance) (The Wharton School, University of Pennsylvania). B.S. (Foreign Service) (Georgetown University).

Executive Vice President and Chief Financial Officer, Macromedia, Inc. 1997-2005. Vice President, Corporate Development, Macromedia, Inc. 1996-1997. Project Manager, Corporate Development and International Finance, Hewlett-Packard Company 1988-1996. Associate, Robert Nathan Associates 1982-1986.

Member of the Board of Directors of Brightcove Inc.

Member of the Boards of Directors of Ancestry.com, Inc. 2009-2012, SuccessFactors, Inc. 2007-2012, Autodesk, Inc. 2007-2010 and CNET Networks, Inc. 2003-2008.

Kari Stadigh, b. 1955

*Group CEO and President of Sampo plc. Board member since 2011. Member of the Personnel Committee.*

---

**Table of Contents**

Master of Science (Eng.) (Helsinki University of Technology). Bachelor of Business Administration (Swedish School of Economics and Business Administration, Helsinki).

Deputy CEO of Sampo plc 2001-2009. President of Sampo Life Insurance Company Limited 1999-2000. President of Nova Life Insurance Company Ltd 1996-1998. President and COO of Jaakko Pöyry Group 1991-1996.

Member of the Board of Directors of Nordea Bank AB (publ). Chairman of the Board of Directors of If P&C Insurance Holding Ltd (publ), Kaleva Mutual Insurance Company and Mandatum Life Insurance Company Limited. Member of the Board of Directors of Varma Mutual Pension Insurance Company. Vice Chairman of the Board of Directors of Confederation of Finnish Industries (EK). Vice Chairman of the Board of Directors of the Federation of Finnish Financial Services. Member of the Board of Directors of Central Chamber of Commerce of Finland.

Chairman of the Board of Directors of Alma Media Corporation 2005-2011. Member of the Board of Directors of Aspo Plc. 2009. Chairman of the Board of Directors of Aspo Plc. 2000-2008.

***Proposal of the Corporate Governance and Nomination Committee for Composition of the Board of Directors in 2013***

On January 24, 2013, the Corporate Governance and Nomination Committee announced its proposal to the Annual General Meeting convening on May 7, 2013 regarding the composition of the Board of Directors for a one-year term from the Annual General Meeting 2013 until the close of the Annual General Meeting 2014. The Committee will propose that the number of Board members be ten and that the following current Nokia Board members be re-elected as members of the Nokia Board of Directors for a term until the close of the Annual General Meeting 2014: Bruce Brown, Stephen Elop, Henning Kagermann, Jouko Karvinen, Helge Lund, Märten Mickos, Elizabeth Nelson, Risto Siilasmaa and Kari Stadigh.

In addition, the Committee will propose that Elizabeth Doherty, the Chief Financial Officer of Reckitt Benckiser Group plc until March 15, 2013, be elected as a member of the Nokia Board of Directors for the same term until the close of the Annual General Meeting 2014.

The Committee's aim is continually to renew the Board to ensure an efficient Board of international professionals with a diverse mix of skills and experience. The Committee considers potential director candidates based on the short-term and long-term needs of Nokia and of the Board and may engage search firms or advisors to identify director candidates. According to Nokia's Articles of Association, the Board consists of a minimum of seven and a maximum of 12 directors. Based on past experience and the current business situation at Nokia, the Committee regards ten as an appropriate number of directors for the needed diversity in experience and skills to perform the Board's work effectively.

The Chairman and the Vice Chairman are elected by the new Board and confirmed by the independent directors of the Board from among the Board members upon the recommendation of the Corporate Governance and Nomination Committee. The independent directors of the new Board will also confirm the election of the members and Chairmen for the Board's committees from among the Board's independent directors upon the recommendation of the Corporate Governance and Nomination Committee and based on each committee's member qualification standards. These elections will take place at the Board's assembly meeting following the Annual General Meeting.

## **Table of Contents**

On January 24, 2013, the Corporate Governance and Nomination Committee announced that it will propose in the assembly meeting of the new Board of Directors after the Annual General Meeting on May 7, 2013 that Risto Siilasmaa be elected as Chairman of the Board and Jouko Karvinen as Vice Chairman of the Board.

### **Nokia Leadership Team**

According to our Articles of Association, the Nokia Leadership Team is responsible for the operative management of the Company. The Chairman and members of the Nokia Leadership Team are appointed by the Board of Directors. Only the Chairman of the Nokia Leadership Team, the President and Chief Executive Officer, can be a member of both the Board of Directors and the Nokia Leadership Team.

During 2012, the following appointments were made to the Nokia Leadership Team:

Marko Ahtisaari was appointed Executive Vice President of Design and member of the Nokia Leadership Team as from February 1, 2012.

Juha Putkiranta was appointed Executive Vice President of Operations and member of the Nokia Leadership Team as from July 1, 2012.

Timo Toikkanen was appointed Executive Vice President of Mobile Phones and member of the Nokia Leadership Team as from July 1, 2012.

Chris Weber was appointed Executive Vice President of Sales and Marketing and member of the Nokia Leadership Team as from July 1, 2012.

Further, during 2012, the following Nokia Leadership Team members resigned:

Jerri DeVard, formerly Executive Vice President and Chief Marketing Officer, stepped down from the Nokia Leadership Team effective June 30, 2012.

Colin Giles, formerly Executive Vice President of Sales, stepped down from the Nokia Leadership Team effective June 30, 2012 and left Nokia on September 30, 2012.

Mary T. McDowell, formerly Executive Vice President of Mobile Phones stepped down from the Nokia Leadership Team effective June 30, 2012 and left Nokia on December 31, 2012.

Niklas Savander, formerly Executive Vice President of Markets stepped down from the Nokia Leadership Team effective June 30, 2012 and left Nokia on February 28, 2013.

Esko Aho, formerly Executive Vice President of Corporate Relations and Responsibility stepped down from the Nokia Leadership Team and left Nokia effective August 31, 2012. He continues as an external consultant to Nokia.

The current members of the Nokia Leadership Team are set forth below.

## Edgar Filing: NOKIA CORP - Form 20-F

Chairman Stephen Elop, b. 1963

*President and CEO of Nokia Corporation. Member of the Board of Directors of Nokia Corporation. Nokia Leadership Team member and Chairman since 2010. Joined Nokia 2010.*

Bachelor of Computer Engineering and Management (McMaster University, Hamilton, Canada). Doctor of Laws, honorary (McMaster University, Hamilton, Canada).

President of Microsoft Business Division and member of senior membership team of Microsoft Corporation 2008-2010. COO, Juniper Networks, Inc. 2007-2008. President, Worldwide Field Operations, Adobe Systems Inc. 2005-2006. President and CEO (last position), Macromedia Inc. 1998-2005.

**Table of Contents**

Marko Ahtisaari, b. 1969

*Executive Vice President, Design. Nokia Leadership Team member since February 1, 2012. With Nokia 2002-2006, rejoined 2009.*

Master of Arts in Philosophy (Graduate School of Arts and Sciences, Columbia University, New York, USA). Bachelor of Arts in Economics and Philosophy (Columbia College, New York, USA).

Senior Vice President, Design, Nokia 2009-2012. CEO and Co-founder, Dopplr 2008-2009. Head of Brand & Design, Blyk 2006-2008. Director, Design Strategy, Nokia 2005-2006. Director, Insight & Innovation, Nokia 2002-2004. Designer, Satama Interactive 1999-2002. Faculty Fellow, Graduate School of Arts and Sciences, Columbia University 1993-1998.

Member of the Board of Directors of Artek oy ab. Member of the Board of Directors of WITNESS.

Michael Halbherr, b. 1964

*Executive Vice President, Location & Commerce. Nokia Leadership Team member since 2011. Joined Nokia 2006.*

PhD. (Electrical Engineering) (ETH, Zurich, Switzerland). Worked at MIT Laboratory for Computer Science (Cambridge, MA, USA).

Vice President, Ovi Product Development, Nokia Services 2010-2011. Vice President, Nokia Maps, Nokia Services 2006-2010. CEO, gate5 AG, Berlin, Germany 2001-2006. Managing Director, Europeatweb, Munich, Germany 2000-2001. Manager, The Boston Consulting Group, in the USA and Switzerland 1994-2000.

Jo Harlow, b. 1962

*Executive Vice President, Smart Devices. Nokia Leadership Team member since 2011. Joined Nokia 2003.*

Bachelor of science (psychology) (Duke University, Durham, North Carolina, USA).

Senior Vice President, Symbian Smartphones, Mobile Solutions, Nokia 2010-2011. Senior Vice President, Smartphones Product Management, Nokia 2009. Vice President, Live Category, Nokia 2008-2009. Senior Vice President, Marketing, Mobile Phones, Nokia 2006-2007. Vice President, Marketing, North America, Mobile Phones, Nokia 2003-2005. Marketing, sales and management roles at Reebok 1992-2003 and Procter & Gamble 1984-1992.

Timo Ihamuotila, b. 1966

*Executive Vice President, Chief Financial Officer. Nokia Leadership Team member since 2007. With Nokia 1993-1996, rejoined 1999.*



## Edgar Filing: NOKIA CORP - Form 20-F

Master of Science (Economics) (Helsinki School of Economics). Licentiate of Science (Finance) (Helsinki School of Economics).

Executive Vice President, Sales, Markets, Nokia 2008-2009. Executive Vice President, Sales and Portfolio Management, Mobile Phones, Nokia 2007. Senior Vice President, CDMA Business Unit, Mobile Phones, Nokia 2004-2007. Vice

**Table of Contents**

President, Finance, Corporate Treasurer, Nokia 2000-2004. Director, Corporate Finance, Nokia 1999-2000. Vice President of Nordic Derivatives Sales, Citibank plc. 1996-1999. Manager, Dealing & Risk Management, Nokia 1993-1996. Analyst, Assets and Liability Management, Kansallis Bank 1990-1993.

Member of the Board of Directors of Nokia Siemens Networks B.V. Member of the Board of Directors of Central Chamber of Commerce of Finland.

Louise Pentland, b. 1972

*Executive Vice President, Chief Legal Officer. Nokia Leadership Team member since 2011. Joined Nokia 1998.*

LL.B honours (law degree) (Newcastle upon Tyne).

Qualified and active Solicitor (England and Wales).

Licensed attorney (Member of the New York Bar).

Senior Vice President and Chief Legal Officer, Nokia 2008-2011. Acting Chief Legal Officer, Nokia 2007-2008. Vice President and Head of Legal, Enterprise Solutions, Nokia 2004-2007. Senior Legal Counsel, Nokia Networks 1998-2004. Before joining Nokia, corporate in-house legal positions at Avon Cosmetics Ltd. and law firm positions prior to that in the United Kingdom.

Member of the Board of Directors of Nokia Siemens Networks B.V. Member of Association of General Counsel, CLO Roundtable Europe, Global Leaders in Law, Corporate Counsel Forum. Vice chair of the International Bar Association.

Juha Putkiranta, b. 1957

*Executive Vice President, Operations. Nokia Leadership Team member since July 1, 2012. Joined Nokia 1997.*

Master of Science (Eng.) (Helsinki University of Technology). Majors in Industrial Economics and Information Technology.

Senior Vice President, Supply Chain, Nokia 2007-2012. Senior Vice President, Multimedia Computers, Nokia 2004-2007. Senior Vice President, Imaging Business Unit, Nokia 2002-2004. Senior Vice President, Cellular Telephone Business Unit, Nokia 2000-2002. Vice President, Corporate Planning and Business Development 1997-2000. Managerial positions at Hewlett-Packard Company 1986-1997.

Henry Tirri, b. 1956

*Executive Vice President, Chief Technology Officer. Nokia Leadership Team member since 2011. Joined Nokia 2004.*

Ph.D. (computer science) (University of Helsinki). Dr. h.c. (University of Tampere).

Edgar Filing: NOKIA CORP - Form 20-F

Head of Nokia Research Center (NRC), Corporate Development 2008-2011. Head of NRC Systems Research 2007-2008. Nokia Research Center, Research Fellow 2004-2007.

Adjunct Professor in computer science (University of Helsinki). Adjunct Professor in computational engineering (Aalto University, Helsinki). Adjunct Professor in Civil Engineering

**Table of Contents**

(University of California, Berkeley). Member of the international Advisory Committee of Tsinghua National Laboratory for Information Science and Technology.

Timo Toikkanen, b.1966

*Executive Vice President, Mobile Phones. Nokia Leadership Team member since July 1, 2012. Joined Nokia 1995.*

Master of Law degree (University of Helsinki). Master of Law degree (King's College, London).

Head of Business Development, Nokia 2011-2012. Senior Vice President, Strategic Business Operations, Nokia 2010-2011. Senior Vice President, Sales, Distribution East, Nokia 2000-2010. Senior Vice President, Middle East and Africa-Customer and Market Operations, Nokia 2005-2008. Vice President, Greater China Mobile Phones Sales, Nokia. Vice President, Sales, China South Mobile Phones, Nokia 2001-2002. General Manager, Hong Kong and Macao, Nokia 2000-2001.

Chris Weber, b. 1965

*Executive Vice President, Sales and Marketing. Nokia Leadership Team member since July 1, 2012. Joined Nokia 2011.*

Bachelor degree in business administration (economics and computer science) (Mount Union College, Alliance, Ohio, USA).

Senior Vice President of Markets, Americas, Nokia 2011-2012. CEO of own sales consulting business, 2010-2011. Holder of several executive sales and marketing positions during a 15-year career at Microsoft, including corporate vice president, U.S. Enterprise and Partner Group, and overseeing national sales strategy, sales operations, enterprise partners and vertical industry strategy.

Juha Äkräs, b. 1965

*Executive Vice President, Human Resources. Nokia Leadership Team member since 2010. Joined Nokia 1993.*

Master of Science (Eng.) (Helsinki University of Technology).

Senior Vice President, Human Resources, Nokia 2006-2010. Vice President, Global Operational Human Resources, Nokia 2005-2006. Senior Vice President and General Manager, Core Networks, Nokia Networks 2003-2005. Vice President and General Manager, IP Networks, Nokia Networks 2002-2003. Vice President, Strategy and Business Development, Nokia Networks 2000-2001. Vice President, Customer Services APAC, Nokia Telecommunications 1997-1999. Head of Marketing and Business Development, Customer Services, Nokia Telecommunications 1995-1996. Business Development Manager and Controller, Customer Services, Nokia Cellular Systems 1994-1995. Project Manager, Nokia Telecom AB (Sweden) 1993-1994.

Edgar Filing: NOKIA CORP - Form 20-F

Member of the Board of Directors of Nokia Siemens Networks B.V. Member of the Board of Directors of The Federation of Finnish Technology Industries.

Dr. Kai Öistämö, b. 1964

*Executive Vice President, Chief Development Officer. Nokia Leadership Team member since 2005. Joined Nokia 1991.*

**Table of Contents**

Doctor of Technology (Signal Processing). Master of Science (Engineering) (Tampere University of Technology).

Executive Vice President, Devices, Nokia 2007-2010. Executive Vice President and General Manager of Mobile Phones, Nokia 2005-2007. Senior Vice President, Business Line Management, Mobile Phones, Nokia 2004-2005. Senior Vice President, Mobile Phones Business Unit, Nokia Mobile Phones 2002-2003. Vice President, TDMA/GSM 1900 Product Line, Nokia Mobile Phones 1999-2002. Vice President, TDMA Product Line 1997-1999. Various technical and managerial positions in Nokia Consumer Electronics and Nokia Mobile Phones 1991-1997.

Member of the Board of Directors of Sanoma Corporation. Chairman of the Board of Directors of University of Tampere. Chairman of the Board of The Funding Agency for Technology and Innovation (TEKES).

**6B. Compensation**

The following section reports the remuneration of the Board of Directors and of the seven named executive officers and describes our compensation policies and actual compensation for the Nokia Leadership Team as well as our use of equity-based incentives.

**Board of Directors**

The following table sets forth the annual remuneration of the members of the Board of Directors for service on the Board and its committees, as resolved at the respective Annual General Meetings in 2012, 2011 and 2010.

Position	2012 (EUR)	2011 (EUR)	2010 (EUR)
Chairman	440 000	440 000	440 000
Vice Chairman	150 000	150 000	150 000
Member	130 000	130 000	130 000
Chairman of Audit Committee	25 000	25 000	25 000
Member of Audit Committee	10 000	10 000	10 000
Chairman of Personnel Committee	25 000	25 000	25 000
<b>Total</b>	<b>1 700 000<sup>(1)</sup></b>	<b>1 700 000<sup>(1)</sup></b>	<b>1 700 000<sup>(2)</sup></b>

(1) Our President and CEO, Stephen Elop, did not receive remuneration for his service as a member of the Board in 2011 and 2012.

(2) The aggregate amount of Board pay also includes the remuneration paid to our former President and CEO in his capacity as a member of the Board of Directors, but in that capacity only.

It is Nokia's policy that director remuneration consists of an annual fee only and no fees are paid for meeting attendance. Approximately 40% of director compensation is paid in the form of Nokia shares that are purchased from the market. It is also Nokia's policy that the Board members retain all Nokia shares received as director compensation until the end of their board membership (except for those shares needed to offset any costs relating to the acquisition of the shares, including taxes). In addition, it is Nokia's policy that non-executive members of the Board do not participate in any of Nokia's equity programs and do not receive stock options, performance shares, restricted shares or any other equity-based or otherwise variable compensation for their duties as Board members. The President and CEO

**Table of Contents**

did not receive compensation for his service as a member of the Board of Directors in 2012. The total compensation of the President and CEO is described below in Executive Compensation Actual Executive Compensation for 2012 Summary Compensation Table 2012 .

The remuneration of the Board of Directors is set annually by our Annual General Meeting by a resolution of a simple majority of the shareholders' votes represented at the meeting, upon the proposal of the Corporate Governance and Nomination Committee of the Board of Directors. The remuneration is set for the period as from the respective Annual General Meeting until the close of the next Annual General Meeting.

When preparing the proposal for the Board remuneration for the shareholders' approval in the Annual General Meeting, it is the policy of the Corporate Governance and Nomination Committee to review and compare the total remuneration levels and their criteria paid in other global companies with net sales and complexity of business comparable to that of Nokia. The Committee's aim is to ensure that Nokia has an efficient Board of international professionals representing a diverse mix of skills and experience. A competitive Board remuneration contributes to the achievement of this target.

**Remuneration of the Board of Directors in 2012**

For the year ended December 31, 2012, the aggregate amount of remuneration paid to the members of the Board of Directors for their services as members of the Board and its committees was EUR 1 700 000.

The following table sets forth the total annual remuneration paid to the members of the Board of Directors in 2012, as resolved by the shareholders at the Annual General Meeting on May 3, 2012. For information with respect to the Nokia shares and equity awards held by the members of the Board of Directors, please see Item 6E. Share Ownership.

	Year	Fees Earned or Paid in Cash (EUR) <sup>(1)</sup>	Total (EUR)
Risto Siilasmaa, Chairman as of May 3, 2012 <sup>(2)</sup>	2012	440 000	440 000
Jorma Ollila, Chairman until May 3, 2012 <sup>(3)</sup>	2012		
Marjorie Scardino, Vice Chairman <sup>(4)</sup>	2012	150 000	150 000
Bruce Brown	2012	130 000	130 000
Stephen Elop <sup>(5)</sup>	2012		
Bengt Holmström <sup>(3)</sup>	2012		
Henning Kagermann <sup>(6)</sup>	2012	155 000	155 000
Per Karlsson <sup>(3)</sup>	2012		
Jouko Karvinen <sup>(7)</sup>	2012	155 000	155 000
Helge Lund	2012	130 000	130 000
Isabel Marey-Semper <sup>(8)</sup>	2012	140 000	140 000
Mårten Mickos	2012	130 000	130 000
Elizabeth Nelson <sup>(9)</sup>	2012	140 000	140 000
Kari Stadigh	2012	130 000	130 000
<b>Total</b>		<b>1 700 000</b>	<b>1 700 000</b>

- (1) Approximately 40% of each Board member's annual remuneration is paid in Nokia shares purchased from the market and the remaining approximately 60% is paid in cash. The non-executive members of the Board do not participate in any of Nokia's equity programs and do not receive stock options, performance shares, restricted shares or any other equity-based or other compensation for their duties as Board members.
- (2) Represents the fee paid to Risto Siilasmaa for service as the Chairman of the Board.





**Table of Contents**

- (3) Jorma Ollila, Bengt Holmström and Per Karlsson served on the Board until the close of the Annual General Meeting in 2012. They were not paid any fees during fiscal year 2012, but received their compensation for the term until the close of the Annual General Meeting in 2012 during fiscal year 2011. For their compensation in 2011 see Note 31 to our consolidated financial statements included in Item 18 of this annual report.
- (4) Represents the fee paid to Marjorie Scardino for service as Vice Chairman of the Board.
- (5) Stephen Elop did not receive remuneration for his service as a member of the Board. This table does not include remuneration paid to Mr. Elop for his service as the President and CEO. For the compensation paid for his service as the President and CEO, see Executive Compensation Actual Executive Compensation for 2012 Summary Compensation Table 2012 below.
- (6) Represents the fees paid to Henning Kagermann, consisting of a fee of EUR 130 000 for service as a member of the Board and EUR 25 000 for service as the Chairman of the Personnel Committee.
- (7) Represents the fees paid to Jouko Karvinen, consisting of a fee of EUR 130 000 for service as a member of the Board and EUR 25 000 for service as the Chairman of the Audit Committee.
- (8) Represents the fees paid to Isabel Marey-Semper, consisting of a fee of EUR 130 000 for service as a member of the Board and EUR 10 000 for service as a member of the Audit Committee.
- (9) Represents the fees paid to Elizabeth Nelson, consisting of a fee of EUR 130 000 for service as a member of the Board and EUR 10 000 for service as a member of the Audit Committee.

***Proposal by the Corporate Governance and Nomination Committee for Remuneration to the Board of Directors in 2013***

On January 24, 2013, the Corporate Governance and Nomination Committee of the Board announced its proposal to the Annual General Meeting convening on May 7, 2013 regarding the remuneration to the Board of Directors in 2013. The Committee will propose that the annual fee payable to the Board members elected at the same meeting for a term until the close of the Annual General Meeting in 2014, remain at the same level as it has been for the past five years and be as follows: EUR 440 000 for the Chairman, EUR 150 000 for the Vice Chairman and EUR 130 000 for each member (excluding the President and CEO of Nokia if elected to the Nokia Board); for the Chairman of the Audit Committee and the Chairman of the Personnel Committee an additional annual fee of EUR 25 000, and for each member of the Audit Committee an additional annual fee of EUR 10 000.

The guiding principle of the Committee's proposal is to align the interests of the directors with those of the shareholders by remunerating directors primarily with Nokia shares that must be retained for the duration of the Board membership. Therefore, the Committee will propose that, as in the past, approximately 40 per cent of the remuneration be paid in Nokia shares purchased from the market, which shares shall be retained until the end of a director's Board membership in line with the Nokia policy (except for those shares needed to offset any costs relating to the acquisition of the shares, including taxes). The rest of the remuneration would be payable in cash, most of which is typically used to cover taxes arising out of the remuneration.

**Executive Compensation**

The sections below describe in more detail, our executive compensation philosophy, the design of our programs and the factors that are considered during the decision-making process. One of the underlying principles of our philosophy and our program design is that a significant portion of executive's compensation is at-risk pay tied to the performance of the company and aligned with the value delivered to shareholders. Of the total compensation package for the President and CEO, 84% is at-risk pay tied to performance. The amount of pay at risk for the other members of the Nokia Leadership Team ranges from 71% to 80%. Our programs are designed so this portion of at-risk pay is earned and delivered when results warrant. While significant strides have been made in the execution of our strategy, the transition has taken longer than anticipated in terms of results relative to the

---

**Table of Contents**

measures that were defined. As a result, under our executive compensation programs, the President and CEO and the members of the Nokia Leadership Team have not realized significant elements of their pay over this past year.

***Executive Compensation Philosophy, Programs and Decision-Making Process***

The basic principles of our executive compensation philosophy are to attract, retain and motivate talented executive officers on a global basis with the right mix of skills and capabilities to drive Nokia's success in an extremely complex and rapidly evolving mobile communications industry. As a result, we have developed an overall compensation framework that provides competitive base pay rates combined with short- and long-term incentives that are intended to result in a competitive total compensation package.

Our executive compensation programs have been designed to enable Nokia to effectively execute the strategy announced in early 2011. Specifically, our programs are designed to:

incorporate specific measures that align directly with the execution of our strategy;

deliver an appropriate amount of performance-related variable compensation for the achievement of strategic goals and financial targets in both the short- and long-term;

appropriately balance rewards between Nokia's and an individual's performance; and

foster an ownership culture that promotes sustainability and long-term value creation and align the interests of the executive officers with those of the shareholders through long-term equity-based incentives.

The competitiveness of Nokia's executive compensation levels and practices is one of several key factors the Personnel Committee of the Board considers in its determination of compensation for Nokia executive officers. The Personnel Committee compares, on an annual basis, Nokia's compensation practices, base salaries and total compensation, including short- and long-term incentives against those of other relevant companies with the same or similar revenue, size, global reach and complexity that we believe we compete against for executive talent. The relevant sample includes companies in high technology, telecommunications and Internet services industries, as well as companies from other industries that are headquartered in Europe and the United States. The peer group is determined by the Personnel Committee and reviewed for appropriateness from time to time as deemed necessary due to such factors as changes in the business environment or industry.

The Personnel Committee retains and uses an external compensation consultant from Mercer Human Resources to obtain benchmark data and information on current market trends. The consultant works directly for the Personnel Committee and meets annually with the Personnel Committee, without management present, to provide an assessment of the competitiveness and appropriateness of Nokia's executive pay levels and programs. Management provides the consultant with information regarding Nokia's programs and compensation levels in preparation for meeting with the Committee. The Committee has reviewed and established that the consultant of Mercer Human Resources that works for the Personnel Committee is independent of Nokia and does not have any other business relationships with Nokia.

The Personnel Committee reviews the executive officers' compensation on an annual basis, and from time to time during the year when special needs arise. Without management present, the Personnel Committee reviews and recommends to the Board the corporate goals and objectives relevant to the compensation of the President and CEO, evaluates the performance of the President and CEO in light of those goals and objectives, and proposes to the Board the compensation level of the President and CEO. All compensation for the President and CEO, including long-term equity incentives, is approved by the Board and is confirmed by the independent members of the Board. Management's role is to provide any information requested by the Personnel Committee to assist in their deliberations.

## **Table of Contents**

In addition, upon recommendation of the President and CEO, the Personnel Committee approves all compensation for all the members of the Nokia Leadership Team (other than the President and CEO of Nokia) and other executive level direct reports to the President and CEO, including long-term equity incentives and goals and objectives relevant to compensation. The Personnel Committee also reviews the results of the evaluation of the performance of the Nokia Leadership Team members (excluding the President and CEO) and other executive level direct reports to the President and CEO and approves their incentive compensation based on such evaluation.

The Personnel Committee considers the following factors, among others, in its review when determining the compensation of Nokia's executive officers or recommending the compensation of the President and CEO to the Board:

the compensation levels for similar positions (in terms of scope of position, revenues, number of employees, global responsibility and reporting relationships) in relevant comparison companies;

the performance demonstrated by the executive officer during the last year, which is evaluated at the end of the year against individual goals that are aligned to Nokia-level financial and strategic goals and against the executive officer's overall leadership capabilities;

the size and impact of the particular officer's role on Nokia's overall performance and strategic direction;

the internal comparison to the compensation levels of the other executive officers of Nokia;

past experience and tenure in role; and

the potential and expected future contributions of the executive.

The above factors are assessed by the Personnel Committee in totality.

In 2011, Nokia's management performed an internal risk assessment of Nokia's compensation policies and practices for all its employees specifically to understand any potential risk factors that would be associated with the changes made to Nokia's compensation programs in 2011 in alignment to our strategy. Management assessed such factors as Nokia's proportion of fixed compensation in relation to variable compensation, the caps on incentive compensation that can be earned under our plans, performance metrics tied to the incentive programs and the time horizon over which variable compensation may be earned, as well as Nokia's share ownership, severance and recoupment policies and our overall governance structure and practices. Based on the assessment, management concluded that there are no material risks arising from Nokia's compensation programs, policies and practices or the changes implemented that are likely to have a material adverse effect on Nokia. The findings of the analysis were reported to the Personnel Committee. A similar assessment was not conducted in 2012, as the 2011 assessment considered changes in our programs that were being implemented in 2012.

### ***Components of Executive Compensation***

Our compensation program for executive officers includes annual cash compensation in the form of a base salary and short-term cash incentives as well as long-term equity-based incentive awards in the form of performance shares, stock options and restricted shares.

#### ***Annual Cash Compensation***

Base salaries are targeted at globally competitive market levels. The Personnel Committee evaluates and weighs as a whole the appropriate salary levels based on both our US and European peer companies.



**Table of Contents**

Short-term cash incentives are an important element of our variable pay programs and are tied directly to Nokia-level financial and strategic goals that are shared by the Nokia Leadership Team. The short-term cash incentive opportunity is expressed as a percentage of each executive officer's annual base salary. These award opportunities and measurement criteria are presented in the table below.

Short-term incentives are determined for the Nokia Leadership Team based on their performance as a team. Additionally, some members of the Nokia Leadership Team have an objective on relative Total Shareholder Return (TSR). The payment with respect to relative TSR is based on the Personnel Committee's assessment of Nokia's total shareholder return compared to key peer group companies that are selected by the Personnel Committee in the high technology, Internet services and telecommunications industries and relevant market indices over one-, three- and five-year periods.

The specific goals and underlying targets require the Board's approval with respect to the President and CEO and the Personnel Committee's approval with respect to the other members of the Nokia Leadership Team.

The following table reflects the measurement criteria that were established for the President and CEO and members of the Nokia Leadership Team for the year 2012. The short-term incentive payout is based on performance relative to targets set for each measurement criteria listed in the table.

**Short-Term Incentive as a % of Annual Base Salary in 2012**

Position	Minimum Performance	Target Performance	Maximum Performance	Measurement Criteria
President and CEO	0%	100%	200%	<i>Key financial targets</i> <sup>(1)</sup> (including gross profit, OPEX and net cash flow); and
Nokia Leadership Team	0%	75%	150%	<i>Strategic objectives</i> <sup>(1)</sup> (including targets for performance of Nokia's product and service portfolio);
Certain Nokia Leadership Team members (in addition to above)	0%	25%	50%	<i>Total Shareholder Return</i> <sup>(2)</sup> (comparison made with key competitors in the high technology, telecommunications and Internet services industries over one-, three- and five-year periods)

- (1) One Nokia Leadership Team member's incentive structure is also tied to specific sales and gross margin targets in addition to the key financial targets and strategic objectives.
- (2) Total Shareholder Return reflects the change in Nokia's share price during an established time period, including the amount of dividends paid, divided by Nokia's share price at the beginning of the period. The calculation is conducted in the same manner for each company in the peer group. Only certain members of the Nokia Leadership Team are eligible for the additional Total Shareholder Return element. For Stephen Elop, Total Shareholder Return was measured in the one-time special CEO incentive program approved by the Board of Directors for the two-year period 2011-2012.

Annual incentive cash bonus under the Nokia short-term cash incentive plan is paid once per year based on pre-determined Nokia performance criteria assessed as of December 31, 2012. To determine the pay-out under the Nokia short-term cash incentive plan, the Personnel Committee approved incentive goals are evaluated against pre-defined achievement criteria. The resulting scores are then calculated against each executive individual incentive target to ascertain an individual pay-out percent. The executive's annual base salary is then multiplied by the pay-out percent to determine the pay-out amount. The achievement scores and individual pay-out percent and amount is presented to

---

**Table of Contents**

the Personnel Committee for approval. In the event the achievement criteria is not met, the actual short-term cash incentive awarded to the executive officer can be zero. The maximum payout is only possible with maximum performance on all measures.

For fiscal year 2012, the incentive criteria were not achieved and as a result there was no pay-out under the short-term cash incentive plan.

For more information on the actual cash compensation paid in 2012 to our executive officers, see Actual Executive Compensation for 2012 Summary Compensation Table 2012 below.

*Long-Term Equity-Based Incentives*

Long-term equity-based incentive awards in the form of performance shares, stock options and restricted shares are used to align executive officers' interests with shareholders' interests, reward for long-term financial performance and encourage retention, while also considering evolving regulatory requirements and recommendations and changing economic conditions. These awards are determined on the basis of the factors discussed above in Executive Compensation Philosophy, Programs and Decision-making Process, including a comparison of an executive officer's overall compensation with that of other executives in the relevant market and the impact on the competitiveness of the executive's compensation package in that market. Performance shares are Nokia's main vehicle for long-term equity-based incentives and reward the achievement of both Nokia's long-term financial results and an increase in share price. Performance shares vest as shares if at least one of the pre-determined threshold performance levels, tied to Nokia's financial performance, is achieved by the end of the performance period. The value that the executive receives is dependent on Nokia's share price. Stock options are granted with the purpose of creating value for the executive officer, once vested, only if the Nokia share price at the time of vesting is higher than the exercise price of the stock option established at grant. This is also intended to focus executives on share price appreciation, thus aligning the interests of the executives with those of the shareholders. Restricted shares are used primarily for long-term retention purposes and they vest fully after the close of a pre-determined restriction period. Any shares granted are subject to the share ownership guidelines as explained below. All of these equity-based incentive awards are generally forfeited if the executive leaves Nokia prior to their vesting.

*Recoupment of certain equity gains*

The Board of Directors has approved a policy allowing for the recoupment of equity gains realized by Nokia Leadership Team members under Nokia equity plans in case of a financial restatement caused by an act of fraud or intentional misconduct. This policy applies to equity grants made to Nokia Leadership Team members after January 1, 2010.

Information on the actual equity-based incentives granted to the members of our Nokia Leadership Team in 2012 is included in Item 6E. Share Ownership.

***Actual Executive Compensation for 2012***

*Service Contracts*

Stephen Elop's service contract covers his position as President and CEO as from September 21, 2010. As at December 31, 2012, Mr. Elop's annual base salary, which is subject to an annual review by the Board of Directors and confirmation by the independent members of the Board, is EUR 1 102 500. His incentive target under the Nokia short-term cash incentive plan is 100% of annual base salary as at December 31, 2012. In addition, Mr. Elop had a separate plan for 2011-2012, approved by the Board of Directors. Description and outcome of this plan is below. Mr. Elop is entitled to the customary benefits in line with our policies applicable to the top management, however, some of them are being provided on a

**Table of Contents**

tax-assisted basis. Mr. Elop is also eligible to participate in Nokia's long-term equity-based compensation programs according to Nokia policies and guidelines and as determined by the Board of Directors.

In case of termination by Nokia for reasons other than cause, Mr. Elop is entitled to a severance payment of up to 18 months of compensation (both annual base salary and target incentive) and his equity will be forfeited as determined in the applicable equity plan rules, with the exception of the equity out of the Nokia Equity Program 2010, which will vest in an accelerated manner (the performance period of Nokia Performance Share Plan 2010 ended in 2012 and no shares were delivered in accordance with its terms). In case of termination by Mr. Elop, the notice period is six months and he is entitled to a payment for such notice period (both annual base salary and target incentive for six months) and all his equity will be forfeited. In the event of a change of control of Nokia, Mr. Elop may terminate his employment upon a material reduction of his duties and responsibilities, upon which he will be entitled to a compensation of 18 months (both annual base salary and target incentive), and his unvested equity will vest in an accelerated manner. In case of termination by Nokia for cause, Mr. Elop is entitled to no additional compensation and all his equity will be forfeited. In case of termination by Mr. Elop for cause, he is entitled to a severance payment equivalent to 18 months of notice (both annual base salary and target incentive), and his unvested equity will vest in an accelerated manner. Mr. Elop is subject to a 12-month non-competition obligation after termination of the contract. Unless the contract is terminated by Nokia for cause, Mr. Elop may be entitled to compensation during the non-competition period or a part of it. Such compensation amounts to the annual base salary and target incentive for the respective period during which no severance payment is paid.

The Board of Directors decided in March 2011 that in order to align Mr. Elop's compensation to increased shareholder value and to link a meaningful portion of his compensation directly to the performance of Nokia's share price over the period of 2011-2012, his compensation structure for 2011 and 2012 would be modified. To participate in this program, Mr. Elop invested a portion of his short-term cash incentive opportunity and a portion of the value of his expected annual equity grants into the program as follows:

His target short-term cash incentive level was reduced from 150% to 100% and

His equity grants were reduced to a level below the competitive market value.

In consideration, Mr. Elop had the opportunity to earn a number of Nokia shares at the end of 2012 based on two independent criteria, with half of the opportunity tied to each criterion:

- (1) Total Shareholder Return (TSR) relative to a peer group of companies over the two-year period from December 31, 2010 until December 31, 2012: Minimum payout would require performance at the 50th percentile of the peer group and the maximum payout would occur if the rank is among the top three of the peer group. The peer group consists of a number of relevant companies in the high technology/mobility, telecommunications and Internet services industries.
- (2) Nokia's absolute share price at the end of 2012: Minimum payout if the Nokia share price was EUR 9, with maximum payout if the Nokia share price was EUR 17.

Nokia share price under both criteria was calculated as a 20-day trade volume weighted average share price on the NASDAQ OMX Helsinki. If the minimum level for one of the criterion had been met, a total of 125 000 Nokia ordinary shares would have been delivered to Mr. Elop. At maximum level for both criteria, a total of 750 000 Nokia ordinary shares would have been delivered to him. Shares earned under this plan during 2011-2012 would have been subject to an additional one-year vesting period until the first quarter 2014, at which point the earned and vested shares would have been delivered to Mr. Elop.

---

**Table of Contents**

Based on the results, as of December 31, 2012, no share delivery will take place as the minimum performance for neither of the two performance criteria was reached. The number of shares earned and to be settled may be adjusted by the Board of Directors under certain exceptional circumstances up until June 30, 2013 should the results significantly change.

For information about the compensation and benefits received by Mr. Elop during 2012, see Item 6B. Compensation Executive Compensation Summary Compensation Table 2012 and Compensation Executive Compensation Equity Grants in 2012.

*Pension Arrangements for the Members of the Nokia Leadership Team*

The members of the Nokia Leadership Team participate in the local retirement programs applicable to employees in the country where they reside. Executives in Finland, including Mr. Elop, participate in the Finnish TyEL pension system, which provides for a retirement benefit based on years of service and earnings according to prescribed statutory rules. Under the Finnish TyEL pension system, base pay, incentives and other taxable fringe benefits are included in the definition of earnings, although gains realized from equity are not. The Finnish TyEL pension scheme provides for early retirement benefits at age 62 with a reduction in the amount of retirement benefits. Standard retirement benefits are available from age 63 to 68, according to an increasing scale. The Nokia Leadership Team members in the United States participate in Nokia's US Retirement Savings and Investment Plan. Under this 401(k) plan, participants elect to make voluntary pre-tax contributions that are 100% matched by Nokia up to 8% of eligible earnings. 25% of the employer's match vests for the participants during each year of the first four years of their employment. The Nokia Leadership Team members in Germany participate in the Nokia German Pension Plan that is 100% company funded. Contributions are based on pensionable earnings, the pension table and retirement age. For the Nokia Leadership Team members in UK, the pension accrued in the UK Pension Scheme is a Money Purchase benefit. Contributions are paid into the UK Pension Scheme by both the member and employer. These contributions are held within the UK Pension Scheme and are invested in funds selected by the member.

*Actual Compensation for the Members of the Nokia Leadership Team in 2012*

At December 31, 2012, Nokia had a Nokia Leadership Team consisting of 12 members. Changes in the composition in the Nokia Leadership Team during 2012 are explained above in Item 6A. Directors and Senior Management Nokia Leadership Team.

The following tables summarize the aggregate cash compensation paid and the long-term equity-based incentives granted to the members of the Nokia Leadership Team under our equity plans in 2012.

Gains realized upon exercise of stock options and share-based incentive grants vested for the members of the Nokia Leadership Team during 2012 are included in Item 6E. Share Ownership.



**Table of Contents****Aggregate Cash Compensation to the Nokia Leadership Team for 2012<sup>(1)</sup>**

<b>Year</b>	<b>Number of Members on December 31, 2012</b>	<b>Base Salaries (EUR)</b>	<b>Cash Incentive Payments<sup>(2)</sup> (EUR)</b>
2012	12	6 788 567	515 702

- (1) Includes base salary and cash incentives paid or payable by Nokia for the 2012 fiscal year. The cash incentives are paid as a percentage of annual base salary based on Nokia's short-term cash incentives. Includes Jerri DeVard, Colin Giles, Mary T. McDowell and Niklas Savander for the period until June 30, 2012, Esko Aho until August 31, 2012 and Marko Ahtisaari as from February 1, 2012, Juha Putkiranta, Timo Toikkanen and Chris Weber as from July 1, 2012.
- (2) The amount consists of the annual incentive cash bonus and other bonuses earned and paid or payable by Nokia. For fiscal year 2012, the annual incentive bonus plan under the Nokia short-term cash incentive plan did not achieve established criteria; as a result, there was no payout under that plan. The amount includes the discretionary spot bonus awarded to certain Nokia Leadership Team members in recognition of their specific contributions toward the progress made on our strategy as we headed into 2013. The amount does not include any gains realized upon exercise of stock options, which are described in Item 6E. Share Ownership.

**Long-Term Equity-Based Incentives Granted in 2012<sup>(1)</sup>**

	<b>Nokia Leadership Team<sup>(3)(4)</sup></b>	<b>Total</b>	<b>Total number of participants</b>
Performance Shares at Threshold <sup>(2)</sup>	1 131 000	5 785 875	3 560
Stock Options	2 262 000	10 258 400	180
Restricted Shares	1 606 000	12 999 131	3 690

- (1) The equity-based incentive grants are generally forfeited if the employment relationship terminates with Nokia prior to vesting. The settlement is conditional upon performance and/or service conditions, as determined in the relevant plan rules. For a description of our equity plans, see Note 24 to our consolidated financial statements included in Item 18 of this annual report.
- (2) For performance shares granted under Nokia Performance Share Plans, at maximum performance, the settlement amounts to four times the number at threshold.
- (3) Includes Jerri DeVard, Colin Giles, Mary T. McDowell and Niklas Savander for the period until June 30, 2012, Esko Aho until August 31, 2012 and Marko Ahtisaari as from February 1, 2012, Juha Putkiranta, Timo Toikkanen and Chris Weber as from July 1, 2012.
- (4) For the Nokia Leadership Team members whose employment terminated during 2012, the Long-Term Equity-Based Incentives were forfeited following termination of employment in accordance with plan rules.

**Table of Contents****Summary Compensation Table 2012**

Name and Principal Position <sup>(1)</sup>	Year	Salary (EUR)	Bonus <sup>(2)</sup> (EUR)	Stock Awards <sup>(3)</sup> (EUR)	Option Awards <sup>(3)</sup> (EUR)	Change in Pension Value and Nonqualified Deferred Compensation Earnings <sup>(4)</sup> (EUR)	All Other Compensation (EUR)	Total <sup>(5)</sup> (EUR)
Stephen Elop,								
President and CEO	2012	1 079 500	0	2 631 400	497 350	56 776	69 395 <sup>(6)</sup>	4 334 421
	2011	1 020 000	473 070	3 752 396	539 443	73 956	2 085 948	7 944 813
	2010	280 303	440 137	1 682 607	800 132	340 471	3 115 276	6 658 926
Timo Ihamuotila,								
EVP, Chief Financial Officer	2012	570 690	57 750	539 300	106 575	262 183	40 146 <sup>(7)</sup>	1 576 644
	2011	550 000	173 924	479 493	185 448	150 311	8 743	1 547 919
	2010	423 524	245 634	1 341 568	166 328	31 933	8 893	2 217 880
Jo Harlow,								
EVP, Smart Devices <sup>(8)</sup>	2012	555 296	55 494	539 300	106 575		58 732 <sup>(10)</sup>	1 315 397
Michael Halbherr,								
EVP, Location & Commerce	2012	411 531	44 038	539 300	106 575		61 477 <sup>(11)</sup>	1 162 921
Louise Pentland,								
EVP, Chief Legal Officer <sup>(8)</sup>	2012	466 653	46 321	407 730	81 708		22 761 <sup>(9)(12)</sup>	1 025 173
Mary T. McDowell,								
EVP, Mobile Phones until June 30, 2012 <sup>(8)(14)</sup>	2012	659 335	0	539 300	106 575		265 566 <sup>(9)(13)</sup>	1 570 777
	2011	559 177	202 294	479 493	185 448		249 517	1 675 929
	2010	559 637	314 782	1 233 368	142 567		71 386	2 321 740
Niklas Savander,								
EVP, Markets until June 30, 2012 <sup>(14)</sup>	2012	570 690	0	647 160	127 890	250 265	25 553 <sup>(15)</sup>	1 621 558
	2011	550 000	134 809	479 493	185 448	103 173	21 905	1 474 828
	2010	441 943	247 086	1 233 368	142 567		23 634	2 088 598

(1) The positions set forth in this table are the current positions of the named executives. Ms. McDowell served as Executive Vice President, Mobile Phones and Mr. Savander served as Executive Vice President, Markets until June 30, 2012.

(2) The amount consists of the annual incentive cash bonus and/or other bonuses earned and paid or payable by Nokia for the respective fiscal year. For fiscal year 2012, the annual incentive bonus plan under the Nokia short-term cash incentive plan did not achieve established criteria; as a result, there was no pay-out under that plan. The amount for year 2012 represents a discretionary spot bonus awarded to certain Nokia Leadership Team members in recognition of their specific contributions toward the progress made on our strategy as we headed into 2013.

## Edgar Filing: NOKIA CORP - Form 20-F

(3) Amounts shown represent the grant date fair value of equity grants awarded for the respective fiscal year. The fair value of stock options equals the estimated fair value on the grant date, calculated using the Black-Scholes model.

The fair value of performance shares and restricted shares equals the estimated fair value on the grant date. The estimated fair value is based on the grant date market price of a Nokia share less the present value of dividends, if any, expected to be paid during the vesting period. The value of the performance shares is presented on the basis of granted number of shares, which is two times the number of shares at threshold.

The value of the stock awards with performance shares valued at maximum (four times the number of shares at threshold), for each of the named executive officers, is as follows: Mr. Elop EUR 3 542 800; Mr. Ihamuotila EUR 734 600; Ms. Harlow EUR 734 600; Mr. Halbherr EUR 734 600; Ms. Pentland EUR 557 460; Ms. McDowell EUR 734 600; and Mr. Savander EUR 881 520.

**Table of Contents**

- (4) The change in pension value represents the proportionate change in the liability related to the individual executives. These executives are covered by the Finnish State employees' pension act ( TyEL ) that provides for a retirement benefit based on years of service and earnings according to the prescribed statutory system. The TyEL system is a partly funded and a partly pooled "pay as you go" system. Effective March 1, 2008, Nokia transferred its TyEL pension liability and assets to an external Finnish insurance company and no longer carries the liability on its financial statements. The figures shown represent only the change in liability for the funded portion. The method used to derive the actuarial IFRS valuation is based upon available salary information at the respective year end. Actuarial assumptions including salary increases and inflation have been determined to arrive at the valuation at the respective year end.
- (5) The amounts shown in the total compensation column do not represent the amount actually payable or paid for the respective fiscal years, as they also include the theoretical pension value and the theoretical grant date fair value of the stock awards and option awards, and not the actual value received by the executive.
- (6) All other compensation for Mr. Elop in 2012 includes: EUR 39,152 for housing; EUR 10,692 for participation in a health assessment and leadership performance program; EUR 15,454 for home security; and EUR 4,097 taxable benefit for premiums paid under supplemental medical and disability insurance and for mobile phone and driver.
- (7) All other compensation for Mr. Ihamuotila in 2012 includes: EUR 11,220 for car allowance; EUR 15,069 service year award; EUR 10,692 for participation in a health assessment and leadership performance program; EUR 1,285 for home security and EUR 1,880 taxable benefit for premiums paid under supplemental medical and disability insurance and for mobile phone and driver.
- (8) Salaries, benefits and perquisites for Ms. Harlow, Ms. Pentland and Ms. McDowell were paid and denominated in GBP and USD. Amounts were converted using year-end 2012 USD/EUR exchange rate of 1.28 and GBP/EUR rate of 0.80. For year 2011 disclosure, amounts were converted using year-end 2011 USD/EUR and GBP/EUR exchange rate of 1.35 and 0.86, respectively. For year 2010 disclosure, amounts were converted using year-end 2010 USD/EUR exchange rate of 1.32.
- (9) Ms. McDowell and Ms. Pentland participated in Nokia's U.S Retirement Savings and Investment Plan. Under this 401(k) plan, participants elect to make voluntary pre-tax contributions that are 100% matched by Nokia up to 8% of eligible earnings. 25% of the employer's match vests for the participants during each of the first four years of their employment. Participants earning in excess of the Internal Revenue Service (IRS) eligible earning limits may participate in the Nokia Restoration and Deferral Plan, which allows employees to defer up to 50% of their salary and 100% of their short-term cash incentive. Contributions to the Restoration and Deferral Plan are matched 100% up to 8% of eligible earnings, less contributions made to the 401(k) plan. The Company's contributions to the plan are included under "All Other Compensation Column" and noted hereafter.
- (10) All other compensation for Ms. Harlow in 2012 includes: EUR 48,252 company contributions to the UK Pension Plan; EUR 9,709 for car and fuel and EUR 771 for health insurance and home security.
- (11) All other compensation for Mr. Halbherr in 2012 includes: EUR 48,966 company contributions to the German Pension Plan and EUR 12,511 for car, fuel, account maintenance and health insurance.
- (12) All other compensation for Ms. Pentland in 2012 includes: EUR 10,692 for participation in a health assessment and leadership performance program; EUR 9,787 company contributions to the 401(k) Plan and EUR 2,282 provided under Nokia's international assignment policy in the UK.
- (13) All other compensation for Ms. McDowell in 2012 includes: EUR 112,024 provided under Nokia's international assignment policy in the UK; EUR 10,866 for car allowance; EUR 77,927 for accrued and unused holiday and payment provided under Nokia's international assignment policy in the UK and EUR 64,749 company contributions to the 401(k) and Executive Salary Deferral Plan.

**Table of Contents**

- (14) Ms. McDowell's and Mr. Savander's equity grants were forfeited and cancelled upon their respective terminations of employment in accordance with plan rules.
- (15) All other compensation for Mr. Savander in 2012 includes: EUR 20 820 for car allowance; EUR 3 070 for home security and EUR 1 663 taxable benefit for premiums paid under supplemental medical and disability insurance and for mobile phone and driver.

**Equity Grants in 2012<sup>(1)</sup>**

Name and Principal Position	Year	Grant Date	Option Awards		Grant Date Fair Value <sup>(2)</sup> (EUR)	Stock Awards			Grant Date Fair Value <sup>(3)</sup> (EUR)
			Number of Shares underlying Options	Grant Price (EUR)		Performance Shares at Threshold (Number)	Performance Shares at Maximum (Number)	Restricted Shares (Number)	
Stephen Elop, President and CEO	2012	May 11 June 30 March 31	700 000	2.44	497 350	350 000	1 400 000	500 000	2 631 400
Timo Ihamuotila, EVP, Chief Financial Officer	2012	May 11 June 30 March 31	150 000	2.44	106 575	75 000	300 000	100 000	539 300
Jo Harlow, EVP, Smart Devices	2012	May 11 June 30 March 31	150 000	2.44	106 575	75 000	300 000	100 000	539 300
Michael Halbherr, EVP, Location & Commerce	2012	May 11 June 30 March 31	150 000	2.44	106 575	75 000	300 000	100 000	539 300
Louise Pentland, EVP, Chief Legal Officer	2012	May 11 June 30 March 31	115 000	2.44	81 708	57 500	230 000	75 000	407 730
Mary T. McDowell, EVP, Mobile Phones, until June 30, 2012 <sup>(4)</sup>	2012	May 11 June 30 March 31	150 000	2.44	106 575	75 000	300 000	100 000	539 300
Niklas Savander, EVP, Markets, until June 30, 2012 <sup>(4)</sup>	2012	May 11 June 30 March 31	180 000	2.44	127 890	90 000	360 000	120 000	647 160

- (1) Including all equity awards made during 2012. Awards were made under the Nokia Stock Option Plan 2011, the Nokia Performance Share Plan 2012 and the Nokia Restricted Share Plan 2012.
- (2) The fair value of stock options equals the estimated fair value on the grant date, calculated using the Black-Scholes model. The stock option exercise price was EUR 2.44 on May 11, 2012. NASDAQ OMX Helsinki closing market price was EUR 2.52 at grant date on May 11, 2012.
- (3) The fair value of performance shares and restricted shares equals the estimated fair value on grant date. The estimated fair value is based on the grant date market price of the Nokia share less the present value of dividends, if any, expected to be paid during the vesting period. The value of performance shares is presented on the basis of a number of shares, which is two times the number at threshold.
- (4) Ms. McDowell's and Mr. Savander's equity grants were forfeited and cancelled upon their respective terminations of employment in accordance with plan rules.



---

## **Table of Contents**

For information with respect to the Nokia shares and equity awards held by the members of the Nokia Leadership Team as at December 31, 2012, please see Item 6E. Share Ownership.

### **Equity-Based Incentive Programs**

#### ***General***

During the year ended December 31, 2012, we administered two global stock option plans, four global performance share plans and four global restricted share plans. Both executives and employees participate in these plans. Our compensation programs promote long-term value creation and sustainability of the company and ensure that remuneration is based on performance. Performance shares have been the main element of the company's broad-based equity compensation program for several years to further emphasize the performance element in employees' long-term incentives.

The primary equity instruments for the executive employees are performance shares and stock options. Restricted shares are also used for executives for retention purposes. The portfolio approach is designed to build an optimal and balanced combination of long-term equity-based incentives and to help focus recipients on long term financial performance as well as on share price appreciation, thus aligning recipients' interests with those of shareholders. For directors below the executive level the primary equity instruments are performance shares and restricted shares. Below the director level, performance shares and restricted shares are used on a selective basis to ensure retention and recruitment of individuals with functional mastery and other employees deemed critical to Nokia's future success.

The equity-based incentive grants are generally conditioned upon continued employment with Nokia, as well as the fulfillment of performance and other conditions, as determined in the relevant plan rules.

The participant group for the 2012 equity-based incentive program continued to include employees from many levels of the organization. As at December 31, 2012, the aggregate number of participants in all of our active equity-based programs was approximately 7,200 compared with approximately 9,300 as at December 31, 2011 reflecting changes in our grant guidelines and reduction in eligible population.

Stock option, performance share and restricted share grants to the President and CEO are made upon recommendation by the Personnel Committee and approved by the Board of Directors and confirmed by the independent directors of the Board. Stock option, performance share and restricted share grants to the other Nokia Leadership Team members and other direct reports of the President and CEO are approved by the Personnel Committee. Stock option, performance share and restricted share grants to other eligible employees are approved by the President and CEO on a quarterly basis, based on an authorization given by the Board of Directors.

For a more detailed description of all of our equity-based incentive plans, see Note 24 to our consolidated financial statements included in Item 18 of this annual report.

#### ***Performance Shares***

During 2012, we administered four global performance share plans, the Performance Share Plans of 2009, 2010, 2011 and 2012, each of which, including its terms and conditions, has been approved by the Board of Directors.

**Table of Contents**

The performance shares represent a commitment by Nokia Corporation to deliver Nokia shares to employees at a future point in time, subject to Nokia's fulfillment of pre-defined performance criteria. No Nokia shares will be delivered unless the Group's performance reaches at least one of the threshold levels measured by two independent, pre-defined performance criteria. The below table illustrates the performance criteria of the Performance Share Plans from 2009 through 2012.

Performance Criteria	Performance Share Plan			
	2012	2011	2010	2009
Average Annual Net Sales Growth (Nokia Group)		yes	yes	yes
EPS at the end of Performance period (Nokia Group)			yes	yes
Average Annual Net Sales (Nokia Group excluding NSN)	yes			
Average Annual EPS (Nokia Group)	yes	yes		

The 2009, 2010, and 2011 plans have a three-year performance period. The shares vest after the respective performance period. The 2012 plan has a two-year performance period and a subsequent one-year restriction period, after which the shares vest. The shares will be delivered to the participants as soon as practicable after they vest. The below table summarizes the relevant periods and settlements under the plans.

Plan	Performance period	Settlement
2009 <sup>(1)</sup>	2009-2011	2012
2010 <sup>(1)</sup>	2010-2012	2013
2011	2011-2013	2014
2012	2012-2013 <sup>(2)</sup>	2015

- (1) No Nokia shares were delivered under the Nokia Performance Share Plans 2009 and 2010 as Nokia's performance did not reach the threshold level of either performance criteria under both plans.
- (2) Nokia Performance Share Plan 2012 has a one-year restriction period after the two-year performance period. Until the shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights, associated with the performance shares. The performance share grants are generally forfeited if the employment relationship terminates with Nokia prior to vesting.

Similar to the previous 2007, 2008 and 2009 plans, there was no payout from the 2010 Performance Share Plan.

**Stock Options**

During 2012 we administered two global stock option plans, the Stock Option Plans 2007 and 2011, each of which, including its terms and conditions, has been approved by the Annual General Meeting in the year when the plan was launched.

Each stock option entitles the holder to subscribe for one new Nokia share. The stock options are non-transferable and may be exercised for shares only. All of the stock options granted under the Stock Option Plan 2007 have a vesting schedule with 25% of the options vesting one year after grant and 6.25% each quarter thereafter. The stock options granted under the 2007 plan have a term of approximately five years. The stock options granted under the Stock Option Plan 2011 have a vesting schedule with 50% of stock options vesting three years after grant and the remaining 50% vesting four years from grant. The stock options granted under the 2011 plan have a term of approximately six years. For information on stock option exercise prices, exercise periods and expiry dates, see Note 24 to our consolidated financial statements included in Item 18 of this annual report.



---

**Table of Contents**

The exercise price of the stock options is determined at the time of grant, on a quarterly basis, in accordance with a pre-agreed schedule after the release of Nokia's periodic financial results. The exercise prices are based on the trade volume weighted average price of a Nokia share on NASDAQ OMX Helsinki during the trading days of the first whole week of the second month of the respective calendar quarter (i.e., February, May, August or November). With respect to the 2011 Stock Option Plan, should an ex-dividend date take place during that week, the exercise price shall be determined based on the following week's trade volume weighted average price of the Nokia share on NASDAQ OMX Helsinki. Exercise prices are determined on a one-week weighted average to mitigate any day-specific fluctuations in Nokia's share price. The determination of exercise price is defined in the terms and conditions of the stock option plans, which were approved by the shareholders at the Annual General Meetings 2007 and 2011. The Board of Directors does not have the right to change how the exercise price is determined.

Shares will be eligible for dividend for the financial year in which the share subscription takes place. Other shareholder rights will commence on the date on which the subscribed shares are entered in the Trade Register. The stock option grants are generally forfeited if the employment relationship terminates with Nokia.

***Restricted Shares***

During 2012, we administered four global restricted share plans, the Restricted Share Plans 2009, 2010, 2011 and 2012, each of which, including its terms and conditions, has been approved by the Board of Directors.

Restricted shares are used on a selective basis to ensure retention and recruitment of individuals with functional mastery and other employees deemed critical to Nokia's future success.

All of our restricted share plans have a restriction period of three years after grant. Until the shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights, associated with the restricted shares. The restricted share grants are generally forfeited if the employment relationship terminates with Nokia prior to vesting.

***Nokia Equity-Based Incentive Program 2013***

On January 24, 2013, the Board of Directors approved the scope and design of the Nokia Equity Program 2013. The Equity Program 2013 mirrors the 2012 Program in terms of performance shares, stock options and restricted shares. In addition to these instruments, the Board of Directors approved also the implementation of a new Employee Share Purchase Plan. Similarly to the earlier broad-based equity incentive programs, the Equity Program 2013 is designed to support the participants' focus and alignment with the company's strategy and targets. Nokia's use of the performance-based plan in conjunction with the restricted share plan as the main long-term incentive vehicles is planned to effectively contribute to the long-term value creation and sustainability of the company and to align the interests of the employees with those of the shareholders. It is also designed to ensure that the overall equity-based compensation is based on performance, while also ensuring the recruitment and retention of talent vital to the future success of Nokia. In addition, the new Employee Share Purchase Plan is introduced to encourage employee share ownership, commitment and engagement.

The primary equity instruments for the executive employees are performance shares and stock options. Restricted shares are also used for executives for retention purposes. For directors below the executive level, the primary equity instruments are performance shares and restricted shares. Below the director level, performance shares and restricted shares are used on a selective basis to ensure retention and recruitment of individuals with functional mastery and other employees deemed critical to Nokia's future success. These equity-based incentive awards are generally forfeited if the employee

---

## **Table of Contents**

leaves Nokia prior to vesting. The Employee Share Purchase Plan will be offered to all employees in selected jurisdictions (excluding Nokia Siemens Networks employees), to the extent there are no local regulatory or administrative obstacles for the offer. The participation in the plan will be voluntary to eligible employees.

### *Performance Shares*

The Performance Share Plan 2013 approved by the Board of Directors has a performance period of two years (2013-2014) and a subsequent one-year restriction period. Therefore, the amount of shares based on the financial performance during 2013-2014 will vest after 2015. No Nokia shares will be delivered unless Nokia's performance reaches at least one of the threshold levels measured by two independent, pre-defined performance criteria:

(1) *Average Annual Net Sales (non-IFRS)*: EUR 12 483 million (threshold) and EUR 18 725 million (maximum) during the performance period 2013-2014, and

(2) *Average Annual EPS (diluted, non-IFRS)*: EUR 0.00 (threshold) and 0.30 (maximum) during the performance period 2013-2014. Average Annual Net Sales is calculated as an average of the non-IFRS net sales for Nokia Group, excluding Nokia Siemens Networks B.V. and its subsidiaries, for the years 2013 and 2014. Average Annual EPS is calculated as an average of the diluted, non-IFRS earnings per share for the years 2013 and 2014 for Nokia Group. Both the Average Annual Net Sales and the Average Annual EPS criteria are equally weighted and performance under each of the two performance criteria is calculated independent of each other.

We believe the performance criteria set above are challenging, yet realistic and within reach. The awards at the threshold are significantly reduced from grant level and achievement of maximum award would serve as an indication that Nokia's performance significantly exceeded current market expectations of our long-term execution.

Achievement of the maximum performance for both criteria would result in the vesting of a maximum of 32 million Nokia shares. Performance exceeding the maximum criteria does not increase the number of performance shares that will vest. Achievement of the threshold performance for both criteria will result in the vesting of approximately 8 million shares. If only one of the threshold levels of performance is achieved, only approximately 4 million of the performance shares will vest. If none of the threshold levels is achieved, then no Nokia shares will be delivered. If the required performance level is achieved, the vesting will occur after 2015. Until the Nokia shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights associated with these performance shares.

### *Stock Options*

The stock options to be granted in 2013 are out of the Stock Option Plan 2011 approved by the Annual General Meeting in 2011. For more information about the Stock Option Plan 2011 see [Equity-Based Incentive Programs](#) [Stock Options](#) above.

### *Restricted Shares*

Restricted shares under the Restricted Share Plan 2013 approved by the Board of Directors are used as described above on a selective basis to ensure retention and recruitment of individuals with functional mastery and other employees deemed critical to Nokia's future success. The restricted shares under the Restricted Share Plan 2013 have a three-year restriction period. The restricted shares will vest and the resulting Nokia shares will be delivered in 2016 and early 2017, dependent on

**Table of Contents**

the fulfillment of the criteria of continued employment during the restriction period. Until the shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights associated with these restricted shares.

*Employee Share Purchase Plan*

Under the Employee Share Purchase Plan, eligible Nokia employees can elect to make monthly contributions from their salary to purchase Nokia shares. The contribution per employee cannot exceed EUR 1 200 per year. The share purchases will be made at market value on pre-determined dates on a monthly basis during a 12-month savings period. Nokia will offer one matching share for every two purchased shares the employee still holds after the last monthly purchase has been made in June 2014. In addition, 20 free shares will be delivered to employees who make the first three consecutive monthly share purchases. The participation in the plan is voluntary to the employees.

*Maximum Planned Grants under the Nokia Equity-Based Incentive Program 2013 in Year 2013*

The approximate maximum numbers of planned grants under the Nokia Equity Program 2013 (i.e. performance shares, stock options, restricted shares as well as matching share awards under the Employee Share Purchase Plan) in 2013 are set forth in the table below.

Plan type	Planned Maximum Number of Shares Available for Grants under the Equity Program 2013
Stock Options	11 million
Restricted Shares	16 million
Performance Shares at Maximum <sup>(1)</sup>	32 million
Employee Share Purchase Plan <sup>(2)</sup>	3.15 million

- (1) The number of Nokia shares to be delivered at threshold performance is a quarter of maximum performance, i.e., a total of 8 million Nokia shares.
- (2) The total maximum amount of employee contributions during the plan cycle commencing in 2013 will be approximately EUR 22 million, which equals approximately 6.3 million Nokia shares using the January 23, 2013 closing share price of EUR 3.49. Based on the matching ratio of one matching share for every two purchased shares, the number of matching shares would be 3.15 million. In addition, 20 free shares will be delivered to employees who make the first three consecutive monthly share purchases.

As at December 31, 2012, the total dilutive effect of all Nokia's stock options, performance shares and restricted shares outstanding, assuming full dilution, was approximately 2.5% in the aggregate. The potential maximum effect of the proposed Equity Program 2013 would be approximately another 1.7%.

**6C. Board Practices****The Board of Directors**

The operations of Nokia are managed under the direction of the Board of Directors, within the framework set by the Finnish Companies Act and our Articles of Association as well as any complementary rules of procedure as defined by the Board, such as the Corporate Governance Guidelines and related Board Committee charters.

The Board represents and is accountable to the shareholders of Nokia. The Board's responsibilities are active, not passive, and include the responsibility regularly to evaluate the strategic direction of Nokia,

---

**Table of Contents**

management policies and the effectiveness with which management implements them. The Board's responsibilities also include overseeing the structure and composition of Nokia's top management and monitoring legal compliance and the management of risks related to Nokia's operations. In doing so, the Board may set annual ranges and/or individual limits for capital expenditures, investments and divestitures and financial commitments not to be exceeded without Board approval.

Nokia has a Risk Policy which outlines Nokia's risk management policies and processes and is approved by the Audit Committee. The Board's role in risk oversight includes risk analysis and assessment in connection with each financial and business review, update and decision-making proposal and is an integral part of all Board deliberations. The Audit Committee is responsible for, among other matters, risk management relating to the financial reporting process and assisting the Board's oversight of the risk management function. Nokia applies a common and systematic approach to risk management across all business operations and processes based on a strategy approved by the Board. Accordingly, risk management at Nokia is not a separate process but a normal daily business and management practice.

The Board has the responsibility for appointing and discharging the Chief Executive Officer, the Chief Financial Officer and the other members of the Nokia Leadership Team. The Chief Executive Officer, who is separate from Chairman, also acts as President, and his rights and responsibilities include those allotted to the President under Finnish law. Subject to the requirements of Finnish law, the independent directors of the Board confirm the compensation and the employment conditions of the President and CEO upon the recommendation of the Personnel Committee. The compensation and employment conditions of the other members of the Nokia Leadership Team are approved by the Personnel Committee upon the recommendation of the President and CEO.

It is the responsibility of the members of the Board to act in good faith and with due care so as to exercise their business judgment on an informed basis in what they reasonably and honestly believe to be in the best interests of the company and its shareholders. In discharging that obligation, the directors must inform themselves of all relevant information reasonably available to them. The Board and each Board Committee also have the power to hire independent legal, financial or other advisors as they deem necessary.

The Board has three committees: Audit Committee, Corporate Governance and Nomination Committee and Personnel Committee. These committees assist the Board in its duties pursuant to their respective committee charters. The Board may also establish ad hoc committees for detailed reviews or consideration of particular topics to be proposed for the approval of the Board.

In line with Nokia's Corporate Governance Guidelines, the Board conducts annual performance evaluations, which also include evaluations of the Board Committees' work, the results of which are discussed by the Board. Regarding 2012, the evaluation was conducted by an external evaluator, and the evaluation consisted of interviews with the Board members. The results of the evaluation are discussed by the entire Board.

Pursuant to the Articles of Association, Nokia Corporation has a Board of Directors composed of a minimum of seven and a maximum of 12 members. The members of the Board are elected for a one-year term at each Annual General Meeting, i.e., as from the close of that Annual General Meeting until the close of the following Annual General Meeting, which convenes each year by June 30. The Annual General Meeting held on May 3, 2012 elected the following 11 members to the Board of Directors: Bruce Brown, Stephen Elop, Henning Kagermann, Jouko Karvinen, Helge Lund, Isabel Marey-Semper, Mårten Mickos, Elizabeth Nelson, Dame Marjorie Scardino, Risto Siilasmaa and Kari Stadigh.

Nokia Board's leadership structure consists of a Chairman and Vice Chairman, elected annually by the Board and confirmed by the independent directors of the Board from among the Board members upon

**Table of Contents**

the recommendation of the Corporate Governance and Nomination Committee. On May 3, 2012, the independent directors of the Board elected Risto Siilasmaa as the new Chairman and Dame Marjorie Scardino to continue as Vice Chairman of the Board. The Chairman has certain specific duties as defined by Finnish standards and the Nokia Corporate Governance Guidelines. The Vice Chairman assumes the duties of the Chairman in case the Chairman is prevented from performing his duties. The Board has determined that Nokia Board Chairman, Risto Siilasmaa, and the Vice Chairman, Dame Marjorie Scardino, are independent as defined by Finnish standards and relevant stock exchange rules.

Nokia does not have a policy concerning the combination or separation of the roles of Chairman and Chief Executive Officer, but the Board leadership structure is dependent on the company needs, shareholder value and other relevant factors applicable from time to time, respecting the highest corporate governance standards. In 2012, the roles were separate while Risto Siilasmaa was the Chairman of the Board and Stephen Elop was the Chief Executive Officer. The current members of the Board are all non-executive, except the President and CEO. The Board has determined that nine of the current ten non-executive Board members are independent as defined by Finnish standards as well as by the rules of the New York Stock Exchange. Mårten Mickos was determined not to be independent under both Finnish standards and the rules of the New York Stock Exchange due to his position as CEO of Eucalyptus Systems, Inc., which has a business relationship with and receives revenue from Nokia Siemens Networks. The executive member of the Board, President and CEO Stephen Elop, was determined not to be independent under both Finnish standards and the New York Stock Exchange rules.

The Board has determined that all of the members of the Audit Committee, including its Chairman, Jouko Karvinen, are audit committee financial experts as defined in Item 16A of this annual report.

The Board held 17 meetings during 2012, of which approximately half were regularly scheduled meetings held in person, complemented by meetings through video or conference calls and other means. In addition, in 2012 the non-executive directors held a meeting without management in connection with each regularly scheduled Board meeting. Also, the independent directors held one meeting separately in 2012.

Directors' attendance at the Board meetings, including Committee meetings, but excluding meetings among the non-executive directors or independent directors only, was as follows in 2012:

	Board meetings	Audit Committee meetings	Personnel Committee meetings	Corporate Governance & Nomination Committee meetings
Bruce Brown (as of May 3, 2012)	92%		75%	
Stephen Elop	100%			
Bengt Holmström (until May 3, 2012)	80%			
Henning Kagermann	100%		100%	100%
Per Karlsson (until May 3, 2012)	100%		100%	
Jouko Karvinen	100%	100%		100% (as of May 3, 2012)
Helge Lund	94%		86%	
Isabel Marey-Semper	88%	100%		
Mårten Mickos (as of May 3, 2012)	100%			
Elizabeth Nelson (as of May 3, 2012)	100%	100%		
Jorma Ollila (until May 3, 2012)	100%			
Dame Marjorie Scardino	82%		43%	60%
Risto Siilasmaa	100%	100% (until May 3, 2012)		100%
Kari Stadigh	100%		100%	

In addition, many of the directors attended as non-voting observers in meetings of a committee in which they were not a member.

## **Table of Contents**

According to the Nokia Board practices, the non-executive directors meet without management in connection with each regularly scheduled meeting. Such sessions are chaired by the non-executive Chairman of the Board. If the non-executive Chairman of the Board is unable to chair any of the meetings of non-executive directors, the non-executive Vice Chairman of the Board chairs the meeting.

In addition, the independent directors meet separately at least once annually. All the directors who served on the Board for the term until the close of the Annual General Meeting 2012, except for Helge Lund, attended Nokia's Annual General Meeting held on May 3, 2012. The Finnish Corporate Governance Code recommends attendance by the Board Chairman and a sufficient number of directors in the general meeting of shareholders to allow the shareholders to exercise their right to present questions to the Board and management.

The independent directors of the Board confirm the election of the members and Chairmen for the Board's committees from among the Board's independent directors upon the recommendation of the Corporate Governance and Nomination Committee and based on each committee's member qualification standards. For information about the members and the Chairmen for the Board of Directors and its committees, see Item 6A. Directors and Senior Management Board of Directors above and Committees of the Board of Directors below.

The Corporate Governance Guidelines concerning the directors' responsibilities, the composition and selection of the Board, its committees and certain other matters relating to corporate governance are available on our website, [www.nokia.com/global/about-nokia](http://www.nokia.com/global/about-nokia). Also, the Committee Charter of the Audit Committee, Corporate Governance and Nomination Committee and Personnel Committee are available on our website, [www.nokia.com/global/about-nokia](http://www.nokia.com/global/about-nokia). We also have a Code of Conduct which is equally applicable to all of our employees, directors and management and is available on our website, [www.nokia.com/global/about-nokia](http://www.nokia.com/global/about-nokia). In addition, we have a Code of Ethics for the Principal Executive Officers and the Senior Financial Officers. For more information about our Code of Ethics, see Item 16B. Code of Ethics.

At December 31, 2012, Mr. Elop, the President and CEO, was the only Board member who had a service contract with Nokia. For discussion of the service contract of Mr. Elop, see Item 6B. Executive Compensation Actual Executive Compensation for 2012 Service Contracts.

### **Committees of the Board of Directors**

The Audit Committee consists of a minimum of three members of the Board who meet all applicable independence, financial literacy and other requirements of Finnish law and the rules of the stock exchanges where Nokia shares are listed, i.e. NASDAQ OMX Helsinki and the New York Stock Exchange. Since May 3, 2012, the Audit Committee has consisted of the following three members of the Board: Jouko Karvinen (Chairman), Isabel Marey-Semper and Elizabeth Nelson.

The Audit Committee is established by the Board primarily for the purpose of overseeing the accounting and financial reporting processes of the company and audits of the financial statements of the company. The Committee is responsible for assisting the Board's oversight of (1) the quality and integrity of the company's financial statements and related disclosure, (2) the statutory audit of the company's financial statements, (3) the external auditor's qualifications and independence, (4) the performance of the external auditor subject to the requirements of Finnish law, (5) the performance of the company's internal controls and risk management and assurance function, (6) the performance of the internal audit function, and (7) the company's compliance with legal and regulatory requirements, including also the performance of its ethics and compliance program. The Committee also maintains procedures for the receipt, retention and treatment of complaints received by the company regarding accounting, internal controls, or auditing matters and for the confidential, anonymous submission by

**Table of Contents**

employees of the company of concerns regarding accounting or auditing matters. Our disclosure controls and procedures, which are reviewed by the Audit Committee and approved by the Chief Executive Officer and the Chief Financial Officer, as well as our internal controls over financial reporting, are designed to provide reasonable assurance regarding the quality and integrity of the company's financial statements and related disclosures. The Disclosure Committee chaired by the Chief Financial Officer is responsible for the preparation of the quarterly and annual results announcements, and the process includes involvement by business managers, business controllers and other functions, like internal audit, as well as a final review and confirmation by the Audit Committee and the Board. For further information on internal control over financial reporting, see Item 15. Controls and Procedures .

Under Finnish law, our external auditor is elected by our shareholders by a simple majority vote at the Annual General Meeting for one fiscal year at a time. The Audit Committee makes a proposal to the shareholders in respect of the appointment of the external auditor based upon its evaluation of the qualifications and independence of the auditor to be proposed for election or re-election. Under Finnish law, the fees of the external auditor are also approved by our shareholders by a simple majority vote at the Annual General Meeting. The Committee makes a proposal to the shareholders in respect of the fees of the external auditor, and approves the external auditor's annual audit fees under the guidance given by the Annual General Meeting. For information about the fees paid to our external auditor, PricewaterhouseCoopers during 2012, see Item 16C. Principal Accountant Fees and Services Auditor Fees and Services.

In discharging its oversight role, the Audit Committee has full access to all company books, records, facilities and personnel. The Committee may retain counsel, auditors or other advisors in its sole discretion, and must receive appropriate funding, as determined by the Committee, from the company for the payment of compensation to such outside advisors.

The Audit Committee meets at least four times a year based upon a schedule established at the first meeting following the appointment of the Committee. The Committee meets separately with the representatives of Nokia's management, heads of the internal audit and ethics and compliance functions, and the external auditor in connection with each regularly scheduled meeting. The head of the internal audit function has at all times a direct access to the Audit Committee, without involvement of management.

The Audit Committee had 6 meetings in 2012. The attendance at all meetings was 100%. In addition, any directors who wish to may attend Audit Committee meetings as non-voting observers.

**The Personnel Committee** consists of a minimum of three members of the Board who meet all applicable independence requirements of Finnish law and the rules of the stock exchanges where Nokia shares are listed, i.e. NASDAQ OMX Helsinki and the New York Stock Exchange. Since May 3, 2012, the Personnel Committee has consisted of the following five members of the Board: Henning Kagermann (Chairman), Bruce Brown, Helge Lund, Dame Marjorie Scardino and Kari Stadigh.

The primary purpose of the Personnel Committee is to oversee the personnel policies and practices of the company. It assists the Board in discharging its responsibilities relating to all compensation, including equity compensation, of the company's executives and their terms of employment. The Committee has overall responsibility for evaluating, resolving and making recommendations to the Board regarding (1) compensation of the company's top executives and their employment conditions, (2) all equity-based plans, (3) incentive compensation plans, policies and programs of the company affecting executives and (4) other significant incentive plans. The Committee is responsible for overseeing compensation philosophy and principles and ensuring that the above compensation programs are performance-based, designed with an intention to contribute to the long-term value

## **Table of Contents**

sustainability of the company, properly motivate management, support overall corporate strategies and are aligned with shareholders' interests. The Committee is responsible for the review of senior management development and succession plans.

The Personnel Committee had 7 meetings in 2012. The average attendance at the meetings was 86%. In addition, any directors who wish to may attend Personnel Committee meetings as non-voting observers.

For further information on the activities of the Personnel Committee, see Item 6B. Compensation Executive Compensation.

**The Corporate Governance and Nomination Committee** consists of three to five members of the Board who meet all applicable independence requirements of Finnish law and the rules of the stock exchanges where Nokia shares are listed, i.e. NASDAQ OMX Helsinki and the New York Stock Exchange. Since May 3, 2012, the Corporate Governance and Nomination Committee has consisted of the following four members of the Board: Risto Siilasmaa (Chairman), Henning Kagermann, Jouko Karvinen and Dame Marjorie Scardino.

The Corporate Governance and Nomination Committee's purpose is (1) to prepare the proposals for the general meetings in respect of the composition of the Board and the director remuneration to be approved by the shareholders and (2) to monitor issues and practices related to corporate governance and to propose necessary actions in respect thereof.

The Committee fulfills its responsibilities by (i) actively identifying individuals qualified to become members of the Board and considering and evaluating the appropriate level and structure of director remuneration, (ii) proposing to the shareholders the director nominees for election at the Annual General Meetings as well as the director remuneration, (iii) monitoring significant developments in the law and practice of corporate governance and of the duties and responsibilities of directors of public companies, (iv) assisting the Board and each Committee of the Board in its annual performance self-evaluations, including establishing criteria to be used in connection with such evaluations, (v) developing and recommending to the Board and administering our Corporate Governance Guidelines, and (vi) reviewing the company's disclosure in the Corporate Governance Statement published in Nokia's Finnish annual report.

The Committee has the power to retain search firms or advisors to identify candidates. The Committee may also retain counsel or other advisors, as it deems appropriate. The Committee has the sole authority to retain or terminate such search firms or advisors and to review and approve such search firm or advisor's fees and other retention terms. It is the Committee's practice to retain a search firm to identify new director candidates.

The Corporate Governance and Nomination Committee had 5 meetings in 2012. The average attendance at the meetings was 90%. In addition, any directors who wish to may attend Corporate Governance and Nomination Committee meetings as non-voting observers.



**Table of Contents****6D. Employees**

At December 31, 2012, Nokia employed 97 798 people, compared with 130 050 people at December 31, 2011, and 132 427 people at December 31, 2010. The average number of personnel for 2012, 2011 and 2010 was 112 256, 134 171 and 129 355, respectively, divided according to their activity and geographical location as follows:

	<b>2012</b>	<b>2011</b>	<b>2010</b>
Devices & Services	41 480	54 850	56 896
Location & Commerce	6 441	7 187	6 766
Nokia Siemens Networks	64 052	71 825	65 379
Corporate Common Functions	283	309	314
<b>Nokia Group</b>	<b>112 256</b>	<b>134 171</b>	<b>129 355</b>
Finland	14 381	18 715	20 956
Other European countries	27 586	34 737	35 175
Middle-East & Africa	4 290	5 017	4 628
China	20 674	22 082	18 923
Asia-Pacific	26 680	29 611	26 976
North America	7 846	8 771	8 128
Latin America	10 799	15 238	14 569
<b>Nokia Group</b>	<b>112 256</b>	<b>134 171</b>	<b>129 355</b>

Management believes that we have a good relationship with our employees and with the labor unions.

**6E. Share Ownership****General**

The following section describes the ownership or potential ownership interest in the company of the members of our Board of Directors and the Nokia Leadership Team as at December 31, 2012, either through share ownership or, with respect to the Nokia Leadership Team, through holding of equity-based incentives, which may lead to share ownership in the future.

With respect to the Board of Directors, approximately 40% of director compensation is paid in the form of Nokia shares that are purchased from the market. It is also Nokia's policy that the Board members retain all Nokia shares received as director compensation until the end of their board membership (except for those shares needed to offset any costs relating to the acquisition of the shares, including taxes). In addition, it is Nokia's policy that non-executive members of the Board do not participate in any of Nokia's equity programs and do not receive stock options, performance shares, restricted shares or any other equity based or otherwise variable compensation for their duties as Board members.

For a description of our remuneration for our Board of Directors, see Item 6B. Compensation Board of Directors Remuneration of the Board of Directors in 2012.

The Nokia Leadership Team members receive equity-based compensation in the form of performance shares, stock options and restricted shares. For a description of our equity-based compensation programs for employees and executives, see Item 6B. Compensation Equity-Based Incentive Programs.

**Table of Contents****Share Ownership of the Board of Directors**

At December 31, 2012, the members of our Board of Directors held the aggregate of 2 125 654 shares and ADSs in Nokia, which represented 0.06% of our outstanding shares and total voting rights excluding shares held by Nokia Group at that date.

The following table sets forth the number of shares and ADSs held by the members of the Board of Directors as at December 31, 2012.

Name <sup>(1)</sup>	Shares <sup>(2)</sup>	ADSs <sup>(2)</sup>
Risto Siilasmaa	732 592	
Marjorie Scardino		67 362
Bruce Brown		42 850
Stephen Elop		425 000
Henning Kagermann	187 977	
Jouko Karvinen	34 279	
Helge Lund	46 596	
Isabel Marey-Semper	43 734	
Mårten Mickos	88 350	
Elizabeth Nelson	56 554	
Kari Stadigh	400 000	

- (1) Bengt Holmström did not stand for re-election in the Annual General Meeting held on May 3, 2012 and he held 41 981 shares at that time. Per Karlsson did not stand for re-election in the Annual General Meeting held on May 3, 2012 and he held 48 113 shares at that time. Per Karlsson's holdings included both shares held personally and shares held through a company. Jorma Ollila did not stand for re-election in the Annual General Meeting held on May 3, 2012 and he held 791 284 shares at that time.
- (2) The number of shares or ADSs includes not only shares or ADSs received as director compensation, but also shares or ADSs acquired by any other means. Stock options or other equity awards that are deemed as being beneficially owned under the applicable SEC rules are not included. For the number of shares or ADSs received as director compensation, see Note 31 to our consolidated financial statements included in Item 18 of this annual report.

**Share Ownership of the Nokia Leadership Team**

The following table sets forth the share ownership, as well as potential ownership interest through the holding of equity-based incentives, of the members of the Nokia Leadership Team as at December 31, 2012.

	Shares	Shares Receivable Through Stock Options	Shares Receivable Through Performance Shares at Threshold <sup>(4)</sup>	Shares Receivable Through Performance Shares at Maximum <sup>(5)</sup>	Shares Receivable Through Restricted Shares
Number of equity instruments held by Nokia Leadership Team <sup>(1)</sup>	983 866	5 686 250	1 379 750 <sup>(6)</sup>	5 519 000 <sup>(6)</sup>	2 772 500
% of the outstanding shares <sup>(2)</sup>	0.027	0.153	0.037	0.149	0.075
% of the total outstanding equity incentives (per instrument) <sup>(3)</sup>		22.11	16.09	16.09	11.71

- (1) Includes 12 Nokia Leadership Team members at year end. Figures do not include those former Nokia Leadership Team members who left during 2012.

**Table of Contents**

- (2) The percentage is calculated in relation to the outstanding number of shares and total voting rights of the company, excluding shares held by Nokia Group.
- (3) The percentage is calculated in relation to the total outstanding equity incentives per instrument.
- (4) No Nokia shares were delivered under Nokia Performance Share Plan 2010, which vested in 2012, as Nokia's performance did not reach the threshold level of either performance criteria. Therefore the shares deliverable at threshold equals zero for the Performance Share Plan 2010.
- (5) No Nokia shares were delivered under Nokia Performance Share Plan 2010, which vested in 2012, as Nokia's performance did not reach the threshold level of either performance criteria. Therefore the shares deliverable at maximum equals zero for Nokia Performance Share Plan 2010. At maximum performance under the Performance Share Plans 2011 and 2012, the number of shares deliverable equals four times the number of performance shares at threshold.
- (6) No Nokia shares were delivered under the one-time special CEO incentive program. Therefore the shares deliverable at threshold and maximum equals zero for the incentive program.

The following table sets forth the number of shares and ADSs in Nokia held by members of the Nokia Leadership Team as of December 31, 2012.

Name <sup>(1)</sup>	Shares <sup>(2)</sup>	ADSs <sup>(2)</sup>	Became Nokia Leadership Team member (Year)
Stephen Elop		425 000	2010
Marko Ahtisaari	10 000		2012
Michael Halbherr	205 451		2011
Jo Harlow	14 219	25 000	2011
Timo Ihamuotila	74 825		2007
Louise Pentland	31 444		2011
Juha Putkiranta	36 031		2012
Henry Tirri	11 931		2011
Timo Toikkanen	4 821		2012
Chris Weber	4 043		2012
Juha Äkräs	21 761		2010
Kai Öistämö	119 340		2005

- (1) Jerri DeVard left the Nokia Leadership Team on June 30, 2012 and did not hold any shares at that time. Colin Giles left the Nokia Leadership Team on June 30, 2012 and held 73 032 shares at that time. Mary T. McDowell left the Nokia Leadership Team on June 30, 2012 and held 204 245 shares and 5000 ADSs at that time. Niklas Savander left the Nokia Leadership Team on June 30, 2012 and held 112 285 shares at that time. Esko Aho left the Nokia Leadership Team on August 31, 2012 and held 15 429 shares at that time.
- (2) Stock options or other equity awards that are deemed as being beneficially owned under applicable SEC rules are not included.

**Table of Contents****Stock Option Ownership of the Nokia Leadership Team**

The following table provides certain information relating to stock options held by members of the Nokia Leadership Team as of December 31, 2012. These stock options were issued pursuant to Nokia Stock Option Plans 2007 and 2011. For a description of our stock option plans, please see Note 24 to our consolidated financial statements in Item 18 of this annual report.

Name	Stock Option Category	Expiration Date	Exercise Price per Share (EUR)	Number of Stock Options <sup>(1)</sup>		Total Intrinsic Value of Stock Options, December 28, 2012 (EUR) <sup>(2)</sup>	
				Exercisable	Unexercisable	Exercisable	Unexercisable
Stephen Elop	2010 4Q	December 31, 2015	7.59	218 750	281 250	0	0
	2011 2Q	December 27, 2017	6.02	0	250 000	0	0
	2011 3Q	December 27, 2017	3.76	0	500 000	0	0
	2012 2Q	December 27, 2018	2.44	0	700 000	0	343 000
Marko Ahtisaari	2010 2Q	December 31, 2015	8.86	15 185	11 815	0	0
	2011 2Q	December 27, 2017	6.02	0	30 000	0	0
	2011 3Q	December 27, 2017	3.76	0	100 000	0	0
	2012 2Q	December 27, 2018	2.44	0	115 000	0	56 350
Michael Halbherr	2007 2Q	December 31, 2012	18.39	0	0	0	0
	2008 2Q	December 31, 2013	19.16	3750	0	0	0
	2009 2Q	December 31, 2014	11.18	5 683	1 317	0	0
	2010 2Q	December 31, 2015	8.86	3 655	2 845	0	0
	2011 2Q	December 27, 2017	6.02	0	15 000	0	0
	2011 3Q	December 27, 2017	3.76	0	255 000	0	0
	2012 2Q	December 27, 2018	2.44	0	150 000	0	73 500
Jo Harlow	2007 2Q	December 31, 2012	18.39	0	0	0	0
	2008 2Q	December 31, 2013	19.16	3 500	0	0	0
	2009 2Q	December 31, 2014	11.18	4 462	1 038	0	0
	2010 2Q	December 31, 2015	8.86	14 060	10 940	0	0
	2011 2Q	December 27, 2017	6.02	0	70 000	0	0
	2011 3Q	December 27, 2017	3.76	0	200 000	0	0
	2012 2Q	December 27, 2018	2.44	0	150 000	0	73 500
Timo Ihamuotila	2007 2Q	December 31, 2012	18.39	0	0	0	0
	2008 2Q	December 31, 2013	19.16	20 000	0	0	0
	2009 2Q	December 31, 2014	11.18	28 433	6 567	0	0
	2009 4Q	December 31, 2014	8.76	13 750	6 250	0	0
	2010 2Q	December 31, 2015	8.86	39 375	30 625	0	0
	2011 2Q	December 27, 2017	6.02	0	70 000	0	0
	2011 3Q	December 27, 2017	3.76	0	200 000	0	0
	2012 2Q	December 27, 2018	2.44	0	150 000	0	73 500
Louise Pentland	2007 2Q	December 31, 2012	18.39	0	0	0	0
	2008 2Q	December 31, 2013	19.16	4 000	0	0	0
	2009 2Q	December 31, 2014	11.18	9 750	2 250	0	0
	2010 2Q	December 31, 2015	8.86	16 875	13 125	0	0
	2011 2Q	December 27, 2017	6.02	0	45 000	0	0
	2011 3Q	December 27, 2017	3.76	0	150 000	0	0
	2012 2Q	December 27, 2018	2.44	0	115 000	0	56 350
Juha Putkiranta	2007 2Q	December 31, 2012	18.39	0	0	0	0
	2008 2Q	December 31, 2013	19.16	10 000	0	0	0
	2009 2Q	December 31, 2014	11.18	16 250	3 750	0	0
	2010 2Q	December 31, 2015	8.86	14 060	10 940	0	0
	2011 2Q	December 27, 2017	6.02	0	27 000	0	0
	2012 2Q	December 27, 2018	2.44	0	50 000	0	24 500
	2012 3Q	December 27, 2018	2.18	0	53 500	0	40 125

Edgar Filing: NOKIA CORP - Form 20-F

Henry Tirri

2007 2Q	December 31, 2012	18.39	0	0	0	0
2008 2Q	December 31, 2013	19.16	3 500	0	0	0
2009 2Q	December 31, 2014	11.18	9 750	2 250	0	0
2010 2Q	December 31, 2015	8.86	11 250	8 750	0	0
2011 2Q	December 27, 2017	6.02	0	27 000	0	0
2011 4Q	December 27, 2017	4.84	0	168 000 <sup>(4)</sup>	0	0
2012 2Q	December 27, 2018	2.44	0	115 000	0	56 350

**Table of Contents**

	Stock Option Category	Expiration Date	Exercise Price per Share (EUR)	Number of Stock Options <sup>(1)</sup>		Exercisable
				Exercisable	Unexercisable	
	2007 2Q	December 31, 2012	18.39	0	0	0
	2008 2Q	December 31, 2013	19.16	10 000	0	0
	2009 2Q	December 31, 2014	11.18	9 750	2 250	0
	2010 2Q	December 31, 2015	8.86	14 060	10 940	0
	2011 2Q	December 27, 2017	6.02	0	27 000	0
	2012 2Q	December 27, 2018	2.44	0	28 500	0
	2012 3Q	December 27, 2018	2.18	0	75 000	0
	2011 2Q	December 27, 2017	6.02	0	25 000	0
	2012 2Q	December 27, 2018	2.44	0	40 000	0
	2012 3Q	December 27, 2018	2.18	0	63 500	0
	2007 2Q	December 31, 2012	18.39	0	0	0
	2008 2Q	December 31, 2013	19.16	6 000	0	0
	2009 2Q	December 31, 2014	11.18	9 750	2 250	0
	2010 2Q	December 31, 2015	8.86	22 500	17 500	0
	2011 2Q	December 27, 2017	6.02	0	45 000	0
	2011 3Q	December 27, 2017	3.76	0	150 000	0
	2012 2Q	December 27, 2018	2.44	0	115 000	0
	2007 2Q	December 31, 2012	18.39	0	0	0
	2008 2Q	December 31, 2013	19.16	32 000	0	0
	2009 2Q	December 31, 2014	11.18	48 750	11 250	0
	2010 2Q	December 31, 2015	8.86	39 375	30 625	0
	2011 2Q	December 27, 2017	6.02	0	45 000	0
	2011 3Q	December 27, 2017	3.76	0	150 000	0
	2012 2Q	December 27, 2018	2.44	0	90 000	0
held by the members of the Nokia Leadership Team as at December 31, 2012, Total <sup>(5)</sup>				658 223	5 028 027	
stock option plans (global plans), Total				5 490 746	20 230 256	

- (1) Number of stock options equals the number of underlying shares represented by the option entitlement. Stock options granted under 2007 and 2011 Stock Option Plans have different vesting schedules. The Group's global Stock Option Plan 2007 has a vesting schedule with a 25% vesting one year after grant, and quarterly vesting thereafter, each of the quarterly lots representing 6.25% of the total grant. The grants vest fully in four years. The Group's global Stock Option Plan 2011 has a vesting schedule with 50% of stock options vesting three years after grant and the remaining 50% vesting four years from grant.
- (2) The intrinsic value of the stock options is based on the difference between the exercise price of the options and the closing market price of Nokia shares on NASDAQ OMX Helsinki as at December 28, 2012 of EUR 2.93.
- (3) For any gains realized upon exercise of stock options for the members of the Nokia Leadership Team, see the table in Stock Option Exercises and Settlement of Shares below.
- (4) The Personnel Committee approved a grant of 168 000 2011 4Q stock options to Mr. Tirri. Due to an administrative error, only 118 000 stock options were reflected in the documentation provided to Mr. Tirri and reported in 2011 Form 20-F. The administrative error was corrected in 2012.

**Table of Contents**

- (5) During 2012, the following executives stepped down from the Nokia Leadership Team: Jerri DeVard, Colin Giles, Mary T. McDowell, Niklas Savander and Esko Aho. The information related to stock options held for each former executive is as of the date of resignation from the Nokia Leadership Team and is presented in the table below.

Name	Stock Option Category	Expiration Date	Exercise Price Share (EUR)	Number of Stock Options <sup>(1)</sup>		Total Intrinsic Value of Stock Options (EUR) <sup>(8)</sup>	
				Exercisable	Unexercisable	Exercisable <sup>(3)</sup>	Unexercisable
Jerri DeVard <sup>(6)</sup>							
as per June 30, 2012	2011 2Q	December 27, 2017	6.02	0	45 000	0	0
	2011 3Q	December 27, 2017	3.76	0	150 000	0	0
Colin Giles <sup>(7)</sup>							
as per June 30, 2012	2007 2Q	December 31, 2012	18.39	18 000	0	0	0
	2008 2Q	December 31, 2013	19.16	9 375	625	0	0
	2009 2Q	December 31, 2014	11.18	13 750	6 250	0	0
	2010 2Q	December 31, 2015	8.86	10 936	14 064	0	0
	2011 2Q	December 27, 2017	6.02	0	45 000	0	0
	2011 3Q	December 27, 2017	3.76	0	150 000	0	0
Mary T. McDowell <sup>(7)</sup>							
as per June 30, 2012	2007 2Q	December 31, 2012	18.39	55 000	0	0	0
	2008 2Q	December 31, 2013	19.16	26 250	1 750	0	0
	2009 2Q	December 31, 2014	11.18	37 809	17 191	0	0
	2010 2Q	December 31, 2015	8.86	26 250	33 750	0	0
	2011 2Q	December 27, 2017	6.02	0	70 000	0	0
	2011 3Q	December 27, 2017	3.76	0	200 000	0	0
	2012 2Q	December 27, 2018	2.44	0	150 000	0	0
Niklas Savander <sup>(7)</sup>							
as per June 30, 2012	2007 2Q	December 31, 2012	18.39	32 000	0	0	0
	2008 2Q	December 31, 2013	19.16	26 250	1 750	0	0
	2009 2Q	December 31, 2014	11.18	37 809	17 191	0	0
	2010 2Q	December 31, 2015	8.86	26 250	33 750	0	0
	2011 2Q	December 27, 2017	6.02	0	70 000	0	0
	2011 3Q	December 27, 2017	3.76	0	200 000	0	0
	2012 2Q	December 27, 2018	2.44	0	180 000	0	0
Esko Aho <sup>(7)</sup>							
as per August 31, 2012	2009 2Q	December 31, 2014	11.18	26 246	8 754	0	0
	2010 2Q	December 31, 2015	8.86	15 000	15 000	0	0
	2011 2Q	December 27, 2017	6.02	0	30 000	0	0
	2011 3Q	December 27, 2017	3.76	0	100 000	0	0
	2012 2Q	December 27, 2018	2.44	0	40 000	0	0

(6) Ms. DeVard's equity will be forfeited and cancelled upon termination of employment in accordance with the plan rules.

(7) Mr. Giles, Ms. McDowell, Mr. Savander and Mr. Aho's stock option grants were forfeited and cancelled upon their respective terminations of employment in accordance with the plan rules.

(8) The intrinsic value of the stock options is based on the difference between the exercise price of the options and the closing market price of Nokia shares on NASDAQ OMX Helsinki as at June 29, 2012 of EUR 1.62 in respect of Ms. DeVard, Mr. Giles, Ms. McDowell and Mr. Savander and as at August 31, 2012 of EUR 2.26 in respect of Mr. Aho.

**Table of Contents****Performance Shares and Restricted Shares of the Nokia Leadership Team**

The following table provides certain information relating to performance shares and restricted shares held by members of the Nokia Leadership Team as at December 31, 2012. These entitlements were granted pursuant to our Performance Share Plans 2010, 2011 and 2012 and Restricted Share Plans 2009, 2010, 2011 and 2012. For Stephen Elop the table also includes the one-time special CEO incentive program. For a description of our performance share and restricted share plans, please see Note 24 to the consolidated financial statements in Item 18 of this annual report.

Name	Plan Name <sup>(1)</sup>	Performance Shares			Restricted Shares		
		Number of Shares at Threshold <sup>(2)</sup>	Number of Shares at Maximum <sup>(3)</sup>	Intrinsic Value December 28, 2012 <sup>(5)</sup> (EUR)	Plan Name <sup>(7)</sup>	Number of Restricted Shares	Intrinsic Value December 28, 2012 <sup>(8)</sup> (EUR)
Stephen Elop	2010	0	0	0	2010	100 000	293 000
	2011	125 000	500 000	0	2011	180 000	527 400
	2011	0 <sup>(4)</sup>	0 <sup>(4)</sup>	0 <sup>(6)</sup>			
	2012	350 000	1 400 000	2 051 000	2012	500 000	1 465 000
Marko Ahtisaari	2010	0	0	0	2010	37 000	108 410
	2011	15 000	60 000	0	2011	23 000	67 390
	2012	57 500	230 000	336 950	2012	75 000	219 750
Michael Halbherr					2009	10 500	30 765
	2010	0	0	0	2010	17 000	49 810
	2011	35 000	140 000	0	2011	50 000	146 500
	2012	75 000	300 000	439 500	2012	100 000	293 000
Jo Harlow					2009	20 000	58 600
	2010	0	0	0	2010	55 000	161 150
	2011	35 000	140 000	0	2011	50 000	146 500
	2012	75 000	300 000	439 500	2012	100 000	293 000
Timo Ihamuotila					2009	10 000	29 300
	2010	0	0	0	2010	120 000	351 600
	2011	35 000	140 000	0	2011	50 000	146 500
	2012	75 000	300 000	439 500	2012	100 000	293 000
Louise Pentland	2010	0	0	0	2010	78 000	228 540
	2011	22 500	90 000	0	2011	35 000	102 550
	2012	57 500	230 000	336 950	2012	75 000	219 750
Juha Putkiranta					2009	20 000	58 600
	2010	0	0	0	2010	30 000	87 900
	2011	13 500	54 000	0	2011	25 000	73 250
	2012	51 750	207 000	303 255	2012	68 000	199 240
Henry Tirri					2009	20 000	58 600
	2010	0	0	0	2010	30 000	87 900
	2011	22 500	90 000	0	2011	35 000	102 550
	2012	57 500	230 000	336 950	2012	75 000	219 750
Timo Toikkanen					2009	15 000	43 950
	2010	0	0	0	2010	23 000	67 390
	2011	13 500	54 000	0	2011	15 000	43 950
	2012	51 750	207 000	303 255	2012	68 000	199 240
Chris Weber	2011	12 500	50 000	0	2011	90 000	263 700
	2012	51 750	207 000	303 255	2012	68 000	199 240
Juha Äkräs					2009	15 000	43 950
	2010	0	0	0	2010	85 000	249 050
	2011	22 500	90 000	0	2011	35 000	102 550
	2012	57 500	230 000	336 950	2012	75 000	219 750



**Table of Contents**

Name	Plan Name <sup>(1)</sup>	Performance Shares			Restricted Shares		
		Number of Performance Shares at Threshold <sup>(2)</sup>	Number of Performance Shares at Maximum <sup>(3)</sup>	Intrinsic Value December 28, 2012 <sup>(5)</sup> (EUR)	Plan Name <sup>(7)</sup>	Number of Restricted Shares	Intrinsic Value December 28, 2012 <sup>(8)</sup> (EUR)
Kai Öistämö	2010	0	0	0	2010	100 000	293 000
	2011	22 500	90 000	0	2011	35 000	102 550
	2012	45 000	180 000	263 700	2012	60 000	175 800
Performance Shares and Restricted Shares held by the Nokia Leadership Team, Total <sup>(9)</sup>		1 379 750	5 519 000	5 890 765		2 772 500	8 123 425
All outstanding Performance Shares and Restricted Shares (Global plans), Total		8 574 085	34 296 340	30 634 233		23 680 532	69 383 959

- (1) The performance period for the 2010 plan is 2010-2012, for the 2011 plan 2011-2013 and for the 2012 plan 2012-2013 (with a subsequent one-year restriction period), respectively.
- (2) The threshold number will vest as Nokia shares should the pre-determined threshold performance levels be met of both performance criteria. No Nokia shares were delivered under the Performance Share Plan 2010, which would have vested in 2012, as Nokia's performance did not reach the threshold level of either performance criteria. Therefore the shares deliverable at threshold equals zero for the Performance Share Plan 2010.
- (3) The maximum number will vest as Nokia shares should the pre-determined maximum performance levels be met of both performance criteria. The maximum number of performance shares equals four times the number at threshold. No Nokia shares were delivered under the Performance Share Plan 2010, as Nokia's performance did not reach the threshold level of either performance criteria. Therefore the shares deliverable at maximum equals zero for the Performance Share Plan 2010.
- (4) Represents the threshold and maximum number of shares under the one-time special CEO incentive program. No Nokia shares were delivered under the incentive program, as Nokia's performance did not reach the threshold level of either performance criteria. Therefore the shares deliverable at threshold and maximum equals zero.
- (5) For Performance Share Plans 2011 and 2012 the value of performance shares is presented on the basis of Nokia's estimation of the number of shares expected to vest. The intrinsic value for the Performance Share Plan 2012 is based on the closing market price of a Nokia share on NASDAQ OMX Helsinki as at December 28, 2012 of EUR 2.93. For the Performance Share Plan 2010 no Nokia shares were delivered, as Nokia's performance did not reach the threshold level of either performance criteria.
- (6) The intrinsic value is zero, as no Nokia shares were delivered, as Nokia's performance did not reach the threshold level of either performance criteria.
- (7) Under the Restricted Share Plans 2009, 2010, 2011 and 2012, awards have been granted quarterly. For the major part of the awards made under these plans, the restriction period will end for the 2009 plan on January 1, 2013; for the 2010 plan on January 1, 2014; for the 2011 plan on January 1, 2015; and for the 2012 plan on July 1, 2016.
- (8) The intrinsic value is based on the closing market price of a Nokia share on NASDAQ OMX Helsinki as at December 28, 2012 of EUR 2.93.

**Table of Contents**

- (9) During 2012, the following executives stepped down from the Nokia Leadership Team: Jerri DeVard, Colin Giles, Mary T. McDowell, Niklas Savander and Esko Aho. The information related to performance shares and restricted shares held by each of the former executives is as of the date of resignation from the Nokia Leadership Team and is presented in the table below.

Name	Plan Name <sup>(1)</sup>	Performance Shares			Restricted Shares		
		Number of Performance Shares at Threshold <sup>(13)</sup>	Number of Performance Shares at Maximum <sup>(14)</sup>	Intrinsic Value (EUR) <sup>(12)</sup>	Plan Name <sup>(5)</sup>	Number of Restricted Shares	Intrinsic Value (EUR) <sup>(12)</sup>
Jerri DeVard <sup>(10)</sup> as per June 30, 2012	2011	22 500	90 000	0	2011	100 000	162 000
Colin Giles <sup>(11)</sup> as per June 30, 2012	2009				2009	20 000	32 400
	2010	12 500	50 000	0	2010	55 000	89 100
	2011	22 500	90 000	0	2011	35 000	56 700
					2012	60 000	97 200
Mary T. McDowell <sup>(11)</sup> as per June 30, 2012	2010	30 000	120 000	0	2010	115 000	186 300
	2011	35 000	140 000	0	2011	50 000	81 000
				0	2012	100 000	162 000
Niklas Savander <sup>(11)</sup> as per June 30, 2012	2010	30 000	120 000	0	2010	115 000	186 300
	2011	35 000	140 000	0	2011	50 000	81 000
					2012	120 000	194 400
Esko Aho <sup>(11)</sup> as per August 31, 2012	2010	15 000	60 000	0	2010	58 000	131 080
	2011	15 000	60 000	0	2011	23 000	51 980
	2012	20 000	80 000	90 400	2012	30 000	67 800

- (10) Ms. DeVard's equity will be forfeited and cancelled upon termination of employment in accordance with the plan rules.
- (11) Mr. Giles, Ms. McDowell, Mr. Savander and Mr. Aho's stock option grants were forfeited and cancelled upon their respective terminations of employment in accordance with the plan rules.
- (12) The intrinsic value is based on the closing market price of a Nokia share on NASDAQ OMX Helsinki as at June 29, 2012 of EUR 1.62 in respect of Ms. DeVard, Mr. Giles, Ms. McDowell and Mr. Savander and as at August 31, 2012 of EUR 2.26 in respect of Mr. Aho.
- (13) The threshold number will vest as Nokia shares should the pre-determined threshold performance levels be met for both performance criteria. No Nokia shares were delivered under the Performance Share Plan 2010, as Nokia's performance did not reach the threshold level of either performance criteria.
- (14) The maximum number will vest as Nokia shares should the pre-determined maximum performance levels be met. The maximum number of performance shares equals four times the number at threshold. No Nokia shares were delivered under the Performance Share Plan 2010, as Nokia's performance did not reach the threshold level of either performance criteria.

**Table of Contents****Stock Option Exercises and Settlement of Shares**

The following table provides certain information relating to stock option exercises and share deliveries upon settlement during the year 2012 for our Nokia Leadership Team members.

Name <sup>(5)</sup>	Stock Options Awards <sup>(1)</sup>		Performance Shares Awards <sup>(2)</sup>		Restricted Shares Awards	
	Number of Shares Acquired on Exercise	Value Realized on Exercise (EUR)	Number of Shares Delivered on Vesting	Value Realized on Vesting (EUR)	Number of Shares Delivered on Vesting	Value Realized on Vesting (EUR)
Stephen Elop	0	0	0	0	0	0
Marko Ahtisaari	0	0	0	0	0	0
Michael Halbherr	0	0	0	0	9 000 <sup>(3)</sup>	37 980 <sup>(3)</sup>
Jo Harlow	0	0	0	0	6 000 <sup>(3)</sup>	25 320 <sup>(3)</sup>
Timo Ihamuotila	0	0	0	0	25 000 <sup>(4)</sup>	69 750 <sup>(4)</sup>
Louise Pentland	0	0	0	0	6 000 <sup>(4)</sup>	16 740 <sup>(4)</sup>
Juha Putkiranta	0	0	0	0	10 000 <sup>(3)</sup>	42 200 <sup>(3)</sup>
Henry Tirri	0	0	0	0	10 000 <sup>(3)</sup>	42 200 <sup>(3)</sup>
Timo Toikkanen	0	0	0	0	10 000 <sup>(3)</sup>	42 200 <sup>(3)</sup>
Chris Weber	0	0	0	0	0	0
Juha Äkräs	0	0	0	0	8 000 <sup>(3)</sup>	33 760 <sup>(3)</sup>
Kai Öistämö	0	0	0	0	50 000 <sup>(4)</sup>	139 500 <sup>(4)</sup>

- (1) Value realized on exercise is based on the difference between the Nokia share price and exercise price of options.
- (2) No Nokia shares were delivered under the Performance Share Plan 2009 during 2012 as Nokia's performance did not reach the threshold level of either performance criteria.
- (3) Represents the delivery of Nokia shares vested from the Restricted Share Plan 2008. Value is based on the average market price of the Nokia share on NASDAQ OMX Helsinki on February 22, 2012 of EUR 4.22
- (4) Represents the delivery of Nokia shares vested from the Restricted Share Plan 2009. Value is based on the average market price of the Nokia share on NASDAQ OMX Helsinki on April 25, 2012 of EUR 2.79.
- (5) During 2012, the following executives stepped down from the Nokia Leadership Team: Jerri DeVard, Colin Giles, Mary T. McDowell, Niklas Savander and Esko Aho. The information regarding stock option exercises and settlement of shares regarding each of the former executives is as of the date of resignation from the Nokia Leadership Team and is represented in the table below.

Name	Stock Options Awards <sup>(1)</sup>		Performance Shares Awards <sup>(2)</sup>		Restricted Shares Awards	
	Number of Shares Acquired on Exercise	Value Realized on Exercise (EUR)	Number of Shares Delivered on Vesting	Value Realized on Vesting (EUR)	Number of Shares Delivered on Vesting	Value Realized on Vesting (EUR)
Jerri DeVard						
as per June 30, 2012	0	0	0	0	0	0
Colin Giles						
as per June 30, 2012	0	0	0	0	10 000 <sup>(3)</sup>	42 200 <sup>(3)</sup>
Mary T. McDowell						
as per June 30, 2012	0	0	0	0	38 000 <sup>(4)</sup>	106 020 <sup>(4)</sup>
Niklas Savander	0	0	0	0	38 000 <sup>(4)</sup>	106 020 <sup>(4)</sup>

Edgar Filing: NOKIA CORP - Form 20-F

as per June 30, 2012

Esko Aho

7 000<sup>(3)</sup>

29 540<sup>(3)</sup>

as per August 31, 2012

0

0

0

0

25 000<sup>(4)</sup>

69 750<sup>(4)</sup>

---

## **Table of Contents**

### **Share Ownership Guidelines for Executive Management**

One of the goals of our long-term equity-based incentive program is to focus executives on promoting the long-term value sustainability of the company and on building value for shareholders on a long-term basis. In addition to granting stock options, performance shares and restricted shares, we also encourage stock ownership by our top executives and have stock ownership commitment guidelines with minimum recommendations tied to annual base salaries. For the President and CEO, the recommended minimum investment in Nokia shares corresponds to three times his annual base salary and for members of the Nokia Leadership Team two times the member's annual base salary, respectively. To meet this requirement, all members of the Nokia Leadership Team are expected to retain 50% of any after-tax gains from equity programs in shares until the minimum investment level is met. The Personnel Committee regularly monitors the compliance by the executives with the stock ownership guidelines.

### **Insider Trading in Securities**

The Board of Directors has established a policy in respect of insiders' trading in Nokia securities. The members of the Board and the Nokia Leadership Team are considered as primary insiders. Under the policy, the holdings of Nokia securities by the primary insiders are public information, which is available from Euroclear Finland Ltd. and available on our website. Both primary insiders and secondary insiders (as defined in the policy) are subject to a number of trading restrictions and rules, including, among other things, prohibitions on trading in Nokia securities during the three-week closed-window period immediately preceding the release of our quarterly results including the day of the release and the four-week closed-window period immediately preceding the release of our annual results including the day of the release. In addition, Nokia may set trading restrictions based on participation in projects. We update our insider trading policy from time to time and provide training for compliance with the policy. Nokia's insider policy is in line with the NASDAQ OMX Helsinki Guidelines for Insiders and also sets requirements beyond those guidelines.

## **ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS**

### **7A. Major Shareholders**

At December 31, 2012, a total of 818 252 657 ADSs (equivalent to the same number of shares or approximately 21.85% of the total outstanding shares) were outstanding and held of record by 13 917 registered holders in the United States. We are aware that many ADSs are held of record by brokers and other nominees, and accordingly the above number of holders is not necessarily representative of the actual number of persons who are beneficial holders of ADSs or the number of ADSs beneficially held by such persons. Based on information available from Automatic Data Processing, Inc., the number of beneficial owners of ADSs as at December 31, 2012 was 432 821.

Based on information known to us as of February 19, 2013, as at December 31, 2012, Dodge & Cox Incorporated beneficially owned 241 074 318 Nokia shares or ADRs combined, and Capital Research and Management Company beneficially owned 82 612 674 Nokia shares or ADRs combined, which at that time corresponded to approximately 6.4% and 2.2% of the share capital of Nokia, respectively.

As far as we know, Nokia is not directly or indirectly owned or controlled by any other corporation or any government, and there are no arrangements that may result in a change of control of Nokia.

### **7B. Related Party Transactions**

There have been no material transactions during the last three fiscal years to which any director, executive officer or 5% shareholder, or any relative or spouse of any of them, was a party. There is no significant outstanding indebtedness owed to Nokia by any director, executive officer or 5% shareholder.

---

**Table of Contents**

There are no material transactions with enterprises controlling, controlled by or under common control with Nokia or associates of Nokia.

See Note 31 to our consolidated financial statements included in Item 18 of this annual report.

**7C. Interests of Experts and Counsel**

Not applicable.

**ITEM 8. FINANCIAL INFORMATION**

**8A. Consolidated Statements and Other Financial Information**

**8A1.** See Item 18 for our consolidated financial statements.

**8A2.** See Item 18 for our consolidated financial statements, which cover the last three financial years.

**8A3.** See page F-1 for the audit report of our accountants, entitled Report of Independent Registered Public Accounting Firm.

**8A4.** Not applicable.

**8A5.** Not applicable.

**8A6.** See Note 2 to our audited consolidated financial statements included in Item 18 of this annual report for the amount of our export sales.

**8A7. Litigation**

**Intellectual Property Rights Litigation**

***InterDigital***

In 1999, we entered into a license agreement with InterDigital Technology Corporation and InterDigital Communications Corporation (together IDT ). The license provided for a fixed royalty payment through 2001 and most favored licensee treatment from 2002 through 2006. In April 2006, Nokia and IDT resolved their contract dispute over the patent license terms related to 2G products, with Nokia obtaining a fully paid-up, perpetual, irrevocable, worldwide license to all of IDT's current and future patents for purposes of making or selling 2G products. The IDT settlement terms did not address any prospective 3G license terms, however, our sale of 3G products was fully released through the date of the settlement agreements.

Nokia Corporation and Nokia Inc. (referred to collectively here as Nokia ) and IDT currently have pending legal disputes in the United States regarding IDT's alleged 3G patents. Among them, in August 2007 IDT filed a complaint against Nokia with the US International Trade Commission ( ITC ) alleging infringement of two declared essential WCDMA patents, amending the complaint later to add two additional patents. The consolidated action included four patents, which were also asserted against Nokia in a parallel case in the United States District Court for the District of Delaware. The Delaware case is stayed pending the ITC action. Through its ITC action, IDT is seeking to exclude certain of our WCDMA handsets from importation and sale in the United States.

A hearing on the merits of IDT's ITC case was conducted in May 2009. On August 14, 2009, the Administrative Law Judge issued an opinion finding the patents not invalid, but also not infringed by Nokia's accused products. On review of the Administrative Law Judge's opinion, the ITC affirmed the finding of non-infringement and took no position on whether or not the patents were invalid. IDT appealed the ITC's decision to the Court of Appeals for the Federal Circuit. Thereafter, the Federal Circuit remanded the case back to the ITC for further proceedings. The ITC has not yet set a timetable for the case.

---

**Table of Contents**

In July 2011, IDT filed another complaint against Nokia and others with the ITC alleging infringement of seven declared essential WCDMA patents, amending the complaint later to add another co-respondent. The same seven patents were also asserted against Nokia in a parallel case in the United States District Court for the District of Delaware. The Delaware case is stayed pending resolution of the ITC action. Through its second ITC action, IDT is seeking to exclude certain of our WCDMA and CDMA2000 devices from importation and sale in the United States. The target date for completion of the ITC investigation is currently set for October 28, 2013.

In January 2013, IDT filed a third complaint against Nokia with the ITC alleging infringement of a single declared essential UMTS and LTE patent, and also filed a parallel case asserting the same patent in the United States District Court for the District of Delaware. Through its third ITC action, IDT is seeking to exclude certain of our WCDMA, CDMA2000, and LTE devices from importation and sale in the United States.

We believe that the allegations of IDT described above are without merit and we intend to pursue all available defenses and legal options in this matter.

***IPCom***

From December 2007 onwards, IPCom filed actions against Nokia and members of the Nokia Leadership Team in Mannheim and Düsseldorf, Germany, claiming infringement of 17 patents and two utility models. All of these reached trial at first instance, and a number were appealed. Nokia responded by filing nullity actions in the German Patents Court and oppositions before the German and European Patent Office ( GPTO and EPO ) in relation to these patents, utility models, and other patents included in IPCom's list of patents. To date, all of IPCom's patents and utility models that have reached trial were found to be invalid and/or not infringed, except for two patents of the same family (so called #100a and #100DE), which were found to be infringed by certain Nokia products. However, in the meantime, the EPO found #100a to be invalid (currently on appeal). The decision on the validity of the #100DE patent has not been reached yet. We will pursue all of our appeal rights.

Since September 2008, Nokia commenced revocation proceedings in England against 30 of IPCom's UK patents. IPCom responded by bringing infringement actions in relation to some of the patents in issue. On January 18, 2010, the two IPCom patents that were subject to the first trial were found to be invalid. IPCom appealed this ruling. The Court of Appeal dismissed the appeal in relation to both. IPCom conceded that 23 of its other patents should be revoked in the UK. Three cases remain on-going at first instance. In one case (#100a, the parallel to Germany) certain of Nokia's older devices were found to have infringed an IPCom patent, but the court ruled that Nokia's devices currently on the market do not infringe. IPCom requested an injunction, but due to concerns expressed by the court, IPCom changed the request to fix a FRAND (fair, reasonable and non-discriminatory) royalty for this patent. The hearing is due to take place in July 2013.

In Italy, IPCom filed criminal complaints against Nokia and some Nokia individuals for allegedly infringing IPCom patents. IPCom requested seizures of Nokia devices. The complaints were consolidated in Milan, and the Milan court dismissed the complaints on January 26, 2012. We have claimed compensation for the wrongful attempts at product seizure and criminal complaints in the Milan Court, and sought findings of invalidity and non-infringement of some of the asserted patents. Those cases are on-going.

Since IPCom filed its first action against Nokia, 60 IPCom patents have been found invalid as granted or conceded by IPCom. We believe that the allegations of IPCom described above are without merit, and we will continue to defend ourselves against these actions.

---

**Table of Contents**

***HTC***

On April 27 and 28, and May 2, 2012, Nokia commenced patent infringement proceedings against HTC in relation to 20 non-essential patents in the District Courts of Mannheim, Munich and Düsseldorf, Germany. In addition, on May 2, 2012, Nokia commenced patent infringement proceedings against HTC in respect of 9 non-essential patents in the ITC, and 18 non-essential patents in three separate suits in the United States District Court for the District of Delaware. Nokia has voluntarily dropped one of the asserted patents in the ITC action to date and a second patent has been dismissed from the action pending the outcome of an arbitration.

The ITC instituted the action on June 4, 2012 and set a target date to complete the investigation by January 23, 2014. The initial trial is expected to be held May 31, 2013 through June 7, 2013 before the ITC. The Delaware Federal District Court case involving the same patents as before the ITC remains stayed pending resolution of the ITC action. The actions against HTC in the Delaware Federal District Court involving patents not before the ITC are proceeding and one or more Delaware trials on the merits are likely to be scheduled for the first half of 2015.

HTC filed nullity actions with the Federal Patent Court in Munich and commenced revocation proceedings against Nokia in the UK High Court in May, June, July and December 2012. On July 18, 2012, S3 Graphics Co. Ltd, a subsidiary of HTC, filed an action for patent infringement against Nokia GmbH in Mannheim. On the same date, HTC filed a patent infringement action against Nokia GmbH in Mannheim. On July 23, 2012, HTC initiated parallel infringement proceedings in Munich against Nokia Corporation in respect of the same patent brought in Mannheim. The first decision on infringement against HTC is expected March 8, 2013 in Mannheim.

We intend to pursue our claims in these actions to protect Nokia's interests. However, the final outcome, including the ability to recover damages, is uncertain due to the nature and inherent risks of such legal proceedings. Further, we believe that the allegations of HTC described above are without merit and we will defend ourselves against these actions.

***BlackBerry (formerly Research In Motion)***

On April 27, and May 2, 2012, Nokia commenced patent infringement proceedings against BlackBerry in the District Courts of Mannheim, Munich and Düsseldorf, Germany. BlackBerry filed respective nullity actions with the Federal Patent Court in Munich.

On November 6, 2012, a final and conclusive arbitration award was made against BlackBerry by the Arbitration Institute of the Stockholm Chamber of Commerce relating to the arbitration BlackBerry commenced against Nokia on March 7, 2011 in relation to a dispute as to the scope of a patent license agreement between the parties. On November 26 and 27, 2012, Nokia applied for permission to enforce the award against BlackBerry in Canada, the US and the UK.

On December 21, 2012, before any of the cases in Germany reached final judgment, the parties entered a new patent license agreement. The agreement resulted in settlement of all existing patent litigation between the companies and withdrawal of pending actions in the US, UK and Canada related to the arbitration tribunal decision. The financial structure of the license agreement includes a one-time payment payable by BlackBerry and on-going payments to be paid by BlackBerry to Nokia.

***Digitide***

On December 2, 2011, Digitide Innovations LLC filed two complaints against Nokia. The first action was pending in the US Federal District Court for the District of Delaware and alleged that certain of our Lumia smartphones infringed four of Digitide patents and sought unspecified damages. Digitide also



**Table of Contents**

filed a complaint with the ITC based upon the same four patents and sought to ban Nokia from importing certain Lumia smartphones into the United States. The ITC action was instituted by the ITC on January 13, 2012 and a target date for completion was July 18, 2013.

Before any of the cases reached final judgment, Nokia and Digitude resolved all patent litigation between the companies, including withdrawal by Digitude of its complaint in the ITC and its action pending in the District of Delaware. The structure of the settlement is that Digitude entered into a Patent Purchase Agreement with third-party RPX whereby the asserted patents were sold to RPX, and Digitude entered into a release agreement directly with Nokia. Nokia has a Membership and License Agreement between itself and RPX which covered the asserted patents.

***Securities Litigation & ERISA***

On February 5, 2010 a lawsuit was initiated by a municipal retirement fund in the United States District Court for the Southern District of New York on behalf of itself, and was seeking class action status on behalf of purchasers of American Depository Shares or ADSs, of Nokia between January 24, 2008 and September 5, 2008 inclusive, to pursue remedies under the Securities and Exchange Act of 1934 (the Exchange Act). An amended complaint was filed in the same lawsuit on August 23, 2010 by a different municipal retirement fund that was appointed lead plaintiff. The complaint generally alleged that certain officers and executives of Nokia Corporation violated the Exchange Act when they allegedly failed to disclose materially adverse facts about the Company's business in a timely manner, including allegations of failures to disclose product launch delays, intense price competition, loss of market share to competitors and changing worldwide market conditions, all of which were adverse to the Company. After extensive proceedings, the case was dismissed by the Court on December 12, 2012. No appeal was taken and the dismissal became final on January 12, 2013.

On May 3, 2012 a class action complaint entitled Chmielinski v. Nokia Corporation was filed in the United States District Court for the Southern District of New York naming Nokia Corporation and two of its executives as defendants. In summary the complaint alleged that from October 26, 2011 to April 10, 2012, false positive statements were made about Nokia's financial outlook and growth prospects in relation to the conversion to a Windows Phone-based operating system for smartphones. After investigation, the plaintiffs agreed to dismiss the case against all defendants without any compensation being paid to any plaintiff or their counsel by any defendant. On December 12, 2012 the complaint was withdrawn and dismissed.

On April 19, 2010 and April 21, 2010, two individuals filed separate putative class action lawsuits against Nokia Inc. and the directors and officers of Nokia Inc., and certain other employees and representatives of the company, claiming to represent all persons who were participants in or beneficiaries of the Nokia Retirement Savings and Investment Plan (the Plan) who participated in the Plan between January 1, 2008 and the present and whose accounts included investments in Nokia shares. The plaintiffs allege that the defendants failed to comply with their statutory and fiduciary duties when they failed to remove Nokia shares as a plan investment option. The cases were consolidated and an amended consolidated complaint was filed on September 15, 2010. The amended complaint alleges that the named individuals knew of the matters alleged in the securities case referenced above, that the matters significantly increased the risk of Nokia shares ownership, and as a result of that knowledge, the named defendants should have removed Nokia shares as a Plan investment option. The plaintiff's claims were dismissed in their entirety on September 5, 2011. On September 13, 2012 the Court denied Plaintiffs' motion for leave to amend their complaint a second time and entered judgment in favor of Nokia. On October 23, 2012 the plaintiffs filed an appeal of the District Court's order granting judgment in favor of Nokia. A decision on the Appeal is expected in 2013. We believe that the allegations are without merit, and we will continue to defend ourselves against this action.

---

**Table of Contents**

On September 19, 2012, a class action based on the US Employee Retirement Income Security Act ( ERISA ) entitled *Romero v. Nokia* was filed in the United States District Court for the Southern District of New York. The complaint named Nokia Corporation, certain Nokia Corporation Board members, Fidelity Management Trust Co., The Nokia Retirement Savings & Investment Plan Committee and the Plan Administrator, as well as certain individuals from the Nokia Retirement Savings & Investment Plan Committee. The complaint claimed to represent all persons who were participants in or beneficiaries of the Nokia Retirement Savings and Investment Plan (the Plan ) who participated in the Plan between January 19, 2012 and the present and whose accounts invested in the Nokia Stock Fund. The complaint alleged that the named individuals breached their fiduciary duties by, among other things, permitting the plan to offer the fund as an investment option, permitting the plan to invest in the fund and permitting the fund to invest in and remain invested in American Depository Receipts of Nokia Corporation when the defendants allegedly knew the fund and Nokia's shares were extremely risky investments. On December 10, 2012 the Plaintiff filed a motion to dismiss the complaint against all defendants without prejudice and filed a new complaint in the United States District Court for the Northern District of California, naming as defendants Nokia Inc., the Nokia Retirement Savings and Investment Plan Committee, and several individuals alleged to be plan fiduciaries, claiming to represent all persons who were participants in or beneficiaries of the Nokia Retirement Savings and Investment Plan (the Plan ) who participated in the Plan between January 19, 2012 and the present and whose accounts invested in the Nokia Stock Fund. The complaint alleges that named individuals breached their fiduciary duties by, among other things, permitting the plan to offer the fund as an investment option, permitting the plan to invest in the fund and permitting the fund to invest in and remain invested in American Depository Receipts of Nokia Corporation when the defendants allegedly knew the fund and Nokia's shares were extremely risky investments. We believe that the allegations are without merit, and we will continue to defend ourselves against this action.

***Agreement Related Litigation***

We were involved in arbitrations and several lawsuits with Basari Elektronik Sanayi ve Ticaret A.S. ( Basari Elektronik ) and Basari Teknik Servis Hizmetleri Ticaret A.S. regarding claims associated with the expiration of a product distribution agreement and the termination of a product service agreement. Those matters have been before various courts and arbitral tribunals in Turkey and Finland. Basari Elektronik claimed that it was entitled to compensation for goodwill it generated on behalf of Nokia during the term of the agreement and for Nokia's alleged actions in connection with the termination of the agreement. The compensation claim was dismissed by the Turkish courts, and Basari Elektronik filed for arbitration in Helsinki and Turkey. In October 2009, Basari Elektronik withdrew from the arbitration in Helsinki and Nokia was awarded all costs in that matter. In 2011, the arbitration panel in Istanbul, Turkey unanimously ruled in favor of Nokia and denied Basari Elektronik any relief. In May 2012, all claims were settled by way of a settlement agreement.

***Product Related Litigation***

Nokia and several other mobile device manufacturers, distributors and network operators were named as defendants in a series of class action suits filed in various US jurisdictions. The actions were brought on behalf of a purported class of persons in the US as a whole, consisting of all individuals that purchased mobile devices without a headset. In general, the complaints allege that handheld cellular telephone use causes and creates a risk of cell level injury and claim the defendants should have included a headset with every hand-held mobile telephone as a means of reducing any potential health risk associated with the telephone's use. All of these cases have been withdrawn or dismissed.

We have also been named as a defendant along with several other mobile device manufacturers and network operators in twelve lawsuits by individual plaintiffs who allege that the radio emissions from mobile devices caused or contributed to each plaintiff's brain tumor and other adverse health effects.

---

## **Table of Contents**

The Court of Appeals for the District of Columbia determined that adverse health effect claims arising from the use of cellular handsets that operate within the US Federal Communications Commission radio frequency emission guidelines are pre-empted by federal law. Claims that are based upon handsets that operate outside the Federal Communications Commission Guidelines, or were in use before the guidelines were established in 1996, are not pre-empted. The plaintiffs in the subject lawsuits all allege that their handsets either operated outside the US Federal Communications Commission emission guidelines or were manufactured before any guidelines were established. The suits also allege an industry wide conspiracy to manipulate the science and testing surrounding the establishment of emission guidelines and testing protocol. A hearing on the admissibility of the plaintiffs' proffered general causation evidence will likely occur in the fourth quarter of 2013, at the earliest.

We believe that the allegations described above are without merit, and will continue to defend ourselves against these actions. Other courts that have reviewed similar matters to date have found that there is no reliable scientific basis for the plaintiffs' claims.

### ***Antitrust Litigation***

In November 2009, Nokia Corporation filed two lawsuits, one in the United Kingdom's High Court of Justice and the other in the United States District Court for the Northern District of California, joined by Nokia Inc., against certain manufacturers of liquid crystal displays ( LCDs ). Both suits concerned the same underlying allegations: namely, that the defendants violated the relevant antitrust or competition laws (including Article 81 EC Treaty, Article 53 EEA Agreement, Section 1 of the Sherman Act and various state competition laws) by entering into a worldwide conspiracy to raise and/or stabilize the prices of LCDs, among other anticompetitive conduct, from approximately January 1996 to December 2006 (the Cartel Period ). Defendants Sharp Corporation, LG Display Co. Ltd., Chunghwa Picture Tubes, Ltd., Hitachi Displays Ltd. and Epson Imaging Devices Corporation, as well as non-defendant Chi Mei Optoelectronics, and Hannstar Display Corporation, have pleaded guilty in the United States to participating in a conspiracy to fix certain LCD prices and have agreed to pay fines totaling approximately USD 900 million. Further, the United States Department of Justice has indicted AU Optronics Corporation and its American subsidiary, AU Optronics Corporation America, for participation in the conspiracy to fix the prices of TFT-LCD panels sold worldwide from September 14, 2001 to December 1, 2006. During the Cartel Period, Nokia purchased substantial quantities of LCDs from several defendants and other manufacturers for incorporation into its mobile devices. The lawsuits allege that as a result of defendants' cartel activities, Nokia suffered harm by, among other reasons, paying supra-competitive prices for LCDs. Trial in the United States action is stayed pending the settlements.

Also in November 2009, Nokia Corporation filed a lawsuit in the United Kingdom's High Court of Justice against certain manufacturers of cathode rays tubes ( CRTs ). In this lawsuit, Nokia alleged that the defendants violated the relevant antitrust or competition laws (Article 81 EC Treaty and Article 53 EEA Agreement) by entering into a worldwide conspiracy to raise and/or stabilize the prices of CRTs, among other anticompetitive conduct, from no later than March 1995 to around November 2007. During the Cartel Period, Nokia, through its subsidiary Nokia Display Products Oy, engaged in the manufacture and supply of computer monitors for third parties. Nokia purchased substantial quantities of CRTs for this purpose from several defendants, as well as non-defendant manufacturers. The lawsuit alleges that as a result of defendants' cartel activities, Nokia suffered harm by, among other reasons, paying supra-competitive prices for CRTs.

Most defendants have settled the claims against them. Chunghwa Picture Tubes, Ltd, Philips and LG Display Co. Ltd have settled on confidential terms. Epson Imaging Devices Corporation has paid \$80 million in damages as well as certain additional consideration. Others have also settled on confidential

## **Table of Contents**

terms. We intend to pursue our CRT and LCD claims against the remaining defendants. However, the final outcome of the claims, including the ability to recover damages for any overcharges paid, is uncertain due to the nature and inherent risks of such legal proceedings.

Based upon the information currently available, management does not expect the resolution of any of the matters discussed in this section 8A7 Litigation to have a material adverse effect on our financial condition or results of operations.

We are also party to other routine litigation incidental to the normal conduct of our business. Based upon the information currently available, our management does not believe that liabilities related to those proceedings are likely to be material to our financial condition or results of operations.

### **8A8. Dividend Policy**

See Item 3A. Selected Financial Data Distribution of Earnings for a discussion of our dividend policy.

### **8B. Significant Changes**

No significant changes have occurred since the date of our consolidated financial statements included in this annual report. See Item 5A.

Operating Results Principal Factors and Trends Affecting our Results of Operations for information on material trends affecting our business and results of operations.

## **ITEM 9. THE OFFER AND LISTING**

### **9A. Offer and Listing Details**

Our capital consists of shares traded on NASDAQ OMX Helsinki under the symbol NOK1V. American Depositary Shares, or ADSs, each representing one of our shares, are traded on the New York Stock Exchange under the symbol NOK. The ADSs are evidenced by American Depositary Receipts, or ADRs, issued by Citibank, N.A., as the Depositary under the Amended and Restated Deposit Agreement dated as of March 28, 2000 (as amended), among Nokia, Citibank, N.A. and registered holders from time to time of ADRs.

**Table of Contents**

The table below sets forth, for the periods indicated, the reported high and low quoted prices for our shares on NASDAQ OMX Helsinki and the high and low quoted prices for the shares, in the form of ADSs, on the New York Stock Exchange.

	NASDAQ OMX Helsinki Price per share		New York Stock Exchange Price per ADS	
	High (EUR)	Low	High (USD)	Low
<b>2008</b>	25.78	9.95	38.25	12.35
<b>2009</b>	12.25	6.67	16.58	8.47
<b>2010</b>	11.82	6.59	15.89	8.00
<b>2011</b>				
First Quarter	8.49	5.42	11.75	7.73
Second Quarter	6.36	4.03	9.42	5.79
Third Quarter	4.79	3.33	6.84	4.82
Fourth Quarter	5.19	3.50	7.38	4.46
Full Year	8.49	3.33	11.75	4.46
<b>2012</b>				
First Quarter	4.46	3.75	5.87	4.90
Second Quarter	4.11	1.60	5.52	2.04
Third Quarter	2.79	1.33	3.39	1.63
Fourth Quarter	3.31	1.92	4.35	2.52
Full Year	4.46	1.33	5.87	1.63
<b>Most recent six months</b>				
September 2012	2.44	1.81	3.14	2.27
October 2012	2.42	1.92	2.95	2.52
November 2012	2.79	2.04	3.59	2.60
December 2012	3.31	2.49	4.35	3.24
January 2013	3.64	2.84	4.89	3.67
February 2013	3.11	2.68	4.17	3.54

**9B. Plan of Distribution**

Not applicable.

**9C. Markets**

The principal trading markets for the shares are the New York Stock Exchange, in the form of ADSs, and NASDAQ OMX Helsinki, in the form of shares. Nokia also maintained a listing at the Frankfurt Stock Exchange in the year 2012 but decided to delist its shares and the final day of trading at the Frankfurt Stock Exchange was March 16, 2012.

**9D. Selling Shareholders**

Not applicable.

**9E. Dilution**

Not applicable.

**9F. Expenses of the Issue**

Not applicable.

**ITEM 10. ADDITIONAL INFORMATION**

**10A. Share Capital**

Not applicable.

---

**Table of Contents****10B. Memorandum and Articles of Association****Registration**

Nokia is organized under the laws of the Republic of Finland and registered under the business identity code 0112038-9. Under our current Articles of Association, Nokia's corporate purpose is to engage in the telecommunications industry and other sectors of the electronics industry as well as the related service businesses, including the development, manufacture, marketing and sales of mobile devices, other electronic products and telecommunications systems and equipment as well as related mobile, Internet and network infrastructure services and other consumer and enterprise services. Nokia may also create, acquire and license intellectual property and software as well as engage in other industrial and commercial operations. Further, we may engage in securities trading and other investment activities.

**Director's Voting Powers**

Under Finnish law and our Articles of Association, resolutions of the Board of Directors shall be made by a majority vote. A director shall refrain from taking any part in the consideration of a contract between the director and the company or third party, or any other issue that may provide any material benefit to him, which may be contradictory to the interests of the company. Under Finnish law, there is no age limit requirement for directors, and there are no requirements under Finnish law that a director must own a minimum number of shares in order to qualify to act as a director. However, our Board has established a guideline retirement age of 70 years for the members of the Board of Directors and the Corporate Governance and Nomination Committee will not without specific reason propose re-election of a person who has reached 70 years of age. In addition, in accordance with company policy, approximately 40% of the annual remuneration payable to the Board members has been paid in Nokia shares purchased from the market, which shares shall be retained until the end of the board membership (except for those shares needed to offset any costs relating to the acquisition of the shares, including taxes).

**Share Rights, Preferences and Restrictions**

Each share confers the right to one vote at general meetings. According to Finnish law, a company generally must hold an Annual General Meeting called by the Board within six months from the end of the fiscal year. In addition, the Board is obliged to call an extraordinary general meeting at the request of the auditor or shareholders representing a minimum of one-tenth of all outstanding shares. Under our Articles of Association, the members of the board are elected for a term of one year from the respective Annual General Meeting to the end of the next Annual General Meeting.

Under Finnish law, shareholders may attend and vote at general meetings in person or by proxy. It is not customary in Finland for a company to issue forms of proxy to its shareholders. Accordingly, Nokia does not do so. However, registered holders and beneficial owners of ADSs are issued forms of proxy by the Depositary.

To attend and vote at a general meeting, a shareholder must be registered in the register of shareholders in the Finnish book-entry system on or prior to the record date set forth in the notice of the Annual General Meeting. A registered holder or a beneficial owner of the ADSs, like other beneficial owners whose shares are registered in the company's register of shareholders in the name of a nominee, may vote with his shares provided that he arranges to have his name entered in the temporary register of shareholders for the Annual General Meeting.

The record date is the eighth business day preceding the meeting. To be entered in the temporary register of shareholders for the Annual General Meeting, a holder of ADSs must provide the Depositary, or have his broker or other custodian provide the Depositary, on or before the voting deadline, as defined in the proxy material issued by the Depositary, a proxy with the following

---

## **Table of Contents**

information: the name, address, and social security number or another corresponding personal identification number of the holder of the ADSs, the number of shares to be voted by the holder of the ADSs and the voting instructions. The register of shareholders as of the record date of each general meeting is public until the end of the respective meeting. Other nominee registered shareholders can attend and vote at the Annual General Meeting by instructing their broker or other custodian to register the shareholder in Nokia's temporary register of shareholders and give the voting instructions in accordance with the broker's or custodian's instructions.

By completing and returning the form of proxy provided by the Depository, a holder of ADSs also authorizes the Depository to give a notice to us, required by our Articles of Association, of the holder's intention to attend the general meeting.

Each of our shares confers equal rights to share in the distribution of the company's funds. For a description of dividend rights attaching to our shares, see Item 3A. Selected Financial Data Distribution of Earnings. Dividend entitlement lapses after three years if a dividend remains unclaimed for that period, in which case the unclaimed dividend will be retained by Nokia.

Under Finnish law, the rights of shareholders related to shares are as stated by law and in our Articles of Association. Amendment of the Articles of Association requires a decision of the general meeting, supported by two-thirds of the votes cast and two-thirds of the shares represented at the meeting.

### ***Disclosure of Shareholder Ownership or Voting Power***

According to the Finnish Securities Market Act (746/2012), which entered into force on January 1, 2013, a shareholder shall disclose its ownership or voting power to the company and the Finnish Financial Supervisory Authority when the ownership or voting power reaches, exceeds or falls below 5, 10, 15, 20, 25, 30, 50 or 90 per cent of all the shares or the voting rights outstanding. The term "ownership" includes ownership by the shareholder, as well as selected related parties and calculating the ownership or voting power covers agreements or other arrangements, which when concluded would cause the proportion of voting rights or number of shares to reach, exceed or fall below the above mentioned limits. Upon receiving such notice, the company shall disclose it by a stock exchange release without undue delay.

### ***Purchase Obligation***

Our Articles of Association require a shareholder that holds one-third or one-half of all of our shares to purchase the shares of all other shareholders that so request, at a price generally based on the historical weighted average trading price of the shares. A shareholder who becomes subject to the purchase obligation is also obligated to purchase any subscription rights, stock options or convertible bonds issued by the company if so requested by the holder. The purchase price of the shares under our Articles of Association is the higher of (a) the weighted average trading price of the shares on NASDAQ OMX Helsinki during the 10 business days prior to the day on which we have been notified by the purchaser that its holding has reached or exceeded the threshold referred to above or, in the absence of such notification or its failure to arrive within the specified period, the day on which our Board of Directors otherwise becomes aware of this; or (b) the average price, weighted by the number of shares, which the purchaser has paid for the shares it has acquired during the last 12 months preceding the date referred to in (a).

Under the Finnish Securities Market Act, a shareholder whose voting power exceeds 30 or 50 per cent of the total voting rights in a company shall, within one month, offer to purchase the remaining shares of the company, as well as any other rights entitling to the shares issued by the company, such as subscription rights, convertible bonds or stock options issued by the company. The purchase price shall be the market price of the securities in question. The market price is determined on the basis of the highest price paid for the security during the preceding six months by the shareholder or any party



## **Table of Contents**

in close connection to the shareholder. This price can be deviated from for a specific reason. If the shareholder or any related party has not during the six months preceding the offer acquired any securities that are the target for the offer, the market price is determined based on the average of the prices paid for the security in public trading during the preceding three months weighted by the volume of trade.

Under the Finnish Companies Act (2006/624), as amended, a shareholder whose holding exceeds nine-tenths of the total number of shares or voting rights in Nokia has both the right and, upon a request from the minority shareholders, the obligation to purchase all the shares of the minority shareholders for the current market price. The market price is determined, among other things, on the basis of the recent market price of the shares. The purchase procedure under the Companies Act differs, and the purchase price may differ, from the purchase procedure and price under the Securities Market Act, as discussed above. However, if the threshold of nine-tenths has been exceeded through either a mandatory or a voluntary public offer pursuant to the Securities Market Act, the market price under the Companies Act is deemed to be the price offered in the public offer, unless there are specific reasons to deviate from it.

### ***Pre-Emptive Rights***

In connection with any offering of shares, the existing shareholders have a pre-emptive right to subscribe for shares offered in proportion to the amount of shares in their possession. However, a general meeting of shareholders may vote, by a majority of two-thirds of the votes cast and two-thirds of the shares represented at the meeting, to waive this pre-emptive right provided that, from the company's perspective, weighty financial grounds exist.

Under the Act on the Control of Foreigners' Acquisition of Finnish Companies (2012/172), a notification to the Ministry of Employment and the Economy is required for a non-resident of Finland, directly or indirectly, when acquiring one-tenth or more of the voting power or corresponding factual influence in a company. The Ministry of Employment and the Economy has to confirm the acquisition unless the acquisition would jeopardize important national interests, in which case the matter is referred to the Council of State. If the company in question is operating in the defense sector an approval by the Ministry of Employment and the Economy is required before the acquisition is made. These requirements are not applicable if, for instance, the voting power is acquired in a share issue that is proportional to the holder's ownership of the shares. Moreover, the requirements do not apply to residents of countries in the European Economic Area or EFTA countries.

### **10C. Material Contracts**

Not applicable.

### **10D. Exchange Controls**

There are currently no Finnish laws which may affect the import or export of capital, or the remittance of dividends, interest or other payments.

### **10E. Taxation**

#### **General**

The taxation discussion set forth below is intended only as a descriptive summary and does not purport to be a complete analysis or listing of all potential tax effects relevant to ownership of our shares represented by ADSs.

---

## **Table of Contents**

The statements of US and Finnish tax laws set out below are based on the laws in force as of the date of this annual report and may be subject to any changes in US or Finnish law, and in any double taxation convention or treaty between the United States and Finland, occurring after that date, possibly with retroactive effect.

For purposes of this summary, beneficial owners of ADSs that hold the ADSs as capital assets and that are considered residents of the United States for purposes of the current income tax convention between the United States and Finland, signed September 21, 1989 (as amended by a protocol signed May 31, 2006), referred to as the Treaty, and that are entitled to the benefits of the Treaty under the Limitation on Benefits provisions contained in the Treaty, are referred to as US Holders. Beneficial owners that are citizens or residents of the United States, corporations created in or organized under US law, and estates or trusts (to the extent their income is subject to US tax either directly or in the hands of beneficiaries) generally will be considered to be residents of the United States under the Treaty. Special rules apply to US Holders that are also residents of Finland and to citizens or residents of the United States that do not maintain a substantial presence, permanent home or habitual abode in the United States. For purposes of this discussion, it is assumed that the Depositary and its custodian will perform all actions as required by the deposit agreement with the Depositary and other related agreements between the Depositary and Nokia.

If a partnership holds ADSs (including for this purpose any entity treated as a partnership for US federal income tax purposes), the tax treatment of a partner will depend upon the status of the partner and activities of the partnership. If a US Holder is a partner in a partnership that holds ADSs, the holder is urged to consult its own tax advisor regarding the specific tax consequences of owning and disposing of its ADSs.

Because this summary is not exhaustive of all possible tax considerations such as situations involving financial institutions, banks, tax-exempt entities, pension funds, US expatriates, real estate investment trusts, persons that are dealers in securities, persons who own (directly, indirectly or by attribution) 10% or more of the share capital or voting stock of Nokia, persons who acquired their ADSs pursuant to the exercise of employee stock options or otherwise as compensation, or persons whose functional currency is not the US dollar, who may be subject to special rules that are not discussed herein holders of shares or ADSs that are US Holders are advised to satisfy themselves as to the overall US federal, state and local tax consequences, as well as to the overall Finnish and other applicable non-US tax consequences, of their ownership of ADSs and the underlying shares by consulting their own tax advisors. This summary does not discuss the treatment of ADSs that are held in connection with a permanent establishment or fixed base in Finland.

For the purposes of both the Treaty and the US Internal Revenue Code of 1986, as amended, referred to as the Code, US Holders of ADSs will be treated as the owners of the underlying shares that are represented by those ADSs. Accordingly, the following discussion, except where otherwise expressly noted, applies equally to US Holders of ADSs, on the one hand, and of shares, on the other.

The holders of ADSs will, for Finnish tax purposes, be treated as the owners of the shares that are represented by the ADSs. The Finnish tax consequences to the holders of shares, as discussed below, also apply to the holders of ADSs.

### **US and Finnish Taxation of Cash Dividends**

For US federal income tax purposes, the gross amount of dividends paid to US Holders of shares or ADSs, including any related Finnish withholding tax, generally will be included in gross income as foreign source dividend income. Dividends will not be eligible for the dividends received deduction allowed to corporations under Section 243 of the Code. The amount includible in income (including any Finnish withholding tax) will equal the US dollar value of the payment, determined at the time such payment is received by the Depositary (in the case of ADSs) or by the US Holder (in the case of

**Table of Contents**

shares), regardless of whether the payment is in fact converted into US dollars. Generally, any gain or loss resulting from currency exchange rate fluctuations during the period between the time such payment is received and the date the dividend payment is converted into US dollars will be treated as US source ordinary income or loss to a US Holder.

Special rules govern and specific elections are available to accrual method taxpayers to determine the US dollar amount includible in income in the case of a dividend paid (and taxes withheld) in foreign currency. Accrual basis taxpayers are urged to consult their own tax advisors regarding the requirements and elections applicable in this regard.

Under the Finnish Income Tax Act and Act on Taxation of Non-residents Income, non-residents of Finland are generally subject to a withholding tax at a rate of 30% payable on dividends paid by a Finnish resident company. However, pursuant to the Treaty, dividends paid to US Holders generally will be subject to Finnish withholding tax at a reduced rate of 15% of the gross amount of the dividend. Qualifying pension funds are, however, pursuant to the Treaty exempt from Finnish withholding tax. See also Finnish Withholding Taxes on Nominee Registered Shares below.

Subject to conditions and limitations, Finnish income taxes withheld will be treated as foreign taxes eligible for credit against a US Holder's US federal income tax liability. Dividends received generally will constitute foreign source passive category income for foreign tax credit purposes. In lieu of a credit, a US Holder may elect to deduct all of its foreign taxes provided the deduction is claimed for all of the foreign taxes paid by the US Holder in a particular year. A deduction does not reduce US tax on a dollar-for-dollar basis like a tax credit. The deduction, however, is not subject to the limitations applicable to foreign tax credits.

Provided that certain holding period and other requirements are met, certain US Holders (including individuals and some trusts and estates) are eligible for reduced rates of US federal income tax at a maximum rate of 15% in respect of qualified dividend income received in taxable years beginning before January 1, 2013; in respect of such income received in taxable years beginning after December 31, 2012, the maximum rate is 20%. Dividends that Nokia pays with respect to its shares and ADSs generally will be qualified dividend income if Nokia was not, in the year prior to the year in which the dividend was paid, and is not, in the year in which the dividend is paid, a passive foreign investment company (a PFIC). Nokia currently believes that dividends paid with respect to its shares and ADSs will constitute qualified dividend income for US federal income tax purposes, however, this is a factual matter and is subject to change. Nokia anticipates that its dividends will be reported as qualified dividends on Forms 1099-DIV delivered to US Holders. US Holders of shares or ADSs are urged to consult their own tax advisors regarding the availability to them of the reduced dividend tax rate in light of their own particular situation and the computations of their foreign tax credit limitation with respect to any qualified dividends paid to them, as applicable.

We believe that we should not be classified as a PFIC for US federal income tax purposes for the taxable year ended December 31, 2012 and we do not expect to become a PFIC in the foreseeable future. US Holders are advised, however, that this conclusion is a factual determination that must be made annually and thus may be subject to change. If we were to be classified as a PFIC, the tax on distributions on our shares or ADSs and on any gains realized upon the disposition of our shares or ADSs may be less favorable than as described herein. Dividends paid by a PFIC are not qualified dividend income and are not eligible for reduced rates of taxation. In addition, US persons that are shareholders in a PFIC generally will be required to file an annual report disclosing the ownership of such shares and certain other information as yet to be determined. US Holders should consult their own tax advisors regarding the application of the PFIC rules (including the new reporting requirements) to their ownership of our shares or ADSs.

---

## **Table of Contents**

The US Treasury has expressed concern that parties to whom ADSs are released may be taking actions inconsistent with the claiming of foreign tax credits or reduced rates in respect of qualified dividends by US Holders of ADSs. Accordingly, the analysis of the creditability of Finnish withholding taxes or the availability of qualified dividend treatment could be affected by future actions that may be taken by the US Treasury with respect to ADSs.

### **Finnish Withholding Taxes on Nominee Registered Shares**

Generally, for US Holders, the reduced 15% withholding tax rate of the Treaty (instead of 30%) is applicable to dividends paid to nominee-registered shares only when the conditions of the provisions applied to dividends are met (Section 10b of the Finnish Act on Taxation of Non-residents Income).

According to the provisions, the Finnish account operator and a foreign custodian are required to have a custody agreement, according to which the custodian undertakes to (a) declare the country of residence of the beneficial owner of the dividend, (b) confirm the applicability of the Treaty to the dividend, (c) inform the account operator of any changes to the country of residence or the applicability of the Treaty, and (d) provide the legal identification and address of the beneficial owner of the dividend and a certificate of residence issued by the local tax authorities upon request. It is further required that the foreign custodian is domiciled in a country with which Finland has entered into a treaty for the avoidance of double taxation and that the custodian is entered into the register of foreign custodians maintained by the Finnish tax authorities.

In general, if based on an applicable treaty for the avoidance of double taxation the withholding tax rate for dividends is 15% or higher, the treaty rate may be applied when the above-described conditions of the new provisions are met (Section 10b of the Finnish Act on Taxation of Non-residents Income). A lower rate than 15% may be applied based on the applicable treaty for the avoidance of double taxation only when the following information on the beneficial owner of the dividend is provided to the payer prior to the dividend payment: name, date of birth or business ID (if applicable) and address in the country of residence.

### **US and Finnish Tax on Sale or Other Disposition**

A US Holder generally will recognize taxable capital gain or loss on the sale or other disposition of ADSs in an amount equal to the difference between the US dollar value of the amount realized and the adjusted tax basis (determined in US dollars) in the ADSs. If the ADSs are held as a capital asset, this gain or loss generally will be long-term capital gain or loss if, at the time of the sale, the ADSs have been held for more than one year. Any capital gain or loss, for foreign tax credit purposes, generally will constitute US source gain or loss. In the case of a US Holder that is an individual, long-term capital gain generally is subject to US federal income tax at preferential rates. The deductibility of capital losses is subject to significant limitations.

The deposit or withdrawal by a US Holder of shares in exchange for ADSs or of ADSs for shares under the deposit agreement generally will not be subject to US federal income tax or Finnish income tax.

The sale by a US Holder of the ADSs or the underlying shares, other than an individual that, by reason of his residence in Finland for a period exceeding six months, is or becomes liable for Finnish income tax according to the relevant provisions of Finnish tax law, generally will not be subject to income tax in Finland, in accordance with Finnish tax law and the Treaty.

### **Finnish Capital Taxes**

The Finnish capital tax regime was abolished in the beginning of 2006.

**Table of Contents****Finnish Transfer Tax**

Transfers of shares and ADSs could be subject to the Finnish transfer tax only when one of the parties to the transfer is subject to Finnish taxation under the Finnish Income Tax Act by virtue of being a resident of Finland or a Finnish branch of a non-Finnish credit institution. In accordance with the amendments in the Finnish Transfer Tax Act (applicable as of November 9, 2007) no transfer tax is payable on the transfer of shares or ADSs (irrespective of whether the transfer is carried out on a stock exchange or not). However, there are certain conditions for the exemption. Prior to the said amendments, transfer tax was not payable on stock exchange transfers. In cases where the transfer tax would be payable, the transfer tax would be 1.6% of the transfer value of the security traded.

**Finnish Inheritance and Gift Taxes**

A transfer of an underlying share by gift or by reason of the death of a US Holder and the transfer of an ADS are not subject to Finnish gift or inheritance tax provided that none of the deceased person, the donor, the beneficiary of the deceased person or the recipient of the gift is resident in Finland.

**Non-Residents of the United States**

Beneficial owners of ADSs that are not US Holders will not be subject to US federal income tax on dividends received with respect to ADSs unless such dividend income is effectively connected with the conduct of a trade or business within the United States. Similarly, non-US Holders generally will not be subject to US federal income tax on any gain realized on the sale or other disposition of ADSs, unless (a) the gain is effectively connected with the conduct of a trade or business in the United States or (b) in the case of an individual, that individual is present in the United States for 183 days or more in the taxable year of the disposition and other conditions are met.

**US Information Reporting and Backup Withholding**

Dividend payments with respect to shares or ADSs and proceeds from the sale or other disposition of shares or ADSs may be subject to information reporting to the Internal Revenue Service and possible US backup withholding. Backup withholding will not apply to a holder if the holder furnishes a correct taxpayer identification number or certificate of foreign status and makes any other required certification in connection therewith or if it is a recipient otherwise exempt from backup withholding (such as a corporation). Any US person required to establish its exempt status generally must furnish a duly completed IRS Form W-9 (Request for Taxpayer Identification Number and Certification). Non-US holders generally are not subject to US information reporting or backup withholding. However, such holders may be required to provide certification of non-US status (generally on IRS Form W-8BEN) in connection with payments received in the United States or through certain US-related financial intermediaries. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a holder's US federal income tax liability, and the holder may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the Internal Revenue Service and furnishing any required information.

**10F. Dividends and Paying Agents**

Not applicable.

**10G. Statement by Experts**

Not applicable.

**10H. Documents on Display**

The documents referred to in this annual report can be read at the Securities and Exchange Commission's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549.

**Table of Contents****10I. Subsidiary Information**

Not applicable.

**ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

See Note 34 to our consolidated financial statements included in Item 18 of this annual report for information on market risk.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES****12D. American Depositary Shares****12D.3 Depositary Fees and Charges**

Our American Depositary Shares, or ADSs, each representing one of our shares, are traded on the New York Stock Exchange under the symbol NOK. The ADSs are evidenced by American Depositary Receipts, or ADRs, issued by Citibank, N.A., as Depositary under the Amended and Restated Deposit Agreement dated as of March 28, 2000, among Nokia, Citibank, N.A. and registered holders from time to time of ADRs, as amended on February 6, 2008. ADS holders may have to pay the following service fees to the Depositary:

Service	Fees (USD)
Issuance of ADSs	Up to 5 cents per ADS <sup>(1)</sup>
Cancellation of ADSs	Up to 5 cents per ADS <sup>(1)</sup>
Distribution of cash dividends or other cash distributions	Up to 2 cents per ADS <sup>(2)</sup>
Distribution of ADSs pursuant to (i) stock dividends, free stock distributions or (ii) exercises of rights to purchase additional ADSs	Up to 5 cents per ADS <sup>(2)</sup>
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to 5 cents per ADS <sup>(1)</sup>
ADR transfer fee	USD 1.50 per transfer <sup>(1)</sup>

(1) These fees are typically paid to the Depositary by the brokers on behalf of their clients receiving the newly-issued ADSs from the Depositary and by the brokers on behalf of their clients delivering the ADSs to the Depositary for cancellation. The brokers in turn charge these transaction fees to their clients.

(2) In practice, the Depositary has not collected these fees. If collected, such fees are offset against the related distribution made to the ADR holder.

In addition, ADS holders are responsible for certain fees and expenses incurred by the Depositary on their behalf and certain governmental charges such as taxes and registration fees, transmission and delivery expenses, conversion of foreign currency and fees relating to compliance with exchange control regulations. The fees and charges may vary over time.

In the event of refusal to pay the depositary fees, the Depositary may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set-off the amount of the depositary fees from any distribution to be made to the ADR holder.

**Table of Contents****12D.4 Depositary Payments for 2012**

For the year ended December 31, 2012, our Depositary made the following payments on our behalf in relation to our ADR program.

Category	Payment (USD)
Settlement infrastructure fees (including the Depositary Trust Company fees)	33 572
Proxy process expenses (including printing, postage and distribution)	563 177
ADS holder identification expenses	92 947
Legal fees	2 841
<b>Total</b>	<b>692 537</b>

In addition, for the year ended December 31, 2012, our Depositary has agreed to reimburse us USD 8 348 321 mainly for contributions towards our investor relations activities, including investor meetings and conferences and fees of investor relations service vendors, and other miscellaneous expenses related to the US listing of our ADSs.

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

None.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

None.

**ITEM 15. CONTROLS AND PROCEDURES**

(a) *Disclosure Controls and Procedures.* Our President and Chief Executive Officer and our Executive Vice President, Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in US Exchange Act Rule 13a-15(e)) as of the end of the period covered by this annual report, have concluded that, as of such date, our disclosure controls and procedures were effective.

(b) *Management's Annual Report on Internal Control Over Financial Reporting.* Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the company. Our internal control over financial reporting is designed to provide reasonable assurance to our management and the Board of Directors regarding the reliability of financial reporting and the preparation and fair presentation of published financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurances with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may decline.

Management evaluated the effectiveness of our internal control over financial reporting based on the Committee of Sponsoring Organizations of the Treadway Commission, or COSO, framework. Based on this evaluation, management has assessed the effectiveness of Nokia's internal control over financial reporting, as at December 31, 2012, and concluded that such internal control over financial reporting is effective.

PricewaterhouseCoopers Oy, which has audited our consolidated financial statements for the year ended December 31, 2012, has issued an attestation report on the effectiveness of the company's internal control over financial reporting under Auditing Standard No. 5 of the Public Company Accounting Oversight Board (United States of America).

**Table of Contents**

(c) *Attestation Report of the Registered Public Accounting Firm.* See the Auditors' report on page F-1.

(d) *Changes in Internal Control Over Financial Reporting.* There were no changes in Nokia's internal control over financial reporting that occurred during the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, the Group's internal control over financial reporting during 2012.

**ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

The Board of Directors has determined that all of the members of the Audit Committee, including its Chairman, Jouko Karvinen, are audit committee financial experts as defined in Item 16A of Form 20-F. Mr. Karvinen and each of the other members of the Audit Committee is an independent director as defined in Section 303A.02 of the New York Stock Exchange's Listed Company Manual.

**ITEM 16B. CODE OF ETHICS**

We have adopted a code of ethics that applies to our Chief Executive Officer, President, Chief Financial Officer and Corporate Controller. This code of ethics is available on our website, [www.nokia.com](http://www.nokia.com) at the corporate governance section under "Our company."

**ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES****Auditor Fees and Services**

PricewaterhouseCoopers Oy has served as our independent auditor for each of the fiscal years in the three-year period ended December 31, 2012. The independent auditor is elected annually by our shareholders at the Annual General Meeting for the fiscal year in question. The Audit Committee of the Board of Directors makes a proposal to the shareholders in respect of the appointment of the auditor based upon its evaluation of the qualifications and independence of the auditor to be proposed for election or re-election on an annual basis.

The following table sets forth the aggregate fees for professional services and other services rendered by PricewaterhouseCoopers to Nokia in 2012 and 2011 in total, with a separate presentation of those fees related to Nokia and Nokia Siemens Networks.

	2012			2011		
	Nokia	Nokia Siemens Networks	Total	Nokia	Nokia Siemens Networks	Total
Audit Fees <sup>(1)</sup>	7.2	10.2	17.4	7.2	10.9	18.1
Audit-Related Fees <sup>(2)</sup>	0.8	1.4	2.2	1.3	2.3	3.6
Tax Fees <sup>(3)</sup>	2.4	1.6	4.0	2.8	2.1	4.9
All Other Fees <sup>(4)</sup>	0.3	0.0	0.3	1.1		1.1
<b>Total</b>	<b>10.7</b>	<b>13.2</b>	<b>23.9</b>	<b>12.4</b>	<b>15.3</b>	<b>27.7</b>

- (1) Audit Fees consist of fees billed for the annual audit of the company's consolidated financial statements and the statutory financial statements of the company's subsidiaries.
- (2) Audit-Related Fees consist of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the company's financial statements or that are traditionally performed by the independent auditor, and include consultations concerning financial accounting and reporting standards; advice on tax accounting matters; advice and assistance in connection with local statutory accounting requirements; due diligence related to acquisitions or divestitures; financial due diligence in connection with provision of funding to customers; reports in relation to covenants in loan agreements; employee benefit plan audits and reviews; and audit procedures in connection with





**Table of Contents**

- investigations and compliance programs. They also include fees billed for other audit services, which are those services that only the independent auditor reasonably can provide, and include the provision of comfort letters and consents in connection with statutory and regulatory filings and the review of documents filed with the SEC and other capital markets or local financial reporting regulatory bodies.
- (3) Tax fees include fees billed for (i) corporate and indirect compliance including preparation and/or review of tax returns, preparation, review and/or filing of various certificates and forms and consultation regarding tax returns and assistance with revenue authority queries; (ii) transfer pricing advice and assistance with tax clearances; (iii) customs duties reviews and advice; (iv) consultations and tax audits (assistance with technical tax queries and tax audits and appeals and advice on mergers, acquisitions and restructurings); (v) personal compliance (preparation of individual tax returns and registrations for employees (non-executives), assistance with applying visa, residency, work permits and tax status for expatriates); and (vi) consultation and planning (advice on stock-based remuneration, local employer tax laws, social security laws, employment laws and compensation programs and tax implications on short-term international transfers).
- (4) All Other Fees include fees billed for company establishment, forensic accounting, data security, investigations and reviews of licensing arrangements with customers, other consulting services and occasional training or reference materials and services.

**Audit Committee Pre-Approval Policies and Procedures**

The Audit Committee of our Board of Directors is responsible, among other matters, for the oversight of the external auditor subject to the requirements of Finnish law. The Audit Committee has adopted a policy regarding pre-approval of audit and permissible non-audit services provided by our independent auditors (the Policy ).

Under the Policy, proposed services either (i) may be pre-approved by the Audit Committee without specific case-by-case services approvals ( general pre-approval ); or (ii) require the specific pre-approval of the Audit Committee ( specific pre-approval ). The Audit Committee may delegate either type of pre-approval authority to one or more of its members. The appendices to the Policy set out the audit, audit-related, tax and other services that have received the general pre-approval of the Audit Committee. All other audit, audit-related (including services related to internal controls and significant M&A projects), tax and other services are subject to a specific pre-approval from the Audit Committee. All service requests concerning generally pre-approved services will be submitted to the Corporate Controller, who will determine whether the services are within the services generally pre-approved. The Policy and its appendices are subject to annual review by the Audit Committee.

The Audit Committee establishes budgeted fee levels annually for each of the four categories of audit and non-audit services that are pre-approved under the Policy, namely, audit, audit-related, tax and other services. Requests or applications to provide services that require specific approval by the Audit Committee are submitted to the Audit Committee by both the independent auditor and the Corporate Controller. At each regular meeting of the Audit Committee, the independent auditor provides a report in order for the Audit Committee to review the services that the auditor is providing, as well as the status and cost of those services.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

Not applicable.

**ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

There were no purchases of Nokia shares or ADSs by Nokia Corporation or its affiliates during 2012.

**Table of Contents****ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT**

None.

**ITEM 16G. CORPORATE GOVERNANCE**

The following is a summary of any significant ways in which our corporate governance practices differ from those followed by US domestic companies under the corporate governance standards of the New York Stock Exchange, or NYSE. There are no significant differences in the corporate governance practices followed by us as compared to those followed by US domestic companies under the NYSE corporate governance standards, except that we follow the requirements of Finnish law with respect to the approval of equity compensation plans. Under Finnish law, stock option plans require shareholder approval at the time of their launch. All other plans that include the delivery of company stock in the form of newly-issued shares or treasury shares require a shareholder approval at the time of the delivery of the shares or, if the shareholder approval is granted through an authorization to the Board of Directors, no more than a maximum of five years earlier. The NYSE corporate governance standards require that the equity compensation plans be approved by a company's shareholders.

Our corporate governance practices comply with the Finnish Corporate Governance Code, approved by the boards of the Finnish Securities Market Association and NASDAQ OMX Helsinki effective as of October 1, 2010, with one exception outlined below. The Finnish Corporate Governance Code is available, for instance, at [www.cgfinland.fi](http://www.cgfinland.fi).

Nokia is not in full compliance with recommendation 39 of the Finnish Corporate Governance Code as Nokia's Restricted Share Plans do not include any performance criteria but are time-based only, with a restriction period of at least three years from the grant. Restricted shares are granted on a selective basis to promote long-term retention of individuals with functional mastery and other employees and executives deemed critical for the future success of Nokia as well as to support attraction of promising external talent in a competitive environment in which Nokia's peers, especially in the United States, commonly use such shares. The Restricted Share Plans also promote employee share ownership, and are used in conjunction with the Performance Share and Stock Option Plans.

**ITEM 16H. MINE SAFETY DISCLOSURE**

Not applicable.

**PART III****ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

**ITEM 18. FINANCIAL STATEMENTS**

The following financial statements are filed as part of this annual report:

<u>Consolidated Financial Statements Report of Independent Registered Public Accounting Firm</u>	F-1
<u>Consolidated Income Statements</u>	F-2
<u>Consolidated Statements of Comprehensive Income</u>	F-3
<u>Consolidated Statements of Financial Position</u>	F-4
<u>Consolidated Statements of Cash Flows</u>	F-5
<u>Consolidated Statements of Changes in Shareholders' Equity</u>	F-7
<u>Notes to the Consolidated Financial Statements</u>	F-9



**Table of Contents**

**ITEM 19. EXHIBITS**

- \*1 Articles of Association of Nokia Corporation.
- 6 See Note 28 to our consolidated financial statements included in Item 18 of this annual report for information on how earnings per share information was calculated.
- 8 List of significant subsidiaries.
- 12.1 Certification of Stephen Elop, Chief Executive Officer of Nokia Corporation, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 12.2 Certification of Timo Ihamuotila, Chief Financial Officer of Nokia Corporation, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 13 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 15.(a) Consent of Independent Registered Public Accounting Firm.

\* Incorporated by reference to our annual report on Form 20-F for the fiscal year ended December 31, 2010.

---

**Table of Contents**

**GLOSSARY OF TERMS**

**2G (second generation mobile communications):** A digital cellular system such as GSM 900, 1800 and 1900.

**3G (third generation mobile communications):** A digital system for mobile communications that provides increased bandwidth and lets a mobile device user access a wide variety of services, such as multimedia.

**3GPP (Third Generation Partnership Project) and 3GPP2 (Third Generation Partnership Project 2):** Projects in which standards organizations and other related bodies have agreed to cooperate on the production of globally applicable technical specifications for a third generation mobile system.

**Access network:** A telecommunications network between a local exchange and the subscriber station.

**ADSL (asymmetric digital subscriber line):** A technology that enables high-speed data communication over existing twisted pair telephone lines and supports a downstream data rate of 1.5 – 8 Mbps and an upstream data rate of 16 kbps – 1 Mbps.

**Asha:** The product name for our high-end feature phones and most affordable smartphones powered by the Series 40 operating system.

**ASP (average selling price):** Our total mobile device ASP represents total Devices & Services net sales – comprised of our Smart Devices, Mobile Phones and Devices & Services Other net sales – divided by total Devices & Services volumes. Devices & Services Other net sales includes net sales of Nokia’s luxury phone business Vertu through October 12, 2012, spare parts, as well as IPR income. As IPR income is included in Devices & Services Other net sales, we provide our total mobile device ASP both including and excluding IPR income. Smart Devices ASP represents Smart Devices net sales divided by Smart Devices volumes. Mobile Phones ASP represents Mobile Phones net sales divided by Mobile Phones volumes. IPR income is not recognized at the Smart Devices and Mobile Phone business unit levels.

**Bandwidth:** The width of a communication channel, which affects transmission speeds over that channel.

**Base station:** A network element in a mobile network responsible for radio transmission and reception to or from the mobile station.

**Base station controller:** A network element in a mobile network for controlling one or more base transceiver stations in the call set-up functions, in signaling, in the use of radio channels, and in various maintenance tasks.

**Broadband:** The delivery of higher bandwidth by using transmission channels capable of supporting data rates greater than the primary rate of 9.6 Kbps.

**CDMA (Code Division Multiple Access):** A technique in which radio transmissions using the same frequency band are coded in a way that a signal from a certain transmitter can be received only by certain receivers.

**Cellular network:** A mobile telephone network consisting of switching centers, radio base stations and transmission equipment.

**Convergence:** The coming together of two or more disparate disciplines or technologies. Convergence types are, for example, IP convergence, fixed-mobile convergence and device convergence.

---

**Table of Contents**

**Core network:** A combination of exchanges and the basic transmission equipment that together form the basis for network services.

**Digital:** A signaling technique in which a signal is encoded into digits for transmission.

**Ecosystem:** An industry term to describe the increasingly large communities of mutually beneficial partnerships that participants such as hardware manufacturers, software providers, developers, publishers, entertainment providers, advertisers and ecommerce specialists form in order to bring their offerings to market. At the heart of the major ecosystems in the mobile devices and related services industry is the operating system and the development platform upon which services are built.

**EDGE (Enhanced Data Rates for Global Evolution):** A technology to boost cellular network capacity and increase data rates of existing GSM networks to as high as 473 Kbit/s.

**Engine:** Hardware and software that perform essential core functions for telecommunication or application tasks. A mobile device engine includes, for example, the printed circuit boards, radio frequency components, basic electronics and basic software.

**Ethernet:** A type of local area network (LAN).

**ETSI (European Telecommunications Standards Institute):** Standards produced by the ETSI contain technical specifications laying down the characteristics required for a telecommunications product.

**Feature phone:** Mobile devices that support a wide range of functionalities and applications, such as Internet connectivity and access to our services, but whose software capabilities are generally less powerful than those of smartphones. Our feature phones are based on Series 30, a non-programmable operating system that powers our most cost-effective voice and messaging phones, and Series 40, which supports a wider range of different functionalities and applications, such as Internet connectivity.

**GPRS (General Packet Radio Services):** A service that provides packet switched data, primarily for second generation GSM networks.

**GPS (Global Positioning System):** Satellite-based positioning system that is used for reading geographical position and as a source of the accurate coordinated universal time.

**GSM (Global System for Mobile Communications):** A digital system for mobile communications that is based on a widely accepted standard and typically operates in the 900 MHz, 1800 MHz and 1900 MHz frequency bands.

**HERE:** The new name of our former Location & Commerce business and reportable segment and also the brand for the location-based products and services we build for a broad range of devices and operating systems, including our Lumia smartphones.

**HSPA (High-Speed Packet Access):** A wideband code division multiple access feature that refers to both 3GPP high-speed downlink packet access and high-speed uplink packet access.

**I-HSPA (Internet-HSPA):** A 3GPP standards-based simplified network architecture innovation from Nokia implemented as a data overlay radio access layer that can be built with already deployed WCDMA base stations.

**IMS (IP Multimedia Subsystem):** A subsystem providing IP multimedia services that complement the services provided by the circuit switched core network domain.

**IP (Internet Protocol):** A network layer protocol that offers a connectionless Internet work service and forms part of the TCP/IP protocol.

**IPR (Intellectual Property Right):** Legal right protecting the economic exploitation of intellectual property, a generic term used to describe products of human intellect, for example, patents, that have an economic value.

## **Table of Contents**

***IPTV (Internet Protocol television):*** Television services delivered over Internet protocol infrastructure through a telephone or cable network using a broadband access line.

***Java:*** An object-oriented programming language that is intended to be hardware and software independent.

***LTE (Long-Term Evolution):*** 3GPP radio technology evolution architecture.

***Lumia:*** the product name for our family of smartphones powered by Windows Phone.

***MeeGo:*** A Linux-based, open source software platform which we last deployed in our Nokia N9 smartphone, launched in 2011. Under Nokia's strategy announced on February 11, 2011, we are transitioning to Windows Phone as our primary smartphone platform.

***Mobile phone:*** A generic term for devices that are used for mobile communications over a cellular network. Often used to refer to mobile devices whose software capabilities are generally less powerful than those of smartphones. See also *Feature phone*.

***Multiradio:*** Able to support several different radio access technologies.

***NFC (near field communication):*** a short-range wireless technology that enables people to connect one NFC enabled device with another, or to read an NFC tag. By bringing one NFC-enabled mobile device close to another NFC device, or to an NFC tag, people can easily share content; access information and services; or pay for goods.

***NGOA (Next Generation Optical Access):*** Future telecommunications system based on fiber optic cables capable of achieving bandwidth data rates greater than 100 Mbps.

***Nokia Life:*** a subscription-based service that gives its subscribers regular and relevant information updates on local market prices, weather conditions, the availability of seeds, fertilizers and pesticides, as well as news and advice.

***Nokia Music:*** a digital music service from Nokia that offers free unlimited streaming via hundreds of ad-free music channels on or off-line.

***OFDM (Orthogonal Frequency-Division Multiplexing):*** A technique for transmitting large amounts of digital data over a radio wave. OFDM works by splitting the radio signal into multiple smaller sub-signals that are then transmitted simultaneously at different frequencies to the receiver.

***Open source:*** Refers to a program in which the source code is available to the general public for use and modification from its original design free of charge.

***Operating system (OS):*** Software that controls the basic operation of a computer or a mobile device, such as managing the processor and memory. The term is also often used to refer more generally to the software within a device, including, for instance, the user interface.

***Packet:*** Part of a message transmitted over a packet switched network.

***Platform:*** Software platform is a term used to refer to an operating system or programming environment, or a combination of the two.

***PND (personal navigation device):*** A term used to describe portable devices or devices embedded in a vehicle that are used primarily for navigation. Smartphones and increasingly feature phones may include navigation functionalities, but are not generally referred to as PNDs.

***PureView:*** The name for Nokia's high performance imaging experiences. PureView represents a set of industry leading imaging technologies, rather than a single element, feature or specification.

***Series 30:*** A software platform that powers our most cost-effective voice and messaging feature phones.

***Series 40:*** A software platform that powers our feature phones as well as our most affordable Asha full touch smartphones.





## **Table of Contents**

**Smartphone:** A generic category of mobile devices with sophisticated software and embedded services. Smartphones can run applications such as email, web browsing, navigation, social networking and enterprise software, and can also have built-in music players, video recorders, and other multimedia features. Software capabilities are generally more powerful in smartphones than in feature phones (See *feature phone*). We offer smartphones under the Asha and Lumia product names.

**Symbian:** A software platform which supports a wide array of functionalities, and provides opportunities for the development of sophisticated applications and content by third parties. Under Nokia's strategy announced on February 11, 2011, we are transitioning to Windows Phone as our primary smartphone platform.

**TD-LTE (time division long term evolution):** An alternative standard for LTE mobile broadband networks.

**TD-SCDMA (time division synchronous code division multiple access):** An alternative 3G standard.

**Transmission:** The action of conveying signals from one point to one or more other points.

**VDSL (very high bit rate digital subscriber line):** A form of digital subscriber line similar to asymmetric digital subscriber line (ADSL) but providing higher speeds at reduced lengths.

**VoIP (Voice over Internet Protocol):** Use of the Internet protocol to carry and route two-way voice communications.

**WCDMA (Wideband Code Division Multiple Access):** A third-generation mobile wireless technology that offers high data speeds to mobile and portable wireless devices.

**Windows 8:** A version of the Microsoft Windows operating system, developed by Microsoft. Windows 8 shares many of the same core technologies as Windows Phone 8, the latest version of the software platform designed for smartphones.

**Windows Phone:** A software platform developed by Microsoft that Nokia is deploying as its principal smartphone operating system. Our partnership with Microsoft is providing us with opportunities to innovate and customize on the Windows Phone platform, such as in imaging and location-based services where we are a market leader, with a view to differentiating Nokia smartphones from those of our competitors that also use the Windows Phone platform. We are contributing our expertise on hardware, design and language support, and plan to bring Windows Phone to a broad range of price points, market segments and geographies.

**WiMAX (Worldwide Interoperability for Microwave Access):** A technology of wireless networks that operates according to the 802.16 standard of the Institute of Electrical and Electronics Engineers (IEEE).

**WLAN (wireless local area network):** A local area network using wireless connections, such as radio, microwave or infrared links, in place of physical cables.

---

**Table of Contents**

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Nokia Corporation

In our opinion, the accompanying consolidated statements of financial position and the related consolidated income statements, consolidated statements of comprehensive income, consolidated statements of changes in shareholders' equity and consolidated statements of cash flows present fairly, in all material respects, the financial position of Nokia Corporation and its subsidiaries at December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and in conformity with IFRS as adopted by the European Union. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting appearing under Item 15(b). Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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 management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Oy

Helsinki, Finland

March 7, 2013

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Income Statements**

	Notes	Financial year ended December 31		
		2012 EURm	2011 EURm	2010 EURm
<b>Net sales</b>		<b>30 176</b>	38 659	42 446
Cost of sales		<b>(21 786)</b>	(27 300)	(29 456)
<b>Gross profit</b>		<b>8 390</b>	11 359	12 990
Research and development expenses		<b>(4 782)</b>	(5 584)	(5 844)
Selling and marketing expenses		<b>(3 205)</b>	(3 769)	(3 856)
Administrative and general expenses		<b>(959)</b>	(1 085)	(1 039)
Impairment of goodwill	8		(1 090)	
Other income	7	<b>403</b>	221	476
Other expenses	7, 8	<b>(2 150)</b>	(1 125)	(657)
<b>Operating (loss) profit</b>	<b>2-10, 24</b>	<b>(2 303)</b>	(1 073)	2 070
Share of results of associated companies	<b>15, 31</b>	<b>(1)</b>	(23)	1
Financial income and expenses	<b>8, 11</b>	<b>(340)</b>	(102)	(285)
<b>(Loss) profit before tax</b>		<b>(2 644)</b>	(1 198)	1 786
Tax	12	<b>(1 145)</b>	(290)	(443)
<b>(Loss) profit</b>		<b>(3 789)</b>	(1 488)	1 343
<b>(Loss) profit attributable to equity holders of the parent</b>		<b>(3 106)</b>	(1 164)	1 850
<b>Loss attributable to non-controlling interests</b>		<b>(683)</b>	(324)	(507)
		<b>(3 789)</b>	(1 488)	1 343
		<b>2012</b>	2011	2010
		<b>EUR</b>	EUR	EUR
<b>Earnings per share</b>	<b>28</b>			
(for (loss) profit attributable to the equity holders of the parent)				
Basic		<b>(0.84)</b>	(0.31)	0.50
Diluted		<b>(0.84)</b>	(0.31)	0.50
		<b>2012</b>	2011	2010
<b>Average number of shares (000 s shares)</b>	<b>28</b>			
Basic		<b>3 710 845</b>	3 709 947	3 708 816
Diluted		<b>3 710 845</b>	3 709 947	3 713 250

See Notes to Consolidated Financial Statements.

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Comprehensive Income**

	Notes	Financial year ended December 31		
		2012 EURm	2011 EURm	2010 EURm
<b>(Loss) profit</b>		<b>(3 789)</b>	(1 488)	1 343
<b>Other comprehensive income (expense)</b>				
Items that may be reclassified subsequently to profit or loss				
Translation differences	22	39	9	1 302
Net investment hedges	22	(58)	(37)	(389)
Cash flow hedges	21	(41)	116	(141)
Available-for-sale investments	21	35	70	9
Other increase (decrease), net		10	(16)	45
Income tax related to components of other comprehensive income (expense)	21, 22	12	(16)	126
<b>Other comprehensive income (expense), net of tax</b>		<b>(3)</b>	126	952
<b>Total comprehensive income (expense)</b>		<b>(3 792)</b>	(1 362)	2 295
<b>Total comprehensive income (expense) attributable to</b>				
equity holders of the parent		(3 157)	(1 083)	2 776
non-controlling interests		(635)	(279)	(481)
		<b>(3 792)</b>	(1 362)	2 295

See Notes to Consolidated Financial Statements.

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Financial Position**

	Notes	December 31 2012 EURm	2011 EURm
<b>ASSETS</b>			
<b>Non-current assets</b>			
Goodwill	13	4 876	4 838
Other intangible assets	13	647	1 412
Property, plant and equipment	14	1 431	1 842
Investments in associated companies	15	58	67
Available-for-sale investments	16	689	641
Deferred tax assets	25	1 254	1 848
Long-term loans receivable	16, 34	112	99
Other non-current assets		4	3
		<b>9 071</b>	<b>10 750</b>
<b>Current assets</b>			
Inventories	18, 20	1 538	2 330
Accounts receivable, net of allowances for doubtful accounts (2012: EUR 248 million, 2011: EUR 284 million)	16, 20, 34	5 551	7 181
Prepaid expenses and accrued income	19	3 381	4 488
Current portion of long-term loans receivable	16, 34	35	54
Other financial assets	16, 17, 35	464	500
Investments at fair value through profit and loss, liquid assets	16, 34	415	433
Available-for-sale investments, liquid assets	16, 34	542	1 233
Available-for-sale investments, cash equivalents	16, 34	5 448	7 279
Bank and cash	34	3 504	1 957
		<b>20 878</b>	<b>25 455</b>
<b>Total assets</b>		<b>29 949</b>	<b>36 205</b>
<b>Notes</b>			
<b>SHAREHOLDERS EQUITY AND LIABILITIES</b>			
<b>Capital and reserves attributable to equity holders of the parent</b>			
Share capital	23	246	246
Share issue premium		446	362
Treasury shares, at cost		(629)	(644)
Translation differences	22	744	771
Fair value and other reserves	21	123	154
Reserve for invested non-restricted equity		3 136	3 148
Retained earnings		3 995	7 836
		<b>8 061</b>	<b>11 873</b>
<b>Non-controlling interests</b>		<b>1 386</b>	<b>2 043</b>
		<b>9 447</b>	<b>13 916</b>
<b>Non-current liabilities</b>			
Long-term interest-bearing liabilities	16, 34	5 087	3 969
Deferred tax liabilities	25	700	800
Other long-term liabilities		69	76
		<b>5 856</b>	<b>4 845</b>
<b>Current liabilities</b>			
Current portion of long-term loans	16, 34	201	357

Edgar Filing: NOKIA CORP - Form 20-F

Short-term borrowings	16, 34	261	995
Other financial liabilities	16, 17, 34	90	483
Accounts payable	16, 34	4 394	5 532
Accrued expenses and other liabilities	26	7 081	7 450
Provisions	27	2 619	2 627
		14 646	17 444
<b>Total shareholders' equity and liabilities</b>		<b>29 949</b>	<b>36 205</b>

See Notes to Consolidated Financial Statements.

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Cash Flows**

	Notes	Financial year ended December 31		
		2012	2011	2010
		EURm	EURm	EURm
<b>Cash flow from operating activities</b>				
(Loss) profit attributable to equity holders of the parent		(3 106)	(1 164)	1 850
Adjustments, total	32	3 838	3 486	2 112
Change in net working capital	32	123	(638)	2 349
Cash generated from operations		855	1 684	6 311
Interest received		130	190	110
Interest paid		(277)	(283)	(235)
Other financial income and expenses, net		(584)	264	(507)
Income taxes paid, net		(478)	(718)	(905)
<b>Net cash (used in) / from operating activities</b>		<b>(354)</b>	<b>1 137</b>	<b>4 774</b>
<b>Cash flow from investing activities</b>				
Acquisition of businesses, net of acquired cash		13	(817)	(110)
Purchase of current available-for-sale investments, liquid assets		(1 668)	(3 676)	(8 573)
Purchase of investments at fair value through profit and loss, liquid assets		(40)	(607)	(646)
Purchase of non-current available-for-sale investments		(55)	(111)	(124)
Purchase of shares in associated companies		(1)	(2)	(33)
Proceeds from (+) / payment of (-) other long-term receivables			(14)	2
Proceeds from (+) / payment of (-) short-term loans receivable		24	(31)	(2)
Capital expenditures		(461)	(597)	(679)
Proceeds from disposal of businesses, net of disposed cash		(15)	(2)	120
Proceeds from disposal of shares in associated companies		5	4	5
Proceeds from maturities and sale of current available-for-sale investments, liquid assets		2 355	6 090	7 181
Proceeds from maturities and sale of investments at fair value through profit and loss, liquid assets		86	1 156	333
Proceeds from sale of non-current available-for-sale investments		37	57	83
Proceeds from sale of fixed assets		279	48	21
Dividends received		3	1	1
<b>Net cash from / (used in) investing activities</b>		<b>562</b>	<b>1 499</b>	<b>(2 421)</b>
<b>Cash flow from financing activities</b>				
Other contributions from shareholders			546	
Purchase of treasury shares				1
Proceeds from long-term borrowings		752	1	482
Repayment of long-term borrowings		(266)	(51)	(6)
Proceeds from (+) / repayment of (-) short-term borrowings		(196)	(59)	131
Dividends paid		(755)	(1 536)	(1 519)
<b>Net cash used in financing activities</b>		<b>(465)</b>	<b>(1 099)</b>	<b>(911)</b>
<b>Foreign exchange adjustment</b>		<b>(27)</b>	<b>107</b>	<b>224</b>
<b>Net increase (+) / decrease (-) in cash and cash equivalents</b>		<b>(284)</b>	<b>1 644</b>	<b>1 666</b>
<b>Cash and cash equivalents at beginning of period</b>		<b>9 236</b>	<b>7 592</b>	<b>5 926</b>



<b>Cash and cash equivalents at end of period</b>	<b>8 952</b>	9 236	7 592
---	--------------	-------	-------

F-5

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Cash Flows (Continued)**

	Notes	Financial year ended December 31		
		2012 EURm	2011 EURm	2010 EURm
Cash and cash equivalents comprise of:				
Bank and cash		<b>3 504</b>	1 957	1 951
Current available-for-sale investments, cash equivalents	<b>16, 34</b>	<b>5 448</b>	7 279	5 641
		<b>8 952</b>	9 236	7 592

The figures in the consolidated cash flow statement 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.

See Notes to Consolidated Financial Statements.

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Changes in Shareholders' Equity**

	Number of shares (000 s)	Share capital	Share issue premium	Treasury shares	Translation differences	Fair value and other reserves	Reserve for invested non-restrict. equity	Retained earnings	Before non- controlling interests	Non- controlling interests	Total
<b>Balance at December 31, 2009</b>	<b>3 708 262</b>	<b>246</b>	<b>279</b>	<b>(681)</b>	<b>(127)</b>	<b>69</b>	<b>3 170</b>	<b>10 132</b>	<b>13 088</b>	<b>1 661</b>	<b>14 749</b>
Translation differences					1 240				1 240	64	1 304
Net investment hedges, net of tax					(288)				(288)		(288)
Cash flow hedges, net of tax						(73)			(73)	(43)	(116)
Available-for-sale investments, net of tax						7			7		7
Other increase, net								40	40	5	45
Profit								1 850	1 850	(507)	1 343
<b>Total comprehensive income</b>					<b>952</b>	<b>(66)</b>		<b>1 890</b>	<b>2 776</b>	<b>(481)</b>	<b>2 295</b>
Stock options exercised related to acquisitions			(1)						(1)		(1)
Share-based compensation			47						47		47
Excess tax benefit on share-based compensation			(1)						(1)		(1)
Settlement of performance and restricted shares	868		(12)	17			(9)		(4)		(4)
Reissuance of treasury shares				1					1		1
Conversion of debt to equity										766	766
Dividend								(1 483)	(1 483)	(56)	(1 539)
Acquisitions and other change in non-controlling interests								(39)	(39)	(43)	(82)
<b>Total of other equity movements</b>	<b>868</b>		<b>33</b>	<b>18</b>			<b>(9)</b>	<b>(1 522)</b>	<b>(1 480)</b>	<b>667</b>	<b>(813)</b>
<b>Balance at December 31, 2010</b>	<b>3 709 130</b>	<b>246</b>	<b>312</b>	<b>(663)</b>	<b>825</b>	<b>3</b>	<b>3 161</b>	<b>10 500</b>	<b>14 384</b>	<b>1 847</b>	<b>16 231</b>
Translation differences					(26)				(26)	35	9
Net investment hedges net of tax					(28)				(28)		(28)
Cash flow hedges, net of tax						84			84	10	94
Available-for-sale investments, net of tax						67			67		67
Other decrease, net								(16)	(16)		(16)
Loss								(1 164)	(1 164)	(324)	(1 488)
<b>Total comprehensive income</b>					<b>(54)</b>	<b>151</b>		<b>(1 180)</b>	<b>(1 083)</b>	<b>(279)</b>	<b>(1 362)</b>
Share-based compensation			18						18		18
Excess tax benefit on share-based compensation			(3)						(3)	(1)	(4)
Settlement of performance and restricted shares	1 059		(11)	19			(13)		(5)		(5)
Contributions from shareholders			46						46	500	546
Dividend								(1 484)	(1 484)	(39)	(1 523)
Acquisitions and other change in non-controlling interests										15	15
<b>Total of other equity movements</b>	<b>1 059</b>		<b>50</b>	<b>19</b>			<b>(13)</b>	<b>(1 484)</b>	<b>(1 428)</b>	<b>475</b>	<b>(953)</b>

**Table of Contents****Nokia Corporation and Subsidiaries****Consolidated Statements of Changes in Shareholders' Equity (Continued)**

	Number of shares (000 s)	Share capital	Share issue premium	Treasury shares	Translation differences	Fair value and other reserves	Reserve for invested non-restrict. equity	Retained earnings	Before non- controlling interests	Non- controlling interests	Total
<b>Balance at December 31, 2011</b>	<b>3 710 189</b>	<b>246</b>	<b>362</b>	<b>(644)</b>	<b>771</b>	<b>154</b>	<b>3 148</b>	<b>7 836</b>	<b>11 873</b>	<b>2 043</b>	<b>13 916</b>
Translation differences					40				40	(2)	38
Net investment hedges, net of tax					(67)				(67)		(67)
Cash flow hedges, net of tax						(67)			(67)	47	(20)
Available-for-sale investments, net of tax						36			36		36
Other increase, net							7	7	7	3	10
Loss								(3 106)	(3 106)	(683)	(3 789)
<b>Total comprehensive income</b>					<b>(27)</b>	<b>(31)</b>		<b>(3 099)</b>	<b>(3 157)</b>	<b>(635)</b>	<b>(3 792)</b>
Share-based compensation			1						1		1
Excess tax benefit on share-based compensation			3						3		3
Settlement of performance and restricted shares	796		(5)	15			(12)		(2)		(2)
Dividend								(742)	(742)	(22)	(764)
Convertible bond - equity component			85						85		85
<b>Total of other equity movements</b>	<b>796</b>		<b>84</b>	<b>15</b>			<b>(12)</b>	<b>(742)</b>	<b>(655)</b>	<b>(22)</b>	<b>(677)</b>
<b>Balance at December 31, 2012</b>	<b>3 710 985</b>	<b>246</b>	<b>446</b>	<b>(629)</b>	<b>744</b>	<b>123</b>	<b>3 136</b>	<b>3 995</b>	<b>8 061</b>	<b>1 386</b>	<b>9 447</b>

Dividends declared per share were EUR 0.00 for 2012 (EUR 0.20 for 2011 and EUR 0.40 for 2010), subject to shareholders' approval.

See Notes to Consolidated Financial Statements.

---

## **Table of Contents**

### **1. Accounting principles**

#### **Basis of presentation**

The consolidated financial statements of Nokia Corporation ( Nokia or the Group ), a Finnish public limited liability company with domicile in Helsinki, in the Republic of Finland, are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ( IASB ) and in conformity with IFRS as adopted by the European Union ( IFRS ). The consolidated financial statements are presented in millions of euros ( EURm ), except as noted, and are prepared under the historical cost convention, except as disclosed in the accounting policies below. The notes to the consolidated financial statements also conform to Finnish accounting legislation. Nokia s Board of Directors authorized the financial statements for 2012 for issuance and filing on March 7, 2013.

As of April 1, 2011, the Group s operational structure featured two new operating and reportable segments: Smart Devices and Mobile Phones, which combined with Devices & Services Other and unallocated items form Devices & Services business.

As of October 1, 2011, the Group formed a Location & Commerce business which combines NAVTEQ and Nokia s social location services operations from Devices & Services. Location & Commerce business is an operating and reportable segment. From the third quarter 2008 until the end of the third quarter 2011, NAVTEQ was a separate reportable segment of Nokia. As a result of this structure, Nokia currently has four operating and reportable segments: Smart Devices and Mobile Phones within Devices & Services, Location & Commerce and Nokia Siemens Networks.

As of January 1, 2013, Location & Commerce business and reportable segment has been renamed as the HERE business and reportable segment.

The presentation of Nokia Siemens Networks restructuring and other associated expenses has been aligned with other Nokia businesses and included within other expenses instead of impacting functions. Accordingly, included in other expenses in 2011 is EUR 126 million restructuring charges, previously reflected within cost of sales (EUR 40 million), R&D (EUR 28 million), selling and marketing (EUR 22 million) and administrative expenses (EUR 36 million). Included in other expenses in 2010 is EUR 289 million restructuring charges previously reflected within cost of sales (EUR 173 million), R&D (EUR 19 million), selling and marketing (EUR 21 million) and administrative expenses (EUR 76 million).

Certain notes to the financial statements include changes in presentation format. To allow meaningful comparison between years, comparative information have been aligned with current presentation format.

#### *Adoption of pronouncements under IFRS*

In the current year, the Group has adopted all of the new and revised standards, amendments and interpretations to existing standards issued by the IASB that are relevant to its operations and effective for accounting periods commencing on or after January 1, 2012.

Amendments to IAS 1 *Presentation of Financial Statements* retains the one or two statement approach at the option of the entity and only revises the way other comprehensive income is presented: Requiring separate subtotals for those elements which may be recycled and those elements that will not.

Amendment to IAS 12 *Income Taxes* provides clarification for measurement of deferred taxes in situations where an asset is measured using the fair value model in IAS 40 Investment Property by introducing a presumption that the carrying amount of the underlying asset will be recovered through sale.

---

## **Table of Contents**

In addition, a number of other amendments that form part of the IASB's annual improvement project were adopted by the Group.

The adoption of each of the above mentioned amendments did not have a material impact to the consolidated financial statements.

### **Principles of consolidation**

The consolidated financial statements include the accounts of Nokia's parent company ( Parent Company ), and each of those companies over which the Group exercises control. Control over an entity is presumed to exist when the Group owns, directly or indirectly through subsidiaries, over 50% of the voting rights of the entity, the Group has the power to govern the operating and financial policies of the entity through agreement or the Group has the power to appoint or remove the majority of the members of the board of the entity.

The Group's share of profits and losses of associates is included in the consolidated income statement in accordance with the equity method of accounting. An associate is an entity over which the Group exercises significant influence. Significant influence is generally presumed to exist when the Group owns, directly or indirectly through subsidiaries, over 20% of the voting rights of the company.

All inter-company transactions are eliminated as part of the consolidation process. Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. In the consolidated statement of financial position, non-controlling interests are presented within equity, separately from the equity of the owners of the parent.

The entities or businesses acquired during the financial periods presented have been consolidated from the date on which control of the net assets and operations was transferred to the Group. Similarly, the result of a Group entity or business divested during an accounting period is included in the Group accounts only to the date of disposal.

### **Business Combinations**

The acquisition method of accounting is used to account for acquisitions of separate entities or businesses by the Group. The consideration transferred in a business combination is measured as the aggregate of the fair values of the assets transferred, liabilities incurred towards the former owners of the acquired business and equity instruments issued. Acquisition-related costs are recognized as expense in profit and loss in the periods when the costs are incurred and the related services are received. Identifiable assets acquired and liabilities assumed by the Group are measured separately at their fair value as of the acquisition date. Non-controlling interests in the acquired business are measured separately based on their proportionate share of the identifiable net assets of the acquired business. The excess of the cost of the acquisition over the interest in the fair value of the identifiable net assets acquired and attributable to the owners of the parent, is recorded as goodwill.

### **Assessment of the recoverability of long-lived assets, intangible assets and goodwill**

For the purposes of impairment testing, goodwill is allocated to cash-generating units that are expected to benefit from the synergies of the acquisition in which the goodwill arose.

The Group assesses the carrying amount of goodwill annually or more frequently if events or changes in circumstances indicate that such carrying amount may not be recoverable. The Group assesses the carrying amount of identifiable intangible assets and long-lived assets if events or changes in circumstances indicate that such carrying amount may not be recoverable. Factors that could trigger an impairment review include significant underperformance relative to historical or projected future results, significant changes in the manner of the use of the acquired assets or the strategy for the overall business and significant negative industry or economic trends.

## **Table of Contents**

The Group conducts its impairment testing by determining the recoverable amount for the asset or cash-generating unit. The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use. If there is no reason to believe that cash-generating unit's value in use materially exceeds its fair value less costs to sell, the Group may use fair value less costs to sell as its recoverable amount.

Cash-generating unit, as determined for the purposes of the Group's goodwill impairment testing, is the smallest group of assets (including goodwill) generating cash inflows that are largely independent of the cash inflows from other assets or groups of assets. In testing a cash-generating unit for impairment, the Group identifies all corporate assets that relate to the cash-generating unit under review and those assets are allocated, on a reasonable and consistent basis, to the relevant units. The aggregate total carrying amount of the unit, including the portion of the carrying amount of the corporate assets allocated to the unit, is compared with its recoverable amount. An impairment loss is recognized if the recoverable amount is less than the carrying amount. Impairment losses are recognized immediately in the income statement.

### **Disposals of separate entities or businesses**

When a disposal transaction causes the Group to relinquish control over a separate entity or business, the Group records a gain or loss on disposal at the disposal date. The gain or loss on disposal is calculated as the difference between the fair value of the consideration received and the carrying amounts of derecognized net assets attributable to the equity holders of the parent and non-controlling interests of the disposed entity or business, adjusted by amounts previously recognized in other comprehensive income in relation to that entity or business.

### **Foreign currency translation**

#### *Functional and presentation currency*

The financial statements of all Group companies are measured using functional currency, which is the currency of the primary economic environment in which each of the companies operate. The consolidated financial statements are presented in euro, which is the functional and presentation currency of the Parent Company.

#### *Transactions in foreign currencies*

Transactions in foreign currencies are recorded at the rates of exchange prevailing at the dates of the individual 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 assets and liabilities are valued at the rates of exchange prevailing at the end of the accounting period. Foreign exchange gains and losses arising from statement of financial position items are reported in financial income and expenses. Unrealized foreign exchange gains and losses related to non-current available-for-sale investments are recognized in other comprehensive income.

#### *Foreign Group companies*

In the consolidated accounts, all income and expenses of foreign Group companies, where the functional currency is other than euro, are translated into euro at the average monthly foreign exchange rates. All assets and liabilities of foreign Group companies are translated into euro at the year-end foreign exchange rates. Differences resulting from the translation of income and expenses at the average rate and assets and liabilities at the closing rate are recognized in other comprehensive income as translation differences within consolidated shareholder's equity. On the disposal of all or

---

## **Table of Contents**

part of a foreign Group company by sale, liquidation, repayment of share capital or abandonment, the cumulative amount or proportionate share of the translation differences is recognized as income or as expense when the gain or loss on disposal is recognized.

### **Revenue recognition**

Majority of the Group's sales are recognized as revenue when the significant risks and rewards of ownership have transferred to the buyer, continuing managerial involvement usually associated with ownership and effective control have ceased, the amount of revenue can be measured reliably, it is probable that economic benefits associated with the transaction will flow to the Group and the costs incurred or to be incurred with respect to the transaction can be measured reliably. The Group records reductions to revenue for special pricing agreements, price protection and other volume-based discounts. Service revenue is generally recognized on a straight line basis over the service period unless there is evidence that some other method better represents the stage of completion. License fees from usage are recognized in the period when they are reliably measurable, which is normally when the customer reports them to the Group.

The Group enters into transactions involving multiple components consisting of any combination of hardware, services and software. The commercial effect of each separately identifiable component of the transaction is evaluated in order to reflect the substance of the transaction. The consideration received from these transactions is allocated to each separately identifiable component based on the relative fair value of each component. The Group determines the fair value of each component by taking into consideration factors such as the price when the component or a similar component is sold separately by the Group or a third party. The consideration allocated to each component is recognized as revenue when the revenue recognition criteria for that component have been met.

In addition, sales and cost of sales from contracts involving solutions achieved through modification of complex telecommunications equipment are recognized using the percentage of completion method when the outcome of the contract can be estimated reliably. A contract's outcome can be estimated reliably when total contract revenue and the costs to complete the contract can be estimated reliably, it is probable that the economic benefits associated with the contract will flow to the Group and the stage of contract completion can be measured reliably. When the Group is not able to meet one or more of the conditions, the policy is to recognize revenues only equal to costs incurred to date, to the extent that such costs are expected to be recovered.

Progress towards completion is measured by reference to cost incurred to date as a percentage of estimated total project costs, the cost-to-cost method.

The percentage of completion method relies on estimates of total expected contract revenue and costs, as well as dependable measurement of the progress made towards completing a particular project. Recognized revenues and profits are subject to revisions during the project in the event that the assumptions regarding the overall project outcome are revised. The cumulative impact of a revision in estimates is recorded in the period where such revisions become probable and can be estimated reliably. Losses on projects in progress are recognized in the period they become probable and can be estimated reliably.

### **Shipping and handling costs**

The costs of shipping and distributing products are included in cost of sales.

### **Research and development**

Research and development costs are expensed as they are incurred as they do not meet the criteria for capitalization.



## **Table of Contents**

### **Other intangible assets**

Acquired patents, trademarks, licenses, software licenses for internal use, customer relationships and developed technology are capitalized and amortized using the straight-line method over their useful lives, generally 3 to 7 years. Where an indication of impairment exists, the carrying amount of the related intangible asset is assessed for recoverability. Any resulting impairment losses are recognized immediately in the income statement.

### **Employee benefits**

#### *Pensions*

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 contributions to trustee-administered funds as determined by periodic actuarial calculations.

In a defined contribution plan, the Group has no legal or constructive obligation to make any additional contributions even if the party receiving the contributions is unable to pay the pension obligations in question. The Group's contributions to defined contribution plans, multi-employer and insured plans are recognized in the income statement in a period which the contributions relate to.

If a pension plan is funded through an insurance contract where the Group does not retain any legal or constructive obligations, the plan is treated as a defined contribution plan. All arrangements that do not fulfill these conditions are considered defined benefit plans.

For defined benefit plans, pension costs are assessed using the projected unit credit method: Pension cost is recognized in the income statement so as to spread the service cost over the service lives of employees. Pension obligation is measured as the present value of the estimated future cash outflows using interest rates on high quality corporate bonds with appropriate maturities. Actuarial gains and losses outside corridor are recognized over the average remaining service lives of employees. The corridor is defined as ten percent of the greater of the value of plan assets or defined benefit obligation at the beginning of the respective year. Actuarial gains and losses within the corridor limits are not recognized.

Past service costs are recognized immediately in income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, the past service costs are amortized on a straight-line basis over the vesting period.

The liability (or asset) recognized in the statement of financial position is pension obligation at the closing date less the fair value of plan assets, unrecognized actuarial gains and losses, and past service costs. Any net pension asset is limited to unrecognized actuarial losses, past service cost, the present value of available refunds from the plan and expected reductions in future contributions to the plan.

Actuarial valuations for the Group's defined benefit pension plans are performed annually. In addition, actuarial valuations are performed when a curtailment or settlement of a defined benefit plan occurs in the Group.

#### *Termination benefits*

Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group

**Table of Contents**

recognizes termination benefits when it is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal, or providing termination benefits as a result of an offer made to encourage voluntary redundancy.

**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 as follows:

Buildings and constructions	20	33 years
Light buildings and constructions	3	20 years
Production machinery, measuring and test equipment	1	5 years
Other machinery and equipment	3	10 years

Land and water areas are not depreciated.

Maintenance, repairs and renewals are generally charged to expense during the financial period in which they are incurred. However, major renovations are capitalized and included in the carrying amount of the asset when it is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will flow to the Group. Major renovations are depreciated over the remaining useful life of the related asset. Leasehold improvements are depreciated over the shorter of the lease term or useful life.

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

**Leases**

The Group has entered into various operating lease contracts. The related payments are treated as rentals and recognized in the income statement on a straight-line basis over the lease terms unless another systematic approach is more representative of the pattern of the user's benefit.

**Inventories**

Inventories are stated at the lower of cost or net realizable value. Cost is determined using standard cost, which approximates actual cost on a FIFO (First-in First-out) 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 overhead is included in the inventory values.

An allowance is recorded for excess inventory and obsolescence based on the lower of cost or net realizable value.

**Financial assets**

The Group has classified its financial assets to the following categories: available-for-sale investments, loans and receivables, financial assets at fair value through profit or loss and bank and cash.

*Available-for-sale investments*

The Group invests a portion of cash needed to cover projected cash needs of its on-going operations in highly liquid, interest-bearing investments and certain equity instruments. The following investments are classified as available-for-sale based on the purpose for acquiring the investments as well as

---

**Table of Contents**

ongoing intentions: (1) Highly liquid fixed income and money-market investments that are readily convertible to known amounts of cash with maturities at acquisition of 3 months or less, which are classified in the balance sheet as current available-for-sale investments, cash equivalents. Due to the high credit quality and short-term nature of these investments, there is an insignificant risk of changes in value. (2) Similar types of investments as in category (1), but with maturities at acquisition of longer than 3 months, are classified in the balance sheet as current available-for-sale investments, liquid assets. (3) Investments in technology related publicly quoted equity shares, or unlisted private equity shares and unlisted funds, are classified in the balance sheet as non-current available-for-sale investments.

Current fixed income and money-market investments are fair valued by using quoted market rates, discounted cash flow analyses and other appropriate valuation models at the balance sheet date. Investments in publicly quoted equity shares are measured at fair value using exchange quoted bid prices. Other available-for-sale investments carried at fair value include holdings in unlisted shares. Fair value is estimated by using various factors, including, but not limited to: (1) the current market value of similar instruments, (2) prices established from a recent arm's length financing transaction of the target companies, (3) analysis of market prospects and operating performance of the target companies taking into consideration the public market of comparable companies in similar industry sectors. The remaining available-for-sale investments, which are technology related investments in private equity shares and unlisted funds for which the fair value cannot be measured reliably due to non-existence of public markets or reliable valuation methods against which to value these assets, are carried at cost less impairment.

All purchases and sales of investments are recorded on the trade date, which is the date that the Group commits to purchase or sell the asset.

The changes in fair value of available-for-sale investments are recognized in fair value and other reserves as part of shareholders' equity, with the exception of interest calculated using the effective interest method as well as foreign exchange gains and losses on monetary assets, which are recognized directly in profit and loss. Dividends on available-for-sale equity instruments are recognized in profit and loss when the Group's right to receive payment is established. When the investment is disposed of, the related accumulated changes in fair value are released from shareholders' equity and recognized in profit and loss. The weighted average method is used when determining the cost basis of publicly listed equities being disposed of by the Group. FIFO (First-in First-out) method is used to determine the cost basis of fixed income securities being disposed of by the Group.

An impairment is recorded when the carrying amount of an available-for-sale investment is greater than the estimated fair value and there is objective evidence that the asset is impaired including, but not limited to, counterparty default and other factors causing a reduction in value that can be considered other than temporary. The cumulative net loss relating to that investment is removed from equity and recognized in profit and loss. If, in a subsequent period, the fair value of the investment in a non-equity instrument increases and the increase can be objectively related to an event occurring after the loss was recognized, the loss is reversed, with the amount of the reversal included in profit and loss.

*Investments at fair value through profit and loss, liquid assets*

Certain highly liquid financial assets are designated as Investments at fair value through profit and loss, liquid assets, at inception. For these investments the following criteria must be met: (1) the designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the assets or recognizing gains or losses on a different basis; or (2) the assets are part of a group of financial assets, which are managed and their performance evaluated on a fair value basis, in accordance with a documented risk management or investment strategy.

**Table of Contents**

These investments are initially recognized and subsequently remeasured at fair value. Fair value adjustments and realized gains and losses are recognized in profit and loss.

*Loans receivable*

Loans receivable include loans to customers and suppliers. Loans receivable are initially measured at fair value and subsequently at amortized cost less impairment using the effective interest method. Loans are subject to regular and thorough review as to their collectability and available collateral. In the event that a loan is deemed not fully recoverable, a provision is made to reflect the shortfall between the carrying amount and the present value of the expected cash flows. Loan interest is recognized in interest income. The long-term portion of loans receivable is included on the statement of financial position under long-term loans receivable and the current portion under current portion of long-term loans receivable.

*Bank and cash*

Bank and cash consist of cash at bank and in hand.

*Accounts receivable*

Accounts receivable are carried at the original amount due from customers, which is considered to be fair value, less allowances for doubtful accounts. Allowance for doubtful accounts is based on a monthly review of all outstanding amounts where significant doubt about collectability exists. Monthly review includes an analysis of historical bad debt, customer concentrations, customer creditworthiness, current economic trends and changes in our customer payment terms. Allowance for doubtful accounts is included in profit and loss within other operating expenses.

**Financial liabilities***Compound financial instruments*

Compound financial instruments have both a financial liability and an equity component from the issuers' perspective. The components are defined based on the terms of the financial instrument and presented and measured separately according to their substance. At initial recognition of a compound financial instrument, the financial liability component is recognized at fair value and residual amount is allocated to the equity component. This allocation is not revised subsequently. The Group has issued a convertible bond, which is a compound financial instrument, and its financial liability component is accounted for as a loan payable.

*Loans payable*

Loans payable are recognized initially at fair value, net of transaction costs incurred. In subsequent periods loans payable are measured at amortized cost using the effective interest method. Transaction costs and loan interest are recognized in interest expenses over the life of the instrument. The long-term portion of loans payable is included on the statement of financial position under long-term interest-bearing liabilities and the current portion under current portion of long-term loans.

*Accounts payable*

Accounts payable are carried at the original invoiced amount, which is considered to be fair value due to the short-term nature of the Group's accounts payable.

**Derivative financial instruments**

All derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. The method of recognizing the resulting gain or loss varies according to whether the derivatives are designated under and qualify for hedge accounting or not.

**Table of Contents**

Generally, the cash flows of a hedge are classified as cash flows from operating activities in the consolidated statement of cash flows as the underlying hedged items relate to the company's operating activities. When a derivative contract is accounted for as a hedge of an identifiable position relating to financing or investing activities, the cash flows of the contract are classified in the same manner as the cash flows of the position being hedged.

*Derivatives not designated in hedge accounting relationships carried at fair value through profit and loss*

Forward foreign exchange contracts are valued at the market forward exchange rates. Changes in fair value are measured by comparing these rates with the original contract forward rate. Currency options are valued at each balance sheet date by using the Garman & Kohlhagen option valuation model. Changes in the fair value on these instruments are recognized in profit and loss.

Fair values of forward rate agreements, interest rate options, futures contracts and exchange traded options are calculated based on quoted market rates at each balance sheet date. Discounted cash flow analyses are used to value interest rate and cross-currency interest rate swaps. Changes in the fair value of these contracts are recognized in profit and loss.

For derivatives not designated under hedge accounting but hedging identifiable exposures such as anticipated foreign currency denominated sales and purchases, the gains and losses are recognized in other operating income or expenses. The gains and losses on all other derivatives not designated under hedge accounting are recognized in financial income and expenses.

Embedded derivatives are identified and monitored by the Group. Embedded derivatives are measured at fair value at each balance sheet date with changes in the fair value are recognized in profit and loss.

**Hedge accounting**

The Group applies hedge accounting on certain forward foreign exchange contracts, certain options or option strategies and certain interest rate derivatives. Qualifying options and option strategies have zero net premium or a net premium paid. For option structures the critical terms of the bought and sold options are the same and the nominal amount of the sold option component is no greater than that of the bought option.

*Cash flow hedges: Hedging of forecast foreign currency denominated sales and purchases*

The Group applies hedge accounting for Qualifying hedges. Qualifying hedges are those properly documented cash flow hedges of the foreign exchange rate risk of future forecast foreign currency denominated sales and purchases that meet the following requirements. The cash flow being hedged must be highly probable and must present an exposure to variations in cash flows that could ultimately affect profit or loss. The hedge must be highly effective both prospectively and retrospectively.

For qualifying foreign exchange forwards, the change in fair value that reflects the change in spot exchange rates is deferred in fair value and other reserves to the extent that the hedge is effective. For qualifying foreign exchange options, or option strategies, the change in intrinsic value is deferred in fair value and other reserves to the extent that the hedge is effective. In all cases, the ineffective portion is recognized immediately in profit and loss as financial income and expenses. Hedging costs, expressed either as the change in fair value that reflects the change in forward exchange rates less the change in spot exchange rates for forward foreign exchange contracts, or change in the time value for options, or options strategies, are recognized in other operating income or expenses.

**Table of Contents**

Accumulated changes in fair value from qualifying hedges are released from fair value and other reserves to profit and loss as adjustments to sales and cost of sales when the hedged cash flow affects profit and loss. Forecast foreign currency sales and purchases affect profit and loss at various dates up to approximately 1 year from the balance sheet date.

If the hedged cash flow is no longer expected to occur, all deferred gains or losses are released immediately to profit and loss as adjustments to sales and cost of sales. If the hedged cash flow ceases to be highly probable, but is still expected to occur, accumulated gains and losses remain in equity until the hedged cash flow affects profit and loss.

*Cash flow hedges: Hedging of foreign currency risk of highly probable business acquisitions and other transactions*

From time to time the Group hedges the cash flow variability due to foreign currency risk inherent in highly probable business acquisitions and other future transactions that result in the recognition of non-financial assets. When those non-financial assets are recognized in the statement of financial position, the gains and losses previously deferred are transferred from fair value and other reserves and included in the initial acquisition cost of the asset. The deferred amounts are ultimately recognized in profit and loss as a result of goodwill assessments in case of business acquisitions and through depreciation in case of other assets. In order to apply for hedge accounting, the forecast transactions must be highly probable and the hedges must be highly effective prospectively and retrospectively.

*Cash flow hedges: Hedging of cash flow variability on variable rate liabilities*

The Group applies cash flow hedge accounting for hedging cash flow variability on certain variable rate liabilities. The effective portion of the gain or loss relating to interest rate swaps hedging variable rate borrowings is deferred in fair value and other reserves. The gain or loss related to the ineffective portion is recognized immediately in profit and loss as financial income and expenses. For hedging instruments closed before the maturity date of the related liability, hedge accounting will immediately discontinue from that date onwards, with all the cumulative gains and losses on the hedging instruments recycled gradually to profit and loss when the hedged variable interest cash flows affect profit and loss.

*Fair value hedges*

The Group applies fair value hedge accounting with the objective to reduce the exposure to fluctuations in the fair value of interest-bearing liabilities due to changes in interest rates and foreign exchange rates. Changes in the fair value of derivatives designated and qualifying as fair value hedges, together with any changes in the fair value of the hedged liabilities attributable to the hedged risk, are recorded in profit and loss in financial income and expenses.

If a hedge no longer meets the criteria for hedge accounting, hedge accounting ceases and any fair value adjustments made to the carrying amount of the hedged item while the hedge was effective are amortized to profit and loss based on the effective interest method.

*Hedges of net investments in foreign operations*

The Group also applies hedge accounting for its foreign currency hedging on net investments. Qualifying hedges are those properly documented hedges of the foreign exchange rate risk of foreign currency denominated net investments that are effective both prospectively and retrospectively.

For qualifying foreign exchange forwards, the change in fair value that reflects the change in spot exchange rates is deferred in translation differences within consolidated shareholder's equity. The

---

**Table of Contents**

change in fair value that reflects the change in forward exchange rates less the change in spot exchange rates is recognized in profit and loss in financial income and expenses. For qualifying foreign exchange options, the change in intrinsic value is deferred in translation differences within consolidated shareholder's equity. Changes in the time value are at all times recognized directly in profit and loss as financial income and expenses. If a foreign currency denominated loan is used as a hedge, all foreign exchange gains and losses arising from the transaction are recognized in translation differences within consolidated shareholder's equity. In all cases, the ineffective portion is recognized immediately in profit and loss as financial income and expenses.

Accumulated changes in fair value from qualifying hedges are released from translation differences on the disposal of all or part of a foreign Group company by sale, liquidation, repayment of share capital or abandonment. The cumulative amount or proportionate share of the changes in the fair value from qualifying hedges deferred in translation differences is recognized as income or as expense when the gain or loss on disposal is recognized.

**Income taxes**

The tax expense comprises current tax and deferred tax. Current taxes are based on the results of the Group companies and are calculated according to local tax rules. Taxes are recognized in the income statement, except to the extent that it relates to items recognized in the other comprehensive income or directly in equity, in which case, the tax is recognized in other comprehensive income or equity, respectively.

Deferred tax assets and liabilities are determined, for all temporary differences arising between tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements using liability method. Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the tax losses, unused tax credits or deductible temporary differences can be utilized. Each reporting period they are assessed for realizability and when circumstances indicate it is no longer probable that deferred tax assets will be utilized, they are adjusted as necessary. Deferred tax liabilities are recognized for temporary differences that arise between the amounts initially recognized and the tax base of identifiable net assets acquired in business combinations. Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

The enacted or substantively enacted tax rates as of each balance sheet date that are expected to apply in the period when the asset is realized or the liability is settled are used in the measurement of deferred tax assets and liabilities.

**Provisions**

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made. When the Group expects a provision to be reimbursed, the reimbursement is recognized as an asset only when the reimbursement is virtually certain. The Group assesses the adequacy of its pre-existing provisions and adjusts the amounts as necessary based on actual experience and changes in future estimates at each balance sheet date.

*Warranty provisions*

The Group provides for the estimated liability to repair or replace products under warranty at the time revenue is recognized. The provision is an estimate calculated based on historical experience of the level of volumes, product mix and repair and replacement cost.

## **Table of Contents**

### *Intellectual property rights (IPR) provisions*

The Group provides for the estimated future settlements related to asserted and unasserted past alleged IPR infringements based on the probable outcome of potential infringement.

### *Tax provisions*

A provision for tax contingencies is recognized when, despite our belief that tax return positions are supportable, it is more likely than not that certain positions will be challenged and may not be fully sustained upon review by tax authorities. Tax provisions are based upon the estimated future settlement amount at each balance sheet date.

### *Restructuring provisions*

The Group provides for the estimated cost to restructure when a detailed formal plan of restructuring has been completed, the restructuring plan has been announced by the Group and a reliable estimate of the amount can be made.

### *Other provisions*

The Group recognizes the estimated liability for non-cancellable purchase commitments for inventory in excess of forecasted requirements at each balance sheet date.

The Group provides for onerous contracts based on the lower of the expected cost of fulfilling the contract and the expected cost of terminating the contract.

## **Share-based compensation**

The Group offers three types of global equity settled share-based compensation schemes for employees: stock options, performance shares and restricted shares.

Employee services received, and the corresponding increase in equity, are measured by reference to the fair value of the equity instruments as of the date of grant, excluding the impact of any non-market vesting conditions. Non-market vesting conditions attached to the performance shares are included in assumptions about the number of shares that the employee will ultimately receive. On a regular basis, the Group reviews the assumptions made and where necessary, revises its estimates of the number of performance shares that are expected to be settled. Share-based compensation is recognized as an expense in the income statement over the relevant service periods.

A separate vesting period is defined for each quarterly stock options plan tranche. When stock options are exercised, the proceeds received, net of any transaction costs, are credited to share issue premium and the reserve for invested non-restricted equity.

The Group has also issued certain stock options which are accounted for as cash-settled. Related employee services received, and the liability incurred, are measured at the fair value of the liability. The fair value of stock options is estimated based on the reporting date market value less the exercise price of the stock options. The fair value of the liability is remeasured at each reporting date and at the date of settlement and related change in fair value is recognized in the income statement over the relevant service periods.

## **Treasury shares**

The Group recognizes acquired treasury shares as a deduction from equity at their acquisition cost. When cancelled, the acquisition cost of treasury shares is recognized in retained earnings.



---

## **Table of Contents**

### **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**

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the parent by the weighted average number of shares outstanding during the year excluding shares purchased by the Group and held as treasury shares. Diluted earnings per share is calculated by adjusting the net profit attributable to equity holders of the parent to eliminate the interest expense of the convertible bond and by adjusting the weighted average number of the shares outstanding with the dilutive effect of stock options, performance shares and restricted shares outstanding during the year as well as the assumed conversion of convertible bond.

### **Use of estimates and critical accounting judgments**

The preparation of financial statements in conformity with IFRS requires the application of judgment by management in selecting appropriate assumptions for calculating financial estimates, which inherently contain some degree of uncertainty. Management bases its estimates on historical experience, expected outcomes and various other assumptions that are believed to be reasonable under the circumstances. The related results form a basis for making judgments about the reported carrying values of assets and liabilities and the reported amounts of revenues and expenses that may not be readily apparent from other sources. The Group will revise material estimates if changes occur in the circumstances on which an estimate was based or as a result of new information or more experience. Actual results may differ from these estimates under different assumptions or conditions.

Set forth below are areas requiring significant judgment and estimation that may have an impact on reported results and the financial position.

#### *Revenue recognition*

Majority of the Group's sales are recognized as revenue when the significant risks and rewards of ownership have transferred to the buyer, continuing managerial involvement usually associated with ownership and effective control have ceased, the amount of revenue can be measured reliably, it is probable that economic benefits associated with the transaction will flow to the Group and the costs incurred or to be incurred in respect of the transaction can be measured reliably. Sales could materially change if management's assessment of such criteria was determined to be inaccurate. The Group enters into transactions involving multiple components consisting of any combination of hardware, services and software. The consideration received from these transactions is allocated to each separately identifiable component based on the relative fair value of each component. The consideration allocated to each component is recognized as revenue when the revenue recognition criteria for that component have been met. Determination of the fair value for each component requires the use of estimates and judgment taking into consideration factors which may have a significant impact on the timing and amount of revenue recognition. Examples of such factors include price when the component is sold separately by the Group or the price when a similar component is sold separately by the Group or a third party.

The Group makes price protection adjustments based on estimates of future price reductions and certain agreed customer inventories at the date of the price adjustment. Potential changes in these estimates could result in revisions to the sales in future periods.

Revenue from contracts involving solutions achieved through modification of complex telecommunications equipment is recognized on the percentage of completion basis when the outcome of the contract can be

---

**Table of Contents**

estimated reliably. Recognized revenues and profits are subject to revisions during the project in the event that the assumptions regarding the overall project outcome are revised. Current sales and profit estimates for projects may materially change due to the early stage of a long-term project, new technology, changes in the project scope, changes in costs, changes in timing, changes in customers' plans, realization of penalties, and other corresponding factors, which may have a significant impact on the timing and amount of revenue recognition.

*Customer financing*

The Group has provided a limited number of customer financing arrangements and agreed extended payment terms with selected customers. Should actual financial position of the customers or general economic conditions differ from assumptions, the ultimate collectability of such financings and trade credits may be required to be re-assessed, which could result in a write-off of these balances and thus negatively impact future profits. From time to time the Group endeavors to mitigate this risk through transfer of its rights to the cash collected from these arrangements to third party financial institutions on a non-recourse basis in exchange for an upfront cash payment.

*Allowances for doubtful accounts*

The Group maintains allowances for doubtful accounts for estimated losses resulting from subsequent inability of customers to make required payments. If the financial conditions of customers were to deteriorate, reducing their ability to make payments, additional allowances may be required.

*Inventory-related allowances*

The Group periodically reviews inventory for excess amounts, obsolescence and declines in net realizable value below cost and records an allowance against the inventory balance for any such declines. These reviews require management to estimate future demand for products. Possible changes in these estimates could result in revisions to the valuation of inventory in future periods.

*Warranty provisions*

The Group provides for the estimated cost of product warranties at the time revenue is recognized. The Group's warranty provision is established based upon best estimates of the amounts necessary to settle future and existing claims on products sold as of each balance sheet date. As new products incorporating complex technologies are continuously introduced, and as local laws, regulations and practices may change, changes in these estimates could result in additional allowances or changes to recorded allowances being required in future periods.

*Provision for intellectual property rights, or IPR, infringements*

The Group provides for the estimated past costs related to alleged asserted IPR infringements. The provision is an estimate calculated based on a probable outcome of potential future settlement. IPR infringement claims can last for varying periods of time, resulting in irregular movements in the IPR infringement provision. The ultimate outcome or actual cost of settling an individual infringement may materially vary from estimates.

*Legal contingencies*

Legal proceedings covering a wide range of matters are pending or threatened in various jurisdictions against the Group. Provisions are recorded for pending litigation when it is determined that an unfavorable outcome is probable and the amount of loss can be reasonably estimated. Due to the inherent uncertain nature of litigation, the ultimate outcome or actual cost of settlement may materially vary from estimates.

## **Table of Contents**

### *Restructuring provisions*

The Group provides for the estimated future cost related to restructuring programs. The provision made for restructuring is based on management's best estimate. Changes in estimates of timing or amounts of costs to be incurred may become necessary as the restructuring program is implemented.

### *Business combinations*

The Group applies the acquisition method of accounting to account for acquisitions of businesses. The consideration transferred in a business combination is measured as the aggregate of the fair values of the assets transferred, liabilities incurred towards the former owners of the acquired business and equity instruments issued. Identifiable assets acquired, and liabilities assumed by the Group are measured separately at their fair value as of the acquisition date. Non-controlling interests in the acquired business are measured separately based on their proportionate share of the identifiable net assets of the acquired business. The excess of the cost of the acquisition over Nokia's interest in the fair value of the identifiable net assets acquired is recorded as goodwill.

The allocation of fair values to the identifiable assets acquired and liabilities assumed is based on various valuation assumptions requiring management judgment. Actual results may differ from the forecasted amounts and the difference could be material. See also Note 9.

### *Assessment of the recoverability of long-lived assets, intangible assets and goodwill*

The recoverable amounts for long-lived assets, intangible assets and goodwill have been determined based on the expected future cash flows attributable to the asset or cash-generating unit discounted to present value. The key assumptions applied in the determination of recoverable amount include discount rate, length of an explicit forecast period, estimated growth rates, profit margins and level of operational and capital investment. Amounts estimated could differ materially from what will actually occur in the future. See also Note 8.

### *Fair value of derivatives and other financial instruments*

The fair value of financial instruments that are not traded in an active market (for example unlisted equities and embedded derivatives) are determined using various valuation techniques. The Group uses judgment to select an appropriate valuation methodology as well as underlying assumptions based on existing market practice and conditions. Changes in these assumptions may cause the Group to recognize impairments or losses in future periods.

### *Income taxes*

Management judgment is required in determining current tax expense, tax provisions, deferred tax assets and liabilities and the extent to which deferred tax assets can be recognized. Each reporting period they are assessed for realizability and when circumstances indicate it is no longer probable that deferred tax assets will be utilized, they are adjusted as necessary.

Tax provisions are recognized based on estimates and assumptions when, despite of management's belief that tax return positions are supportable, it is more likely than not that certain positions will be challenged and may not be fully sustained upon review by tax authorities. Furthermore, the Group has ongoing tax investigations in multiple jurisdictions, including Hungary and India. If the final outcome of these matters differs from the amounts initially recorded, differences may impact the income tax expense in the period in which such determination is made.

In Netherlands but also in certain other jurisdictions, the utilization of deferred tax assets is dependent on future taxable profit in excess of the profits arising from reversal of existing taxable temporary

---

## **Table of Contents**

differences. The recognition of deferred tax assets is based upon whether it is more likely than not that sufficient taxable profits will be available in the future from which the reversal of temporary differences and tax losses can be deducted. Recognition therefore involves judgment with regard to future financial performance of a particular legal entity or tax group in which the deferred tax asset has been recognized.

### *Pensions*

The determination of pension benefit obligation and expense for defined benefit pension plans is dependent on the selection of certain assumptions used by actuaries in calculating such amounts. Those assumptions include, among others, the discount rate, expected long-term rate of return on plan assets and annual rate of increase in future compensation levels. A portion of plan assets is invested in equity securities, which are subject to equity market volatility. Changes in assumptions and actuarial conditions may materially affect the pension benefit obligation and future expense. See also Note 5.

### *Share-based compensation*

The Group operates various types of equity and cash-settled share-based compensation schemes for employees. Fair value of equity settled stock options is based on certain assumptions, including, among others, expected volatility and expected life of the options. Non market related vesting conditions attached to performance shares are included in assumptions about the number of shares that the employee will ultimately receive relating to projections of net sales and earnings per share. Significant differences in equity market performance, employee option activity and the Group's projected and actual net sales and earnings per share performance, may affect future expense. See also Note 24.

### **New accounting pronouncements under IFRS**

The Group will adopt the following new and revised standards, amendments and interpretations to existing standards issued by the IASB that are expected to be relevant to its operations and financial position:

IFRS 9 *Financial Instruments* will change the classification, measurement and impairment of financial instruments based on the Group's objectives for the related contractual cash flows.

IFRS 10 *Consolidated Financial Statements* establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more other entities.

IFRS 11 *Joint Arrangements* establishes that the legal form of an arrangement should not be the primary factor in the determination of the appropriate accounting for the arrangement. A party to a joint arrangement determines the type of joint arrangement in which it is involved by assessing its rights and obligations and accounts for those rights and obligations in accordance with that type of joint arrangement.

IFRS 12 *Disclosure of Interests in Other Entities* requires disclosure of information that enables users of financial statements to evaluate nature of, and risks associated with, its interests in other entities and the effects of those interests on its financial position, financial performance and cash flows.

IFRS 13 *Fair Value Measurement* replaces fair value measurement guidance contained within individual IFRSs with a single, unified definition of fair value in a single new IFRS standard. The new standard provides a framework for measuring fair value, related disclosure requirements about fair value measurements and further authoritative guidance on the application of fair value measurement in inactive markets.

**Table of Contents**

Amended IAS 19 *Employee Benefits* discontinues use of the corridor approach and re-measurement impacts will be recognized in other comprehensive income. Net interest as a product of discount rate and net pension liability will be recognized in the income statements while effect from the difference between the discount rate and actual return on plan assets will be reflected in remeasurements within other comprehensive income. Previously unrecognized actuarial gains and losses are also recognized in other comprehensive income. Other long-term employee benefits are required to be measured in the same way even though changes in the recognized amounts are fully reflected in profit or loss. Treatment for termination benefits, specifically the point in time when an entity would recognize a liability for termination benefits is also revised.

The Group does not currently expect the adoption of the amended IAS 19 to have a material impact on the financial condition and the results of operations of the Group on a going forward basis. However, the standard requires retrospective application for all financial statements presented including previous years. While the Group anticipates virtually no impact to prior period income statements as a result of the retrospective application, the Group expects change in the net pension liabilities and other comprehensive income due to the elimination of the corridor approach. For 2012, there will be an approximately EUR 240 million (EUR 10 million for 2011) increase in our pension liabilities and approximately EUR 200 million (EUR 10 million for 2011) decrease, net of tax, in our other comprehensive income.

The Group will adopt the new standards IFRS 10, IFRS 11, IFRS 12 and IFRS 13 as well as the amended IAS 19 on their effective date, January 1, 2013.

On 16 December, 2011, the IASB amended the effective date of IFRS 9 to annual periods beginning on or after 1 January 2015, and modified the relief from restating comparative periods and the associated disclosures in IFRS 7. The Group will adopt the standards on the revised effective date.

Excluding the impacts of the Amended IAS 19 Employee Benefits, the Group does not expect material impact from adoption of the other standards effective January 1, 2013.

**2. Segment information**

Nokia has three businesses: Devices & Services, Location & Commerce and Nokia Siemens Networks, and four operating and reportable segments for financial reporting purposes: Smart Devices and Mobile Phones within our Devices & Services business, Location & Commerce and Nokia Siemens Networks.

Nokia's reportable segments represent the strategic business units that offer different products and services. The chief operating decision maker receives monthly financial information for these business units. Key financial performance measures of the reportable segments include primarily net sales and contribution/operating profit. Segment contribution for Smart Devices and Mobile Phones consists of net sales as well as its own, directly assigned costs and allocated costs but excludes major restructuring projects/programs and certain other items that are not directly related to the segments. Operating Profit is presented for Location & Commerce and Nokia Siemens Networks. Nokia evaluates the performance of its segments and allocates resources to them based on operating profit/contribution.

Smart Devices focuses on Nokia's most advanced products, including smartphones powered by the Windows Phone system and has profit-and-loss responsibility and end-to-end accountability for the full consumer experience, including product development, product management and product marketing.

## **Table of Contents**

Mobile Phones focuses on the area of mass market entry and feature phones as well as affordable smart phones and has profit-and-loss responsibility and end-to-end accountability for the full consumer experience, including development, management and marketing of feature phone products, services and applications.

Devices & Services Other includes net sales of spare parts and related cost of sales and operating expenses, as well as intellectual property related income and common research and development expenses. Devices & Services Other also included operating results of Nokia's luxury phone business Vertu until October 12, 2012, the date of divestment.

Net assets of Devices & Services Other consists of the assets and liabilities related to the above mentioned activities as well as common functions responsible for selling Nokia's products, executing marketing and communications, sourcing, manufacturing and logistics across all Devices & Services products which have not been allocated to Smart Devices and Mobile Phones segments.

Location & Commerce develops a range of location-based products and services for consumers, as well as platform services and local commerce services for the Group's feature phones and smartphones as well as for other device manufacturers, application developers, Internet service providers, merchants, and advertisers. Location & Commerce also continues to serve NAVTEQ's existing customers both in terms of provision of content and as a business-to-business provider of map data. Location & Commerce has profit and loss responsibility and end-to-end accountability for the full consumer experience. In November 2012, we introduced HERE as the new brand for Nokia's location and mapping service. Also, as of January 1, 2013, Location & Commerce business and reportable segment has been renamed as the HERE reportable business and segment. HERE focuses on the development of location-based services and local commerce.

Nokia Siemens Networks provides a portfolio of mobile, fixed and converged network technology, as well as professional services including managed services, consultancy and systems integration, deployment and maintenance to operators and service providers.

Corporate Common Functions consists of company-wide functions.

In February 2011, Nokia announced a partnership with Microsoft to bring together the respective complementary assets and expertise of both parties to build a new global mobile ecosystem for smartphones. The partnership, under which Nokia is adopting and licensing Windows Phone from Microsoft as its primary smartphone platform, was formalized in April 2011.

The Group is paying Microsoft a software royalty fee to license the Windows Phone smartphone platform, which the Group records as royalty expense in its Smart Devices cost of goods sold. Nokia has a competitive software royalty structure, which includes annual minimum software royalty commitments and reflects the large volumes that the Group expects to ship, as well as a variety of other considerations related to engineering work to which both companies are committed. The Group expects that the adoption of Windows Phone will enable it to reduce significantly its operating expenses.

In recognition of the contributions that the Group is providing, the Group will receive quarterly platform support payments from Microsoft. The amount of the quarterly platform support payment is USD 250 million for each quarter. The euro amount of the platform support payment will fluctuate based on the applicable foreign exchange translation of the US Dollars into euro which is the Group's reporting currency. The received platform support payments are recognized over time as a benefit to our Smart Devices costs of goods sold. The total amount of the platform payments is expected to slightly exceed the total amount of the minimum software royalty commitments. At the end of 2012, the amount of platform support payments received by Nokia has exceeded the amount of minimum software royalty commitment payments made to Microsoft and the remaining minimum software royalty

**Table of Contents**

commitment payments are expected to exceed the remaining platform support payments by a total of approximately EUR 0.5 billion over the remaining life of the agreement. In accordance with the terms of the agreement, the platform support payments and annual minimum software royalty commitment payments continue for a corresponding period of time. The Group has recognized a portion of the received platform support payments as a benefit to our Smart Devices cost of goods sold and the remainder within accrued expenses and other liabilities. The Microsoft partnership also recognizes the value of intellectual property and puts in place mechanisms for exchanging intellectual property rights.

The accounting policies of the segments are the same as those described in Note 1. Nokia accounts for inter-segment revenues and transfers as if the revenues were to third parties, that is, at current market prices.

No single customer represents 10% or more of Group revenues.

2012	Smart Devices EURm	Mobile Phones EURm	Devices & Services Other EURm	Devices & Services EURm	Location & Commerce EURm	Nokia Siemens Networks EURm	Corporate Common	Elimina- tions EURm	Group EURm
							Functions and Corporate unallocated <sup>(4)(6)</sup> EURm		
<b>Profit and Loss Information</b>									
Net sales to external customers	5 445	9 435	790	15 670	729	13 777			30 176
Net sales to other segments	1		15	16	374	2		(392)	
Depreciation and amortization	22	23	194	239	496	587	4		1 326
Impairment		8	33	41		37	31		109
Contribution	(1 560)	524	(64)						
Operating profit (loss)				(1 100)	(301)	(799)	(103)		(2 303)
Share of results of associated companies					1	8	(10)		(1)
<b>Balance Sheet Information</b>									
Capital expenditures <sup>(2)</sup>	33	11	136	180	64	216	1		461
Segment assets <sup>(3)</sup>	2 040	1 803	2 530	6 373	5 551	10 187	10 854	(3 016)	29 949
of which:									
Investments in associated companies					5	32	21		58
Segment liabilities <sup>(5)</sup>	2 762	2 320	2 091	7 173	2 885	7 756	5 704	(3 016)	20 502
<b>2011</b>									
2011	Smart Devices EURm	Mobile Phones EURm	Devices & Services Other EURm	Devices & Services EURm	Location & Commerce EURm	Nokia Siemens Networks EURm	Corporate Common	Elimina- tions EURm	Group EURm
							Functions and Corporate unallocated <sup>(4)(6)</sup> EURm		
<b>Profit and Loss Information</b>									
Net sales to external customers	10 818	11 930	1 178	23 926	698	14 035			38 659
Net sales to other segments	2		15	17	393	6		(416)	
Depreciation and amortization	18	20	315	353	491	711	7		1 562
Impairment		2	168	170	1 091	19	58		1 338
Contribution	(411)	1 481	(186)						
Operating profit (loss) <sup>(1)</sup>				884	(1 526)	(300)	(131)		(1 073)
Share of results of associated companies					1	(17)	(7)		(23)
<b>Balance Sheet Information</b>									
Capital expenditures <sup>(2)</sup>	21	18	213	252	43	302			597
Segment assets <sup>(3)</sup>	2 367	1 999	4 299	8 665	5 257	11 310	13 505	(2 532)	36 205
of which:									
Investments in associated companies					4	29	34		67
Segment liabilities <sup>(5)</sup>	2 528	1 270	5 696	9 494	2 812	7 520	4 995	(2 532)	22 289

**Table of Contents**

2010	Smart Devices EURm	Mobile Phones EURm	Devices & Services & Other EURm	Devices & Services EURm	Location & Commerce EURm	Nokia Siemens Networks EURm	Corporate Common Functions and Corporate unallocated <sup>(4)(6)</sup>		Elimina- tions EURm	Group EURm
							EURm	EURm		
<b>Profit and Loss Information</b>										
Net sales to external customers	14 870	13 696	552	29 118	668	12 660				42 446
Net sales to other segments	3		13	16	201	1			(218)	
Depreciation and amortization	38	17	350	405	519	843		4		1 771
Impairment						2		13		15
Contribution	1 376	2 327	(163)							
Operating profit (loss)				3 540	(663)	(686)		(113)	(8)	2 070
Share of results of associated companies					2	11		(12)		1

(1) Location & Commerce operating loss in 2011 includes a goodwill impairment loss of EUR 1 090 million.

(2) Including goodwill, capital expenditures in 2012 amount to EUR 515 million (EUR 786 million in 2011). The goodwill consists of EUR 33 million in 2012 (EUR 28 million in 2011) for Devices & Services, EUR 12 million in 2012 (EUR 0 million in 2011) for Location & Commerce, EUR 9 million in 2012 (EUR 161 million in 2011) for Nokia Siemens Networks, and EUR 0 million in 2012 (EUR 0 million in 2011) for Corporate Common Functions.

(3) Comprises intangible assets, property, plant and equipment, investments, inventories and accounts receivable as well as prepaid expenses and accrued income except those related to interest and taxes for Devices & Services and Corporate Common Functions. In addition, Location & Commerce and Nokia Siemens Networks assets include cash and other liquid assets, available-for-sale investments, long-term loans receivable and other financial assets as well as interest and tax related prepaid expenses and accrued income. These are directly attributable to Location & Commerce and Nokia Siemens Networks.

(4) Unallocated assets include cash and other liquid assets, available-for-sale investments, long-term loans receivable and other financial assets as well as interest and tax related prepaid expenses and accrued income for Devices & Services and Corporate Common Functions.

(5) Comprises accounts payable, accrued expenses and provisions except those related to interest and taxes for Devices & Services and Corporate Common Functions. In addition, Location & Commerce and Nokia Siemens Networks liabilities include non-current liabilities and short-term borrowings as well as interest and tax related prepaid income and accrued expenses and provisions. These are directly attributable to Location & Commerce and Nokia Siemens Networks.

(6) Unallocated liabilities include non-current liabilities and short-term borrowings as well as interest and tax related prepaid income, accrued expenses and provisions related to Devices & Services and Corporate Common Functions.

**Net sales to external customers by geographic area by location of customer**

	2012 EURm	2011 EURm	2010 EURm
Finland	303	317	371
China	2 509	6 130	7 149
India	2 227	2 923	2 952
Japan	2 182	1 539	730
USA	1 880	1 405	1 630
Brazil	1 753	1 901	1 506
Germany	1 299	1 606	2 019
Russia	1 287	1 843	1 744
UK	900	996	1 470
Indonesia	799	904	1 157
Italy	783	982	1 266
Other	14 254	18 113	20 452
<b>Total</b>	<b>30 176</b>	<b>38 659</b>	<b>42 446</b>



**Table of Contents**

Segment non-current assets by geographic area <sup>(7)</sup>	2012 EURm	2011 EURm
Finland	1 662	1 651
China	387	472
India	151	185
Brazil	77	83
UK	175	212
USA	4 166	4 757
Other	336	732
Total	6 954	8 092

<sup>(7)</sup> Comprises intangible and tangible assets and property, plant and equipment

**3. Percentage of completion**

Contract sales recognized under percentage of completion accounting are EUR 3 431 million in 2012 (EUR 4 769 million in 2011 and EUR 5 094 million in 2010). Service revenue for managed services and network maintenance contracts are EUR 2 655 million in 2012 (EUR 2 994 million in 2011 and EUR 2 924 million in 2010).

Advances received related to construction contracts, included in accrued expenses and other liabilities, are EUR 58 million at December 31, 2012 (EUR 95 million in 2011). Included in accounts receivable are contract revenues recorded prior to billings EUR 700 million at December 31, 2012 (EUR 1 267 million in 2011) and billings in excess of costs incurred are EUR 216 million at December 31, 2012 (EUR 260 million in 2011).

The aggregate amount of costs incurred and recognized profits (net of recognized losses) under construction contracts in progress since inception is EUR 18 107 million at December 31, 2012 (EUR 20 077 million in 2011).

Retentions related to construction contracts, included in accounts receivable, are EUR 100 million at December 31, 2012 (EUR 136 million at December 31, 2011).

**4. Personnel expenses**

	2012 EURm	2011 EURm	2010 EURm
Wages and salaries	6 080	6 284	5 808
Share-based compensation expense, total	13	18	48
Pension expenses, net	375	445	431
Other social expenses	715	787	708
Personnel expenses as per income statement <sup>(1)</sup>	7 183	7 534	6 995

<sup>(1)</sup> Include termination benefits

Share-based compensation expense includes pension and other social costs of EUR 0 million in 2012 (EUR 0 million in 2011 and EUR 1 million in 2010) based upon the related employee benefit charge recognized during the year.

Pension expenses, comprised of multi-employer, insured and defined contribution plans were EUR 335 million in 2012 (EUR 396 million in 2011 and EUR 377 million in 2010). The remainder consists of expenses related to defined benefit plans.



**Table of Contents**

Average personnel

	2012	2011	2010
Devices & Services	<b>41 480</b>	54 850	56 896
Location & Commerce	<b>6 441</b>	7 187	6 766
Nokia Siemens Networks	<b>64 052</b>	71 825	65 379
Group Common Functions	<b>283</b>	309	314
<b>Nokia Group</b>	<b>112 256</b>	134 171	129 355

**5. Pensions**

The Group operates a number of post-retirement plans in various countries. These plans include both defined contribution and defined benefit schemes.

The Group's most significant defined benefit pension plans are in Germany and in the UK. The majority of active employees in Germany participate in the pension scheme BAP (Beitragsorientierter Altersversorgungs Plan), formerly known as Beitragsorientierte Siemens Altersversorgung (BSAV). The funding vehicle for the BAP is the NSN Pension Trust e.V. In Germany, individual benefits are generally dependent on eligible compensation levels, ranking within the Group and years of service.

The majority of active employees in Nokia UK participate in a pension scheme which is designed according to the Scheme Trust Deeds and Rules and is compliant with the Guidelines of the UK Pension Regulator. The funding vehicle for the pension scheme is Nokia Group (UK) Pension Scheme Ltd which is run on a Trust basis. In the UK, individual benefits are generally dependent on eligible compensation levels and years of service for the defined benefit section of the scheme and on individual investment choices for the defined contribution section of the scheme.

**Table of Contents**

The following table sets forth the changes in the benefit obligation and fair value of plan assets during the year and the funded status of the significant defined benefit pension plans showing the amounts that are recognized in the Group's consolidated statement of financial position at December 31:

	2012 EURm	2011 EURm
Present value of defined benefit obligations January 1	<b>(1 737)</b>	(1 544)
Translation differences	<b>(6)</b>	(3)
Current service cost	<b>(58)</b>	(59)
Interest cost	<b>(82)</b>	(83)
Plan participants' contributions	<b>(14)</b>	(9)
Past service cost	<b>(2)</b>	(1)
Actuarial gain (loss)	<b>(301)</b>	(26)
Acquisitions and divestments	<b>14</b>	
Curtailments	<b>25</b>	8
Settlements	<b>13</b>	17
Benefits paid	<b>68</b>	46
Other movements <sup>(1)</sup>	<b>(2)</b>	(83)
<b>Present value of defined benefit obligations December 31</b>	<b>(2 082)</b>	(1 737)
Plan assets at fair value January 1	<b>1 657</b>	1 494
Translation differences	<b>9</b>	4
Expected return on plan assets	<b>80</b>	77
Actuarial gain (loss) on plan assets	<b>67</b>	(14)
Employer contribution	<b>51</b>	54
Plan participants' contributions	<b>14</b>	9
Benefits paid	<b>(50)</b>	(37)
Settlements	<b>(10)</b>	(11)
Acquisitions and divestments	<b>(12)</b>	(2)
Other movements <sup>(1)</sup>	<b>2</b>	83
<b>Plan assets at fair value December 31</b>	<b>1 808</b>	1 657
<b>Deficit</b>	<b>(274)</b>	(80)
Unrecognized net actuarial (gains) losses	<b>239</b>	10
Unrecognized past service cost	<b>1</b>	1
Amount not recognized as an asset in the balance sheet because of limit in IAS 19 paragraph 58(b)	<b>(2)</b>	(1)
<b>Prepaid (Accrued) pension cost in the statement of financial position</b>	<b>(36)</b>	(70)

<sup>(1)</sup> Group has reclassified an existing plan as a defined benefit plan due to requirement to cover for shortfall in return on plan assets in 2011. This reclassification did not have a material impact on the Group's financial statements.

Present value of obligations include EUR 584 million (EUR 414 million in 2011) of wholly funded obligations, EUR 1 436 million of partly funded obligations (EUR 1 260 million in 2011) and EUR 62 million (EUR 63 million in 2011) of unfunded obligations.

**Table of Contents**

The amounts recognized in the income statement are as follows:

	<b>2012</b> EURm	2011 EURm	2010 EURm
Current service cost	<b>58</b>	59	61
Interest cost	<b>82</b>	83	78
Expected return on plan assets	<b>(80)</b>	(77)	(76)
Net actuarial (gains) losses recognized in year	<b>2</b>	7	(1)
Impact of paragraph 58(b) limitation		(7)	3
Past service cost (gain) loss	<b>2</b>	1	1
Curtailement	<b>(21)</b>	(11)	(1)
Settlement	<b>(3)</b>	(6)	(11)
<b>Total, included in personnel expenses</b>	<b>40</b>	49	54

Movements in prepaid (accrued) pension costs recognized in the statement of financial position are as follows:

	<b>2012</b> EURm	2011 EURm
Prepaid (accrued) pension costs January 1	<b>(70)</b>	(84)
Net income (expense) recognized in the profit and loss account	<b>(40)</b>	(49)
Contributions paid	<b>51</b>	54
Benefits paid	<b>18</b>	9
Acquisitions and divestments	<b>2</b>	(2)
Foreign exchange	<b>3</b>	2
<b>Prepaid (accrued) pension costs December 31<sup>(1)</sup></b>	<b>(36)</b>	(70)

<sup>(1)</sup> included within prepaid expenses and accrued income / accrued expenses

The accrued pension cost above is made up of a prepayment of EUR 142 million (EUR 106 million in 2011) and an accrual of EUR 178 million (EUR 176 million in 2011).

	<b>2012</b> EURm	2011 EURm	2010 EURm	2009 EURm	2008 EURm
Present value of defined benefit obligations	<b>(2 082)</b>	(1 737)	(1 544)	(1 411)	(1 205)
Plan assets at fair value	<b>1 808</b>	1 657	1 494	1 330	1 197
<b>Surplus/(Deficit)</b>	<b>(274)</b>	(80)	(50)	(81)	(8)

Experience adjustments arising on plan obligations amount to a loss of EUR 31 million in 2012 (gain of EUR 33 million in 2011, EUR 18 million in 2010, a loss of EUR 12 million in 2009, a gain of EUR 50 million in 2008).

Experience adjustments arising on plan assets amount to a gain of EUR 67 million (a loss of EUR 14 million in 2011, a gain of EUR 9 million in 2010, EUR 54 million in 2009, a loss of EUR 22 million in 2008).

The principal actuarial weighted average assumptions used were as follows:

	<b>2012</b>	2011
	<b>%</b>	<b>%</b>
Discount rate for determining present values	3.7	4.9
Expected long-term rate of return on plan assets	3.4	4.5
Annual rate of increase in future compensation levels	2.4	2.4
Pension increases	1.9	2.0

F-32

**Table of Contents**

The expected long-term rate of return on plan assets is based on the expected return multiplied with the respective percentage weight of the market-related value of plan assets. The expected return is defined on a uniform basis, reflecting long-term returns, current market conditions and strategic asset allocation.

The Group's pension plan weighted average asset allocation as a percentage of Plan Assets at December 31, 2012, and 2011, by asset category are as follows:

	2012 %	2011 %
Asset category:		
Equity securities	22	20
Debt securities	60	62
Insurance contracts	8	8
Short-term investments	3	3
Others	7	7
<b>Total</b>	<b>100</b>	<b>100</b>

The objective of the investment activities is to maximize the excess of plan assets over projected benefit obligations, within an accepted risk level, taking into account the interest rate and inflation sensitivity of the assets as well as the obligations. Derivative instruments can be used to change the portfolio asset allocation and risk characteristics.

The foreign pension plan assets include a self investment through a loan provided to Nokia by the Group's German pension fund of EUR 69 million (EUR 69 million in 2011). See Note 31.

The actual return on plan assets was EUR 147 million in 2012 (EUR 63 million in 2011).

In 2013, the Group expects to make contributions of EUR 35 million to its defined benefit pension plans.

**6. Expenses by nature**

	2012 EURm	2011 EURm	2010 EURm
Cost of material	13 697	18 331	20 917
Personnel expenses	5 750	7 014	6 881
Depreciation and amortization	1 326	1 562	1 771
Advertising and promotional expenses	984	1 212	1 291
Warranty costs	312	671	894
Other costs and expenses	8 663	8 948	8 441
<b>Total of Cost of sales, Research and development, Selling and marketing and Administrative and general expenses</b>	<b>30 732</b>	<b>37 738</b>	<b>40 195</b>

**7. Other income and expenses**

Other income totaled EUR 403 million in 2012 (EUR 221 million in 2011 and EUR 476 million in 2010). Other expenses totaled EUR 215 million in 2012 (EUR 1 125 million in 2011 and EUR 657 million in 2010).





**Table of Contents**

In 2012, other operating income includes a gain on sale of a real estate of EUR 79 million, benefit from cartel claim settlements of EUR 56 million and a gain of EUR 52 million on sale of Vertu, Nokia's luxury phone business. As part of the transaction, approximately 1 000 employees transferred with Vertu. Nokia retains a 10% minority shareholding in Vertu. Other expenses included restructuring and related charges of EUR 1 807 million, which consists primarily of employee termination benefits, but includes also, EUR 42 million related to country and contract exits based on Nokia Siemens Networks' new strategy that focuses on key markets and product segments and a net loss of EUR 50 million arising from divestments of businesses within Nokia Siemens Networks, as well as related impairments of assets of EUR 32 million. Restructuring and related charges included EUR 550 million related to Devices & Services, recorded within Devices & Services other, EUR 31 million related to Location & Commerce and EUR 1 226 million to Nokia Siemens Networks, respectively.

In 2011, other operating income includes a benefit from a cartel claim settlement of EUR 49 million. Other expenses included restructuring charges of EUR 626 million and associated impairments of EUR 90 million. Restructuring charges included EUR 456 million related to Devices & Services, recorded within Devices & Services other. EUR 25 million related to Location & Commerce and EUR 145 million to Nokia Siemens Networks, respectively. Other expenses also included an impairment of shares in an associated company of EUR 41 million. In addition, other expenses included a consideration paid related to the Accenture transaction of EUR 251 million. Nokia agreed to outsource its Symbian software development and support activities to Accenture, which resulted in the transfer of approximately 2 300 employees to Accenture.

In 2010, other income includes a refund of customs duties of EUR 61 million, a gain on sale of assets and a business of EUR 29 million and a gain on sale of the wireless modem business of EUR 147 million impacting Devices & Services operating profit. The wireless modem business was responsible for development of Nokia's wireless modem technologies for LTE, HSPA and GSM standards. The wireless modem business included Nokia's wireless modem technologies for LTE, HSPA and GSM standards, certain related patents and approximately 1 100 Nokia R&D professionals, the vast majority of whom are located in Finland, India, the UK and Denmark. The sale was closed on November 30, 2010. Other expenses included restructuring charges of EUR 401 million, of which EUR 85 million is related to Devices & Services and EUR 316 million to Nokia Siemens Networks. The restructuring charges in Devices & Services mainly related to changes in Symbian Smartphones and Services organizations as well as certain corporate functions.

In all three years presented Other income and expenses include the costs of hedging forecasted sales and purchases (forward points of cash flow hedges). Within the same line are also included the fair value changes of derivatives hedging identifiable and probable forecasted cash flows.

**8. Impairment**

	<b>2012</b>	2011	2010
	<b>EURm</b>	EURm	EURm
Goodwill		1 090	
Other intangible assets	<b>16</b>	2	
Property, plant and equipment	<b>54</b>	104	
Inventories		7	
Investments in associated companies	<b>8</b>	41	
Available-for-sale investments	<b>31</b>	94	107
Other assets			3
Total, net	<b>109</b>	1 338	110

**Table of Contents****Goodwill**

Goodwill is allocated to the Group's cash-generating units (CGU) for the purpose of impairment testing. The allocation is made to those cash-generating units that are expected to benefit from the synergies of the business combination in which the goodwill arose. The Group has allocated goodwill to the cash-generating units, which correspond to the Group's reportable segments at each of the respective years' impairment testing date, as presented in the table below:

	2012 EURm	2011 EURm
Smart Devices	899	862
Mobile Phones	530	502
Location & Commerce	3 270	3 274
Nokia Siemens Networks	183	173
<b>Total</b>	<b>4 882</b>	<b>4 811</b>

The recoverable amounts for the Smart Devices CGU and the Mobile Phones CGU are based on value in use calculations. A discounted cash flow calculation was used to estimate the value in use for both CGUs. Cash flow projections determined by management are based on information available, to reflect the present value of the future cash flows expected to be derived through the continuing use of the Smart Devices CGU and the Mobile Phones CGU.

The recoverable amounts for the Location & Commerce CGU and the Nokia Siemens Networks CGU are based on fair value less costs to sell. A discounted cash flow calculation was used to estimate the fair value less costs to sell for both CGUs. The cash flow projections employed in the discounted cash flow calculation have been determined by management based on the information available, to reflect the amount that an entity could obtain from separate disposal of each of the Location & Commerce CGU and the Nokia Siemens Networks CGU, in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal.

The cash flow projections employed in the value in use and the fair value less costs to sell calculations are based on detailed financial plans approved by management, covering a three-year planning horizon. Cash flows in subsequent periods reflect a realistic pattern of slowing growth that declines towards an estimated terminal growth rate utilized in the terminal period. The terminal growth rate utilized does not exceed long-term average growth rates for the industry and economies in which the CGU operates. All cash flow projections are consistent with external sources of information, wherever available.

The key assumptions applied in the 2012 impairment testing analysis for each CGU are presented in the table below:

	Cash-generating unit							
	Smart Devices		Mobile Phones		Location & Commerce		Nokia Siemens Networks	
	%		%		%		%	
	2012	2011	2012	2011	2012	2011	2012	2011
Terminal growth rate	2.3	1.9	(2.3)	1.5	1.7	3.1	0.7	1.0
Post-tax discount rate	10.5	9.0	10.5	9.0	9.9	9.7	10.3	10.4
Pre-tax discount rate	12.8	12.2	15.5	13.1	12.8	13.1	14.2	13.8

Both value in use of Smart Devices CGU and Mobile Phones CGU and fair value less costs to sell for Location & Commerce CGU and Nokia Siemens Networks CGU are determined on a pre-tax value basis using pre-tax valuation assumptions including pre-tax cash flows and pre-tax discount rate. As market-based rates of return for the Group's CGUs are available only on a post-tax basis, the pre-tax discount rates are derived by adjusting the post-tax discount rates to reflect the specific amount and timing of future tax cash flows.

---

**Table of Contents**

The discount rates applied in the impairment testing for each CGU have been determined

independently of capital structure reflecting current assessments of the time value of money and

relevant market risk premiums. Risk premiums included in the determination of the discount rate reflect risks and uncertainties for which the future cash flow estimates have not been adjusted.

The recoverable amount of the Location & Commerce CGU exceeds its carrying amount by a small margin in the fourth quarter 2012. The related valuation is deemed most sensitive to the changes in both discount and long-term growth rates. A discount rate increase in excess of 0.5 percentage point or long-term growth decline in excess of 1 percentage point would result in impairment loss in the Location & Commerce CGU. Management's estimates of the overall automotive volumes and market share, customer adoption of the new location-based platform and related service offerings, projected device sales volumes and fair value of the services sold within the Group as well as continued focus on cost efficiency are the main drivers for the Location & Commerce net cash flow projections. The Group's cash flow forecasts reflect the current strategic views that license fee based models will remain important in both near and long term. Management expects that license fee based models which are augmented with software and services and monetized via license fees, transactions fees and advertising, will grow in the future as more customers demand complete, end-to-end location solutions. Actual short and long-term performance could vary from management's forecasts and impact future estimates of recoverable value. Since the recoverable amount exceeds the carrying amount only by a small margin, any material adverse changes such as market deterioration or changes in the competitive landscape could impact management's estimates of the main drivers and result in impairment loss.

In the fourth quarter of 2011, the Group conducted annual impairment testing for the Location & Commerce CGU to assess if events or changes in circumstances indicated that the carrying amount of the Location & Commerce CGU was not recoverable. As a result, the Group recorded an impairment loss of EUR 1 090 million to reduce the carrying amount of the Location & Commerce CGU to its recoverable amount. The impairment loss was allocated in its entirety to the carrying amount of goodwill in the balance sheet of the Location & Commerce CGU. This impairment loss is presented as impairment of goodwill in the 2011 consolidated income statement. As a result of the impairment loss, the amount of goodwill allocated to the Location & Commerce CGU was reduced to EUR 3 274 million at December 31, 2011.

The impairment charge was result of an evaluation of the projected financial performance and net cash flows of the Location & Commerce CGU. The main drivers for management's net cash flow projections included license fees related to digital map data, fair value of the services sold within the Group and estimated average revenue per user with regard to mobile media advertising. The average revenue per user was estimated based on peer market data for mobile advertising revenue. Projected device sales volumes impacted the overall forecasted intercompany and advertising revenues. This took into consideration the market dynamics in digital map data and related location-based content markets, including the Group's long-term view at the time of 2011 impairment testing, that the market will move from fee-based models towards advertising-based models especially in some more mature markets. It also reflected recent results and related competitive factors in local search and advertising markets resulting in lower estimated growth prospects from location-based assets integrated with different advertising platforms. After consideration of all relevant factors, the Group reduced the net sales projections for the Location & Commerce CGU which, in turn, reduced projected profitability and cash flows.

The Group's goodwill impairment testing did not result in impairment charges for the years ended December 31, 2012 or 2010. An impairment loss was recorded with respect to the Group's Location & Commerce CGU in 2011, as noted above. No further impairment charges were recorded with respect to the other CGUs in 2011.

## **Table of Contents**

### **Other intangible assets**

During 2012, EUR 8 million impairment charge was recorded on certain technology assets due to obsolescence within Mobile Phones. Furthermore, a charge of EUR 8 million was recorded on intangible assets attributable to the decision to transition certain operations into maintenance mode within Nokia Siemens Networks. All charges were recorded in other operating expenses.

### **Property, plant and equipment and inventories**

During 2012, the Group recognized EUR 31 million impairment losses related to restructuring activities mainly with respect to its Salo, Finland and Komarom, Hungary facilities within other operating expenses of Devices & Services Other. Nokia Siemens Networks recorded an impairment loss of EUR 23 million to reflect non-current assets of Optical Networks business at market value, in anticipation of sale of the business.

Majority of 2011 impairment losses recognized with respect to property, plant and equipment resulted from EUR 94 million charges related to the Group's restructuring programs, including the closure of manufacturing operations in Cluj, Romania, and consolidation of other office sites.

The charges were recorded in other operating expense and are included in Devices & Services Other.

### **Investments in associated companies**

After application of the equity method, including recognition of the Group's share of results of associated companies, the Group determined that recognition of impairment losses of EUR 8 million in 2012 (EUR 41 million in 2011, EUR 0 million in 2010) was necessary to adjust the Group's

investment in associated companies to its recoverable amount. The charges were recorded in other operating expense and are included in Devices & Services Other.

### **Available-for-sale investments**

The Group's investment in certain equity and interest-bearing securities held as available-for-sale

suffered a significant or prolonged decline in fair value resulting in an impairment charge of EUR 31 million (EUR 94 million in 2011, EUR 107 million in 2010). These impairment losses are included within financial expenses and other operating expenses in the consolidated income statement. See also Note 11.

## **9. Acquisitions**

### **Acquisitions completed in 2012**

During 2012, the Group completed minor acquisitions that did not have a material impact on the consolidated financial statements. The purchase consideration paid and the total of goodwill arising from these acquisitions amounted to EUR 56 million and EUR 45 million, respectively. The goodwill arising from these acquisitions is attributable to assembled workforce and post-acquisition synergies.

Scalado AB, based in Lund, Sweden, provides and develops imaging software and experiences. The Group acquired imaging specialists, all technologies and intellectual property from Scalado AB on July 20, 2012.

earthmine Inc., based in California, USA, develops systems to collect and process 3D imagery. The Group acquired a 100% ownership interest in earthmine on November 19, 2012.

F-37

**Table of Contents****Acquisitions completed in 2011****Motorola**

On April 30, 2011, Nokia Siemens Networks completed its acquisition of Motorola Solutions' networks business in exchange for a total consideration of EUR 642 million. The acquired business consists of Motorola's wireless networks infrastructure equipment manufacturing and sales operations, including the GSM, CDMA, WCDMA, WiMAX and LTE product portfolios and services offerings. The acquisition is expected to strengthen Nokia Siemens Networks' position in certain regions, particularly North America and Japan. The goodwill of EUR 164 million arising from the acquisition is attributable to the increased presence in these key markets and the assembled workforce. The majority of the goodwill acquired is expected to be deductible for income tax purposes.

The following table summarizes the consideration paid, the fair value of assets acquired, liabilities assumed and the non-controlling interest at the acquisition date. Fair values of certain assets acquired, liabilities assumed and goodwill were provisional at the end of 2011. Fair values have been finalized during 2012.

	Provisional fair values 2011 EURm	Adjustments EURm	Final fair values 2012 EURm
<b>Total consideration in cash</b>	<b>642</b>		<b>642</b>
<b>Non-current assets</b>			
Goodwill	155	9	164
Developed technology	156		156
Customer relationships	195		195
Other intangible assets	3		3
	509	9	518
Property, plant & equipment	105	(8)	97
Investments in associated companies	6		6
Deferred tax assets	36		36
	656	1	657
<b>Current assets</b>			
Inventories	103		103
Accounts receivable	228	(6)	222
Prepaid expenses and accrued income	20		20
Bank and cash	31		31
	382	(6)	376
<b>Total assets acquired</b>	<b>1 038</b>	<b>(5)</b>	<b>1 033</b>
<b>Non-current liabilities</b>			
Deferred tax liabilities	15		15
Other long-term liabilities	15		15
	30		30
<b>Current liabilities</b>			
Accounts payable	154	(1)	153
Accrued expenses	166	(2)	164
Provisions	30	(2)	28
	350	(5)	345
<b>Total liabilities assumed</b>	<b>380</b>	<b>(5)</b>	<b>375</b>

Non-controlling interest	16	16
<b>Net assets acquired</b>	<b>642</b>	<b>642</b>

**Table of Contents**

In 2011, Nokia Siemens Networks had concluded on a working capital adjustment settlement with respect to the acquisition whereby Motorola Solutions agreed to make additional installment payments to Nokia Siemens Networks. The installment payments were subject to certain conditions that Nokia Siemens Networks must fulfil over a given time period. The maximum amount of installment payments receivable totalled EUR 85 million and Nokia Siemens Networks had determined that the fair value of the installment payments amounted to EUR 81 million. During 2012, the working capital adjustment arrangement has been settled and Nokia Siemens Networks received the maximum amount of installment payments. As a result, EUR 4 million gain has been recognized in other operating income.

The fair value of accounts receivable of EUR 222 million includes trade receivables with a fair value of EUR 146 million. The gross contractual amount for trade receivables due is EUR 255 million, of which EUR 109 million is expected to be uncollectible.

Acquisition related costs of EUR 4 million and EUR 8 million have been charged to administrative and general expenses in the consolidated income statement for the years ended December 31, 2011 and December 31, 2010, respectively.

From April 30, 2011, the consolidated statement of comprehensive income includes revenue and net loss contributed by the Motorola Solutions networks business of EUR 894 million and EUR 4 million, respectively.

Had Motorola Solutions networks business been consolidated from January 1, 2011, the Group consolidated statement of income for 2011 would have shown revenue of EUR 39 445 million and loss of EUR 1 402 million. This unaudited pro forma information is not necessarily indicative of the results of the combined operations had the acquisition actually occurred on January 1, 2011, nor is it indicative of the future results of the combined operations.

During 2011, the Group completed additional acquisitions that in aggregate did not have a material impact on the consolidated financial statements.

**10. Depreciation and amortization**

	2012 EURm	2011 EURm	2010 EURm
<b>Depreciation and amortization by function</b>			
Cost of sales	190	227	248
Research and development <sup>(1)</sup>	613	674	906
Selling and marketing <sup>(2)</sup>	347	442	426
Administrative and general	176	219	191
Total	1 326	1 562	1 771

<sup>(1)</sup> In 2012, depreciation and amortization allocated to research and development included amortization of acquired intangible assets of EUR 378 million (EUR 412 million in 2011 and EUR 556 million in 2010).

<sup>(2)</sup> In 2012, depreciation and amortization allocated to selling and marketing included amortization of acquired intangible assets of EUR 314 million (EUR 422 million in 2011 and EUR 408 million in 2010).



**Table of Contents****11. Financial income and expenses**

	2012 EURm	2011 EURm	2010 EURm
Dividend income on available-for-sale financial investments	3	2	2
Interest income on available-for-sale financial investments	119	169	110
Interest income on loans receivables carried at amortized cost	3	1	
Interest income on investments at fair value through profit and loss	8	18	28
Net interest income (expense) on derivatives not under hedge accounting	(4)	(12)	(20)
Interest expense on financial liabilities carried at amortized cost	(264)	(255)	(254)
Net realised gains (or losses) on disposal of fixed income available-for-sale financial investments	(1)	(4)	1
Net fair value gains (or losses) on investments at fair value through profit and loss	27	102	(3)
Net gains (net losses) on other derivatives designated at fair value through profit and loss	(11)	(121)	19
Net fair value gains (or losses) on hedged items under fair value hedge accounting	(15)	(82)	(63)
Net fair value gains (or losses) on hedging instruments under fair value hedge accounting	23	72	58
Net foreign exchange gains (or losses)			
From foreign exchange derivatives designated at fair value through profit and loss	(73)	74	58
From balance sheet items revaluation	(173)	(34)	(165)
Other financial income <sup>(1)</sup>	52	49	73
Other financial expenses <sup>(2)</sup>	(34)	(81)	(129)
<b>Total</b>	<b>(340)</b>	<b>(102)</b>	<b>(285)</b>

<sup>(1)</sup> Other financial income includes distributions of EUR 49 million in 2012 (EUR 45 million in 2011 and EUR 69 million in 2010) from a private fund held as non-current available-for-sale.

<sup>(2)</sup> Other financial expenses include an impairment loss of EUR 7 million in 2012 (EUR 38 million in 2011 and EUR 94 million in 2010) in the Group's investment in the above mentioned private fund due to changes in estimated future cash flows resulting from distributions received as well as other factors. The Group did not recognize any impairment losses related to Asset Backed Securities in 2012 in other financial expenses, whereas impairments for these securities amounted to EUR 15 million in 2011 and EUR 0 million in 2010. Additional information can be found in Note 8 and Note 16.

During 2012, interest income decreased mainly as a result of lower cash levels than in 2011 and lower interest rates in certain currencies where the Group has investments. Foreign exchange gains (or losses) were negatively impacted by higher hedging costs than in 2011 as well as significant weakening of certain emerging market currencies.

During 2011, interest income increased mainly as a result of higher cash levels than in 2010 and higher interest rates in certain currencies where the Group has investments. Lower interest rates in EUR and USD had a positive impact on Net fair value gains (or losses) on investments at fair value through profit and loss but these gains were offset by the negative impact on Net gains (or losses) on other derivatives designated at fair value through profit and loss that was affected by similar factors. Foreign exchange gains (or losses) were positively impacted by low and in some cases negative hedging costs (i.e. income) in 2011 as well as increased volatility on the foreign exchange market.

**Table of Contents****12. Income taxes**

	2012 EURm	2011 EURm	2010 EURm
Income tax			
Current tax	(641)	(752)	(798)
Deferred tax	(504)	462	355
Total	(1 145)	(290)	(443)
Finnish entities	(724)	(97)	(126)
Other countries	(421)	(193)	(317)
Total	(1 145)	(290)	(443)

The differences between income tax expense computed at statutory rate 24.5% in 2012 in Finland (26% in 2011 and 2010) and income taxes recognized in the consolidated income statement is reconciled as follows:

	2012 EURm	2011 EURm	2010 EURm
Income tax expense (benefit) at statutory rate	(648)	(311)	464
Permanent differences	75	(22)	4
Non tax deductible impairment of goodwill (Note 8)		283	
Taxes for prior years	(50)	(7)	(48)
Taxes on foreign subsidiaries profits in excess of (lower than) income taxes at statutory rates	43	(73)	(195)
Tax losses and temporary differences with no tax effect <sup>(1)</sup>	1 675	280	221
Net increase (decrease) in tax contingencies	39	7	24
Change in income tax rates	6	39	2
Taxes on undistributed earnings <sup>(2)</sup>	(4)	62	(31)
Other	9	32	2
Income tax expense	1 145	290	443

<sup>(1)</sup> In 2012, this item primarily relates to Devices & Services past and current year Finnish tax losses, unused tax credits and temporary differences and Nokia Siemens Networks Finnish and German tax losses, unused tax credits and temporary differences for which no deferred tax was recognized. In 2011 and 2010, this item primarily relates to Nokia Siemens Networks Finnish tax losses, unused tax credits and temporary differences for which no deferred tax was recognized. In 2010, it also includes benefit of 52 million from reassessment of recoverability of deferred tax assets in Nokia Siemens Networks.

<sup>(2)</sup> In 2010, taxes on undistributed earnings mainly relates to changes to tax rates applicable to profit distributions.

Certain of the Group companies income tax returns for prior periods are under examination by tax authorities. Our business and investments especially in emerging market countries may be subject to uncertainties, including unfavorable or unpredictable taxation treatment. Management judgment and a degree of estimation are required in determining tax expense. Even though the Group does not believe that any significant additional taxes in excess of those already provided for will arise as a result of the examinations, it cannot be excluded that final resolutions of open items may substantially differ from the amounts initially recorded.

**Table of Contents****13. Intangible assets**

	2012 EURm	2011 EURm
<b>Capitalized development costs</b>		
Acquisition cost January 1	1 035	1 035
Retirements	(7)	
Accumulated acquisition cost December 31	1 028	1 035
Accumulated amortization January 1	(1 029)	(995)
Retirements	7	
Amortization	(6)	(34)
Accumulated amortization December 31	(1 028)	(1 029)
Net book value January 1	6	40
Net book value December 31		6
<b>Goodwill</b>		
Acquisition cost January 1	6 836	6 631
Translation differences	(16)	17
Acquisitions	54	189
Disposals		(1)
Accumulated acquisition cost December 31	6 874	6 836
Accumulated impairments January 1	(1 998)	(908)
Impairments		(1 090)
Accumulated impairments December 31	(1 998)	(1 998)
Net book value January 1	4 838	5 723
Net book value December 31	4 876	4 838
<b>Other intangible assets</b>		
Acquisition cost January 1	5 877	5 437
Translation differences	(20)	83
Additions	46	53
Acquisitions	11	366
Retirements	(52)	(23)
Impairments	(65)	(2)
Disposals	(44)	(37)
Accumulated acquisition cost December 31	5 753	5 877
Accumulated amortization January 1	(4 471)	(3 509)
Translation differences	19	(84)
Retirements	48	21
Impairments	49	
Disposals	33	25
Amortization	(784)	(924)
Accumulated amortization December 31	(5 106)	(4 471)

Net book value January 1	<b>1 406</b>	1 928
Net book value December 31	<b>647</b>	1 406

F-42

**Table of Contents****14. Property, plant and equipment**

	2012 EURm	2011 EURm
<b>Land and water areas</b>		
Acquisition cost January 1	62	57
Acquisitions		9
Impairments	(4)	(4)
Disposals	(25)	
Accumulated acquisition cost December 31	33	62
Net book value January 1	62	57
Net book value December 31	33	62
<b>Buildings and constructions</b>		
Acquisition cost January 1	1 380	1 414
Translation differences	(1)	3
Additions	80	86
Acquisitions		32
Impairments	(36)	(124)
Disposals	(294)	(31)
Accumulated acquisition cost December 31	1 129	1 380
Accumulated depreciation January 1	(519)	(453)
Translation differences	(3)	
Impairments	15	40
Disposals	134	13
Depreciation	(96)	(119)
Accumulated depreciation December 31	(469)	(519)
Net book value January 1	861	961
Net book value December 31	660	861
<b>Machinery and equipment</b>		
Acquisition cost January 1	4 078	4 004
Translation differences	(1)	(4)
Additions	329	464
Acquisitions	(8)	66
Impairments	(131)	(25)
Disposals	(573)	(427)
Accumulated acquisition cost December 31	3 694	4 078
Accumulated depreciation January 1	(3 257)	(3 185)
Translation differences	(1)	(13)
Impairments	102	9
Disposals	550	410
Depreciation	(437)	(478)
Accumulated depreciation December 31	(3 043)	(3 257)
Net book value January 1	821	819
Net book value December 31	651	821



**Table of Contents**

	2012 EURm	2011 EURm
<b>Other tangible assets</b>		
Acquisition cost January 1	57	56
Translation differences	1	(3)
Additions	6	11
Disposals	(20)	(7)
Accumulated acquisition cost December 31	44	57
Accumulated depreciation January 1	(34)	(37)
Translation differences	(1)	3
Disposals	8	7
Depreciation	(3)	(7)
Accumulated depreciation December 31	(30)	(34)
Net book value January 1	23	19
Net book value December 31	14	23
<b>Advance payments and fixed assets under construction</b>		
Net carrying amount January 1	75	98
Translation differences	(4)	
Additions	58	57
Acquisitions		1
Disposals	(5)	
Transfers to:		
Other intangible assets	(8)	2
Buildings and constructions	(23)	(42)
Machinery and equipment	(18)	(38)
Other tangible assets	(2)	(3)
Net carrying amount December 31	73	75
<b>Total property, plant and equipment</b>	<b>1 431</b>	<b>1 842</b>

**15. Investments in associated companies**

	2012 EURm	2011 EURm
Net carrying amount January 1	67	136
Translation differences	3	(5)
Additions	1	8
Deductions	(4)	(7)
Impairments (Note 8)	(8)	(41)
Share of results	(1)	(23)
Other movements		(1)
Net carrying amount December 31	58	67

Shareholdings in associated companies are comprised of investments in unlisted companies in all periods presented.





**Table of Contents****16. Fair value of financial instruments**

At December 31, 2012	Current available-for- sale financial assets EURm	Non-current available-for- sale financial assets EURm	Carrying amounts			Total carrying amounts EURm	Fair value <sup>(1)</sup> EURm
			Financial instruments at fair value through profit or loss EURm	Loans and receivables measured at amortized cost EURm	Financial liabilities measured at amortized cost EURm		
Available-for-sale investments, publicly quoted equity shares		11				11	11
Available-for-sale investments, carried at fair value		447				447	447
Available-for-sale investments, carried at cost less impairment		231				231	231
Long-term loans receivable				112		112	110
Accounts receivable				5 551		5 551	5 551
Current portion of long-term loans receivable				35		35	35
Other current financial assets, derivatives			448			448	448
Other current financial assets, other				16		16	16
Investments at fair value through profit and loss, liquid assets			415			415	415
Available-for-sale investments, liquid assets carried at fair value	542					542	542
Available for-sale investments, cash equivalents carried at fair value	5 448					5 448	5 448
<b>Total financial assets</b>	<b>5 990</b>	<b>689</b>	<b>863</b>	<b>5 714</b>		<b>13 256</b>	<b>13 254</b>
Long-term interest-bearing liabilities					5 087	5 087	5 298
Current portion of long-term loans payable					201	201	201
Short-term borrowing					261	261	261
Other financial liabilities			90			90	90
Accounts payable					4 394	4 394	4 394
<b>Total financial liabilities</b>			<b>90</b>		<b>9 943</b>	<b>10 033</b>	<b>10 244</b>

**Table of Contents**

At December 31, 2011	Current available-for- sale financial assets EURm	Non-current available-for- sale financial assets EURm	Carrying amounts			Total carrying amounts EURm	Fair value <sup>(1)</sup> EURm
			Financial instruments at fair value through profit or loss EURm	Loans and receivables measured at amortized cost EURm	Financial liabilities measured at amortized cost EURm		
Available-for-sale investments, publicly quoted equity shares		7				7	7
Available-for-sale investments, carried at fair value		419				419	419
Available-for-sale investments, carried at cost less impairment		215				215	215
Long-term loans receivable				99		99	97
Accounts receivable				7 181		7 181	7 181
Current portion of long-term loans receivable				54		54	54
Other current financial assets, derivatives			475			475	475
Other current financial assets, other				25		25	25
Investments at fair value through profit and loss, liquid assets			433			433	433
Available-for-sale investments, liquid assets carried at fair value	1 233					1 233	1 233
Available for-sale investments, cash equivalents carried at fair value	7 279					7 279	7 279
<b>Total financial assets</b>	<b>8 512</b>	<b>641</b>	<b>908</b>	<b>7 359</b>		<b>17 420</b>	<b>17 418</b>
Long-term interest-bearing liabilities					3 969	3 969	3 929
Other long-term non-interest bearing financial liabilities					3	3	3
Current portion of long-term loans payable					357	357	357
Short-term borrowing					995	995	995
Other financial liabilities			483			483	483
Accounts payable					5 532	5 532	5 532
<b>Total financial liabilities</b>			<b>483</b>		<b>10 856</b>	<b>11 339</b>	<b>11 299</b>

<sup>(1)</sup> For information about the valuation of items measured at fair value see Note 1. The fair value is set to carrying amount for available-for-sale investments carried at cost less impairment for which no reliable fair value has been possible to estimate. The fair value of loan receivables and payables is estimated based on the current market values of similar instruments. The fair value is estimated to be equal to the carrying amount for short-term financial assets and financial liabilities due to limited credit risk and short time to maturity.

**Table of Contents**

The following table presents the valuation methods used to determine fair values of financial instruments carried at fair value:

<b>At December 31, 2012</b>	<b>Instruments with quoted prices in active markets (Level 1) EURm</b>	<b>Valuation technique using observable data (Level 2) EURm</b>	<b>Valuation technique using non- observable data (Level 3) EURm</b>	<b>Total EURm</b>
Available-for-sale investments, publicly quoted equity shares	11			11
Available-for-sale investments, carried at fair value	57	20	370	447
Other current financial assets, derivatives <sup>(1)</sup>		448		448
Investments at fair value through profit and loss, liquid assets	415			415
Available-for-sale investments, liquid assets carried at fair value	532	10		542
Available for-sale investments, cash equivalents carried at fair value	5 448			5 448
<b>Total assets</b>	<b>6 463</b>	<b>478</b>	<b>370</b>	<b>7 311</b>
Derivative liabilities <sup>(1)</sup>		90		90
<b>Total liabilities</b>		<b>90</b>		<b>90</b>
<b>At December 31, 2011</b>	<b>Instruments with quoted prices in active markets (Level 1) EURm</b>	<b>Valuation technique using observable data (Level 2) EURm</b>	<b>Valuation technique using non- observable data (Level 3) EURm</b>	<b>Total EURm</b>
Available-for-sale investments, publicly quoted equity shares	7			7
Available-for-sale investments, carried at fair value	60	13	346	419
Other current financial assets, derivatives <sup>(1)</sup>		475		475
Investments at fair value through profit and loss, liquid assets	433			433
Available-for-sale investments, liquid assets carried at fair value	1 201	32		1 233
Available for-sale investments, cash equivalents carried at fair value	7 279			7 279
<b>Total assets</b>	<b>8 980</b>	<b>520</b>	<b>346</b>	<b>9 846</b>
Derivative liabilities <sup>(1)</sup>		483		483
<b>Total liabilities</b>		<b>483</b>		<b>483</b>

<sup>(1)</sup> Note 17 includes the split of hedge accounted and non-hedge accounted derivatives.

Level 1 category includes financial assets and liabilities that are measured in whole or in significant part by reference to published quotes in an active market. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and

**Table of Contents**

regularly occurring market transactions on an arm's length basis. This category includes listed bonds and other securities, listed shares and exchange traded derivatives.

Level 2 category includes financial assets and liabilities measured using a valuation technique based on assumptions that are supported by prices from observable current market transactions. These include assets and liabilities for which pricing is obtained via pricing services, but where prices have not been determined in an active market, financial assets with fair values based on broker quotes and assets that are valued using the Group's own valuation models whereby the material assumptions are market observable. The majority of the Group's over-the-counter derivatives and certain other instruments not traded in active markets fall within this category.

Level 3 category includes financial assets and liabilities measured using valuation techniques based on non market observable inputs. This means that fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data. However, the fair value measurement objective remains the same, that is, to estimate an exit price from the perspective of the Group. The main asset classes in this category are unlisted equity investments as well as unlisted funds.

The following table shows a reconciliation of the opening and closing balances of Level 3 financial assets which are measured at fair value:

	<b>Other available- for-sale investments carried at fair value</b>
<b>EURm</b>	
<b>Balance at December 31, 2010</b>	<b>279</b>
Total gains (losses) in income statement	(22)
Total gains (losses) recorded in other comprehensive income	51
Purchases	81
Sales	(47)
Other transfers	4
<b>Balance at December 31, 2011</b>	<b>346</b>
Total gains (losses) in income statement	(8)
Total gains (losses) recorded in other comprehensive income	34
Purchases	41
Sales	(35)
Other transfers	(8)
<b>Balance at December 31, 2012</b>	<b>370</b>

The gains and losses from financial assets categorized in level 3 are included in other operating income and expenses as the investment and disposal objectives for these investments are business driven. A net loss of EUR 23 million (net loss of EUR 30 million in 2011) related to level 3 financial instruments held at December 31, 2012, was included in the profit and loss during 2012.

**Table of Contents****17. Derivative financial instruments**

2012	Assets		Liabilities	
	Fair value <sup>(1)</sup> EURm	Notional <sup>(2)</sup> EURm	Fair value <sup>(1)</sup> EURm	Notional <sup>(2)</sup> EURm
Hedges of net investment in foreign subsidiaries:				
Forward foreign exchange contracts	24	2 164	(11)	1 182
Cash flow hedges:				
Forward foreign exchange contracts	7	2 968	(6)	3 158
Fair value hedges				
Interest rate swaps	174	1 626		
Cash flow and Fair value hedges: <sup>(3)</sup>				
Cross currency interest rate swaps	42	378		
Derivatives not designated in hedge accounting relationships carried at fair value through profit and loss:				
Forward foreign exchange contracts	185	7 111	(18)	3 337
Currency options bought	16	1 107		
Currency options sold			(6)	289
Interest rate swaps		150	(48)	513
Other derivatives			(1)	9
	448	15 504	(90)	8 488

2011	Assets		Liabilities	
	Fair value <sup>(1)</sup> EURm	Notional <sup>(2)</sup> EURm	Fair value <sup>(1)</sup> EURm	Notional <sup>(2)</sup> EURm
Hedges of net investment in foreign subsidiaries:				
Forward foreign exchange contracts	56	1 584	(179)	2 810
Cash flow hedges:				
Forward foreign exchange contracts	92	6 273	(97)	6 362
Fair value hedges				
Interest rate swaps	167	1 627		
Cash flow and Fair value hedges: <sup>(3)</sup>				
Cross currency interest rate swaps	26	378		
Derivatives not designated in hedge accounting relationships carried at fair value through profit and loss:				
Forward foreign exchange contracts	127	6 626	(159)	7 460
Currency options bought	7	994		
Currency options sold			(6)	721
Interest rate swaps			(41)	552
Other derivatives		3	(1)	38
	475	17 485	(483)	17 943

(1) In the statement of financial position the fair value of derivative financial instruments is included in Other financial assets and in Other financial liabilities.

(2) Includes the gross amount of all notional values for contracts that have not yet been settled or cancelled. The amount of notional value outstanding is not necessarily a measure or indication of market risk, as the exposure of certain contracts may be offset by that of other contracts.

(3) These cross-currency interest rate swaps have been designated partly as fair value hedges and partly as cash flow hedges.



**Table of Contents****18. Inventories**

	2012 EURm	2011 EURm
Raw materials, supplies and other	409	789
Work in progress	352	516
Finished goods	777	1 025
Total	1 538	2 330

During 2012 the Group recognized an expense of EUR 55 million (EUR 0 million in 2011 and 2010) within cost of sales to write-down the inventories to net realizable value.

**19. Prepaid expenses and accrued income**

	2012 EURm	2011 EURm
Social security, VAT and other taxes	1 384	1 906
Deferred cost of sales	145	114
Other prepaid expenses and accrued income	1 852	2 468
Total	3 381	4 488

In 2012, other prepaid expenses and accrued income included advance payments to Qualcomm of EUR 972 million (EUR 1 069 million in 2011). In 2008, Nokia and Qualcomm entered into a new 15 year agreement, under the terms of which Nokia was granted a license to all Qualcomm's patents for the use in Nokia mobile devices and Nokia Siemens Networks infrastructure equipment. The financial structure of the agreement included an upfront payment of EUR 1.7 billion, which is amortized over the contract period and ongoing royalties payable to Qualcomm. As part of the licence agreement, Nokia also assigned ownership of a number of patents to Qualcomm. These patents were valued using the income approach based on projected cash flows, on a discounted basis, over the assigned patents' estimated useful life. Based on the valuation and underlying assumptions Nokia determined that the fair value of these patents were not material.

Prepaid expenses and accrued income also include accrued interest income and various other prepaid expenses and accrued income, but no amounts which are individually significant.

**20. Valuation and qualifying accounts**

Allowed on assets to which they apply:	Balance at beginning of year EURm	Charged to costs and expenses EURm	Deductions <sup>(1)</sup> EURm	Balance at end of year EURm
<b>2012</b>				
Allowance for doubtful accounts	284	53	(89)	248
Excess and obsolete inventory	457	403	(389)	471
<b>2011</b>				
Allowance for doubtful accounts	363	131	(210)	284
Excess and obsolete inventory	301	345	(189)	457
<b>2010</b>				
Allowance for doubtful accounts	391	117	(145)	363

Excess and obsolete inventory	361	124	(184)	301
-------------------------------	-----	-----	-------	-----

(1) Deductions include utilization and releases of the allowances.

F-50



**Table of Contents****21. Fair value and other reserves**

	Hedging reserve, EURm			Available-for-sale investments, EURm			Fair value and other reserves total, EURm		
	Gross	Tax	Net	Gross	Tax	Net	Gross	Tax	Net
<b>Balance at December 31, 2009</b>	<b>61</b>	<b>(15)</b>	<b>46</b>	<b>17</b>	<b>6</b>	<b>23</b>	<b>78</b>	<b>(9)</b>	<b>69</b>
<b>Cash flow hedges:</b>									
Net fair value gains (losses)	(119)	12	(107)				(119)	12	(107)
Transfer of (gains) losses to profit and loss account as adjustment to Net Sales	357	(57)	300				357	(57)	300
Transfer of (gains) losses to profit and loss account as adjustment to Cost of Sales	(379)	70	(309)				(379)	70	(309)
<b>Available-for-sale Investments:</b>									
Net fair value gains (losses)				(3)	(2)	(5)	(3)	(2)	(5)
Transfer to profit and loss account on impairment				13		13	13		13
Transfer of net fair value (gains) losses to profit and loss account on disposal				(1)		(1)	(1)		(1)
<b>Movements attributable to non-controlling interests</b>	<b>50</b>	<b>(7)</b>	<b>43</b>				<b>50</b>	<b>(7)</b>	<b>43</b>
<b>Balance at December 31, 2010</b>	<b>(30)</b>	<b>3</b>	<b>(27)</b>	<b>26</b>	<b>4</b>	<b>30</b>	<b>(4)</b>	<b>7</b>	<b>3</b>
<b>Cash flow hedges:</b>									
Net fair value gains (losses)	106	(25)	81				106	(25)	81
Transfer of (gains) losses to profit and loss account as adjustment to Net Sales	(166)	42	(124)				(166)	42	(124)
Transfer of (gains) losses to profit and loss account as adjustment to Cost of Sales	162	(36)	126				162	(36)	126
Transfer of (gains) losses as a basis adjustment to Assets and Liabilities <sup>(1)</sup>	14	(3)	11				14	(3)	11
<b>Available-for-sale Investments:</b>									
Net fair value gains (losses)				67		67	67		67
Transfer to profit and loss account on impairment				22	(2)	20	22	(2)	20
Transfer of net fair value (gains) losses to profit and loss account on disposal				(19)	(1)	(20)	(19)	(1)	(20)
<b>Movements attributable to non-controlling interests</b>	<b>(8)</b>	<b>(2)</b>	<b>(10)</b>				<b>(8)</b>	<b>(2)</b>	<b>(10)</b>
<b>Balance at December 31, 2011</b>	<b>78</b>	<b>(21)</b>	<b>57</b>	<b>96</b>	<b>1</b>	<b>97</b>	<b>174</b>	<b>(20)</b>	<b>154</b>
<b>Cash flow hedges:</b>									
Net fair value gains (losses)	(25)	21	(4)				(25)	21	(4)
Transfer of (gains) losses to profit and loss account as adjustment to Net Sales	390		390				390		390
Transfer of (gains) losses to profit and loss account as adjustment to Cost of Sales	(406)		(406)				(406)		(406)
<b>Available-for-sale Investments:</b>									
Net fair value gains (losses)				32	1	33	32	1	33
Transfer to profit and loss account on impairment				24		24	24		24
Transfer of net fair value (gains) losses to profit and loss account on disposal				(21)		(21)	(21)		(21)
<b>Movements attributable to non-controlling interests</b>	<b>(47)</b>		<b>(47)</b>				<b>(47)</b>		<b>(47)</b>
<b>Balance at December 31, 2012</b>	<b>(10)</b>		<b>(10)</b>	<b>131</b>	<b>2</b>	<b>133</b>	<b>121</b>	<b>2</b>	<b>123</b>

<sup>(1)</sup> The adjustments relate to acquisitions completed in 2011. For more details see Note 9.

F-51

**Table of Contents****22. Translation differences**

	Translation differences, EURm			Net investment hedging, EURm			Translation differences total, EURm		
	Gross	Tax	Net	Gross	Tax	Net	Gross	Tax	Net
<b>Balance at December 31, 2009</b>	<b>(295)</b>	<b>3</b>	<b>(292)</b>	<b>215</b>	<b>(50)</b>	<b>165</b>	<b>(80)</b>	<b>(47)</b>	<b>(127)</b>
<b>Translation differences:</b>									
Currency translation differences	1 302	3	1 305				1 302	3	1 305
Transfer to profit and loss (financial income and expense)									
<b>Net investment hedging:</b>									
Net investment hedging gains/(losses)				(389)	101	(288)	(389)	101	(288)
Transfer to profit and loss (financial income and expense)									
<b>Movements attributable to non-controlling interests</b>									
	(63)	(2)	(65)				(63)	(2)	(65)
<b>Balance at December 31, 2010</b>	<b>944</b>	<b>4</b>	<b>948</b>	<b>(174)</b>	<b>51</b>	<b>(123)</b>	<b>770</b>	<b>55</b>	<b>825</b>
<b>Translation differences:</b>									
Currency translation differences	17		17				17		17
Transfer to profit and loss (financial income and expense)	(8)		(8)				(8)		(8)
<b>Net investment hedging:</b>									
Net investment hedging gains/(losses)				(37)	9	(28)	(37)	9	(28)
Transfer to profit and loss (financial income and expense)									
<b>Movements attributable to non-controlling interests</b>									
	(35)		(35)				(35)		(35)
<b>Balance at December 31, 2011</b>	<b>918</b>	<b>4</b>	<b>922</b>	<b>(211)</b>	<b>60</b>	<b>(151)</b>	<b>707</b>	<b>64</b>	<b>771</b>
<b>Translation differences:</b>									
Currency translation differences	40	(1)	39				40	(1)	39
Transfer to profit and loss (financial income and expense)	(1)		(1)				(1)		(1)
<b>Net investment hedging:</b>									
Net investment hedging gains/(losses)				(58)	(9)	(67)	(58)	(9)	(67)
Transfer to profit and loss (financial income and expense)									
<b>Movements attributable to non-controlling interests</b>									
	2		2				2		2
<b>Balance at December 31, 2012</b>	<b>959</b>	<b>3</b>	<b>962</b>	<b>(269)</b>	<b>51</b>	<b>(218)</b>	<b>690</b>	<b>54</b>	<b>744</b>

---

**Table of Contents**

**23. The shares of the Parent Company**

**Nokia shares and shareholders**

*Shares and share capital*

Nokia has one class of shares. Each Nokia share entitles the holder to one vote at General Meetings of Nokia.

On December 31, 2012, the share capital of Nokia Corporation was EUR 245 896 461.96 and the total number of shares issued was 3 744 956 052.

On December 31, 2012, the total number of shares included 33 971 118 shares owned by Group companies representing approximately 0.9% of the share capital and the total voting rights.

Under the Articles of Association of Nokia, Nokia Corporation does not have minimum or maximum share capital or a par value of a share.

**Authorizations**

*Authorization to increase the share capital*

At the Annual General Meeting held on May 6, 2010, Nokia shareholders authorized the Board of Directors to issue a maximum of 740 million shares through one or more issues of shares or special rights entitling to shares, including stock options. The Board of Directors may issue either new shares or shares held by the Company. The authorization includes the right for the Board to resolve on all the terms and conditions of such issuances of shares and special rights, including to whom the shares and the special rights may be issued. The authorization may be used to develop the Company's capital structure, diversify the shareholder base, finance or carry out acquisitions or other arrangements, settle the Company's equity-based incentive plans, or for other purposes resolved by the Board. The authorization is effective until June 30, 2013.

At the end of 2012, the Board of Directors had no other authorizations to issue shares, convertible bonds, warrants or stock options.

*Other authorizations*

At the Annual General Meeting held on May 3, 2011, Nokia shareholders authorized the Board of Directors to repurchase a maximum of 360 million Nokia shares by using funds in the unrestricted equity. Nokia did not repurchase any shares on the basis of this authorization. This authorization would have been effective until June 30, 2012 as per the resolution of the Annual General Meeting on May 3, 2011, but it was terminated by the resolution of the Annual General Meeting on May 3, 2012.

At the Annual General Meeting held on May 3, 2012, Nokia shareholders authorized the Board of Directors to repurchase a maximum of 360 million Nokia shares by using funds in the unrestricted equity. The amount of shares corresponds to less than 10% of all the shares of the Company. The shares may be repurchased under the buyback authorization in order to develop the capital structure of the Company. In addition, shares may be repurchased in order to finance or carry out acquisitions or other arrangements, to settle the Company's equity-based incentive plans, to be transferred for other purposes, or to be cancelled. The authorization is effective until June 30, 2013.

*Authorizations proposed to the Annual General Meeting 2013*

On January 24, 2013, Nokia announced that the Board of Directors will propose that the Annual General Meeting convening on May 7, 2013 authorize the Board to resolve to repurchase a maximum

**Table of Contents**

of 370 million Nokia shares. The proposed maximum number of shares that may be repurchased corresponds to less than 10% of all the shares of the Company. The shares may be repurchased in order to develop the capital structure of the Company, finance or carry out acquisitions or other arrangements, settle the company's equity-based incentive plans, be transferred for other purposes, or be cancelled. The shares may be repurchased either through a tender offer made to all shareholders on equal terms, or in such marketplaces the rules of which allow companies to trade with their own shares. The authorization would be effective until June 30, 2014 and terminate the current authorization for repurchasing of the Company's shares resolved at the Annual General Meeting on May 3, 2012.

Nokia also announced on January 24, 2013 that the Board of Directors will propose to the Annual General Meeting to be held on May 7, 2013 that the Annual General Meeting authorize the Board to resolve to issue a maximum of 740 million shares through issuance of shares or special rights entitling to shares (including stock options) in one or more issues. The Board may issue either new shares or shares held by the Company. The Board proposes that the authorization may be used to develop the Company's capital structure, diversify the shareholder base, finance or carry out acquisitions or other arrangements, settle the Company's equity-based incentive plans, or for other purposes resolved by the Board. The proposed authorization includes the right for the Board to resolve on all the terms and conditions of the issuance of shares and special rights entitling to shares, including issuance in deviation from the shareholders' pre-emptive rights. The authorization would be effective until June 30, 2016 and terminate the current authorization granted by the Annual General Meeting on May 6, 2010.

**24. Share-based payment**

The Group has several equity-based incentive plans for employees. The plans include performance share plans, stock option plans and restricted share plans. Both executives and employees participate in these programs.

The equity-based incentive grants are generally conditional upon continued employment as well as fulfillment of such performance and other conditions, as determined in the relevant plan rules.

The share-based compensation expense for all equity-based incentive awards amounted to EUR 13 million in 2012 (EUR 18 million in 2011 and EUR 47 million in 2010).

**Stock options**

During 2012 Nokia administered two global stock option plans, the Stock Option Plans 2007 and 2011, each of which, including its terms and conditions, has been approved by the Annual General Meeting in the year when the plan was launched.

Each stock option entitles the holder to subscribe for one new Nokia share. The stock options are non-transferable and may be exercised for shares only. All of the stock options granted under the Stock Option Plan 2007 have a vesting schedule with 25% of the options vesting one year after grant and 6.25% each quarter thereafter. The stock options granted under the 2007 plan have a term of approximately five years. The stock options granted under the Stock Option Plan 2011 have a vesting schedule with 50% of stock options vesting three years after grant and the remaining 50% vesting four years from grant. The stock options granted under the 2011 plan have a term of approximately six years.

The exercise price of the stock options is determined at the time of grant, on a quarterly basis, in accordance with a pre-agreed schedule after the release of Nokia's periodic financial results. The exercise prices are based on the trade volume weighted average price of a Nokia share on NASDAQ

**Table of Contents**

OMX Helsinki during the trading days of the first whole week of the second month of the respective calendar quarter (i.e., February, May, August or November). With respect to the 2011 Stock Option Plan, should an ex-dividend date take place during that week, the exercise price shall be determined based on the following week's trade volume weighted average price of the Nokia share on NASDAQ OMX Helsinki. Exercise prices are determined on a one-week weighted average to mitigate any day-specific fluctuations in Nokia's share price. The determination of exercise price is defined in the terms and conditions of the stock option plans, which were approved by the shareholders at the respective Annual General Meetings 2007 and 2011. The Board of Directors does not have the right to change how the exercise price is determined.

Shares will be eligible for dividend for the financial year in which the subscription takes place. Other shareholder rights commence on the date on which the subscribed shares are entered in the Trade Register. The stock option grants are generally forfeited if the employment relationship terminates with Nokia.

Pursuant to the stock options issued under the global stock option plans, an aggregate maximum number of 25 721 002 new Nokia shares may be subscribed for, representing 0.7% of the total number of votes at December 31, 2012. All share subscription prices based on the exercises of stock options are recorded in the fund for invested non-restricted equity as per a resolution by the Annual General Meeting.

The table below sets forth certain information relating to the stock options outstanding at December 31, 2012.

Plan (year of launch)	Stock options outstanding 2012	Number of participants (approx.)	Option (sub) category	Vesting status	Exercise period			Exercise price/ share EUR
				(as percentage of total number of stock options)	First vest date	Last vest date	Expiry date	
2007 <sup>(1)</sup>	7 579 015	2 400	2007 2Q	Expired	July 1, 2008	July 1, 2011	December 31, 2012	18.39
			2007 3Q	Expired	October 1, 2008	October 1, 2011	December 31, 2012	21.86
			2007 4Q	Expired	January 1, 2009	January 1, 2012	December 31, 2012	27.53
			2008 1Q	100.00	April 1, 2009	April 1, 2012	December 31, 2013	24.15
			2008 2Q	100.00	July 1, 2009	July 1, 2012	December 31, 2013	19.16
			2008 3Q	100.00	October 1, 2009	October 1, 2012	December 31, 2013	17.80
			2008 4Q	93.75	January 1, 2010	January 1, 2013	December 31, 2013	12.43
			2009 1Q	87.50	April 1, 2010	April 1, 2013	December 31, 2014	9.82
			2009 2Q	81.25	July 1, 2010	July 1, 2013	December 31, 2014	11.18
			2009 3Q	75.00	October 1, 2010	October 1, 2013	December 31, 2014	9.28
			2009 4Q	68.75	January 1, 2011	January 1, 2014	December 31, 2014	8.76
			2010 1Q	62.50	April 1, 2011	April 1, 2014	December 31, 2015	10.11
			2010 2Q	56.25	July 1, 2011	July 1, 2014	December 31, 2015	8.86
2010 3Q	50.00	October 1, 2011	October 1, 2014	December 31, 2015	7.29			
2010 4Q	43.75	January 1, 2012	January 1, 2015	December 31, 2015	7.59			
2011 <sup>(2)</sup>	18 141 987	1 960	2011 2Q		July 1, 2014	July 1, 2015	December 27, 2017	6.02
			2011 3Q		October 1, 2014	October 1, 2015	December 27, 2017	3.76
			2011 4Q		January 1, 2015	January 1, 2016	December 27, 2017	4.84
			2012 1Q		April 1, 2015	April 1, 2016	December 27, 2018	3.84
			2012 2Q		July 1, 2015	July 1, 2016	December 27, 2018	2.44
			2012 3Q		October 1, 2015	October 1, 2016	December 27, 2018	2.18
			2012 4Q		January 1, 2016	January 1, 2017	December 27, 2018	2.12

(1) The Group's global Stock Option Plan 2007 has a vesting schedule with a 25% vesting one year after grant, and quarterly vesting thereafter, each of the quarterly lots representing 6.25% of the total grant. The grants vest fully in four years.

(2) The Group's global Stock Option Plan 2011 has vesting schedule with 50% of stock options vesting three years after grant and the remaining 50% vesting four years from grant.

**Table of Contents****Total stock options outstanding as at December 31, 2012<sup>(1)</sup>**

	Number of shares	Weighted average exercise price EUR	Weighted average share price EUR
<b>Shares under option at January 1, 2010</b>	<b>23 039 962</b>	<b>15.39</b>	
Granted	6 708 582	8.73	
Exercised	39 772	2.20	9.44
Forfeited	1 698 435	12.07	
Expired	6 065 041	13.97	
<b>Shares under option at December 31, 2010</b>	<b>21 945 296</b>	<b>14.04</b>	
Granted	11 801 907	5.50	
Exercised	6 208	5.07	7.69
Forfeited	2 441 876	9.05	
Expired	7 909 089	17.53	
<b>Shares under option at December 31, 2011<sup>(2)</sup></b>	<b>23 390 030</b>	<b>9.07</b>	
Granted	10 258 400	2.32	
Exercised	627	0.97	2.08
Forfeited	4 246 222	6.60	
Expired	3 555 213	15.26	
<b>Shares under option at December 31, 2012</b>	<b>25 846 368</b>	<b>5.95</b>	
Options exercisable at December 31, 2009 (shares)	13 124 925	16.09	
Options exercisable at December 31, 2010 (shares)	11 376 937	17.07	
Options exercisable at December 31, 2011 (shares)	6 904 331	14.01	
Options exercisable at December 31, 2012 (shares)	<b>5 616 112</b>	<b>11.96</b>	

<sup>(1)</sup> Includes also stock options granted under other than global equity plans, however excluding the Nokia Siemens Network share-based incentive program. For further information see "Other equity plans for employees" below.

<sup>(2)</sup> Due to an administrative error, the amount of 50 000 stock options granted to a Nokia Leadership Team member in 4Q 2011 was not reported in 2011 Form 20-F. The administrative error was corrected in 2012 and the table reflects the corrected amount.

The weighted average grant date fair value of stock options granted was EUR 0.76 in 2012, EUR 0.92 in 2011 and EUR 2.29 in 2010.

The options outstanding by range of exercise price at December 31, 2012 are as follows:

<b>Options outstanding</b>			
Exercise prices EUR	Number of shares	Weighted average remaining contractual life in years	Weighted average exercise price EUR
2.12-4.84	12 382 650	5.78	2.64
4.97-6.02	5 822 568	4.96	6.02
6.71-8.86	3 737 369	2.99	8.65
8.87-12.43	2 697 026	1.86	11.37
12.78-24.15	1 206 755	1.03	19.03
	25 846 368		

**Table of Contents**

Nokia calculates the fair value of stock options using the Black-Scholes model. The fair value of the stock options is estimated at the grant date using the following assumptions:

	2012	2011	2010
Weighted average expected dividend yield	7.96%	7.37%	4.73%
Weighted average expected volatility	65.97%	36.95%	52.09%
Risk-free interest rate	0.70% - 1.60%	1.71% - 2.86%	1.52% - 2.49%
Weighted average risk-free interest rate	1.13%	2.68%	1.78%
Expected life (years)	4.70	4.70	3.59
Weighted average share price, EUR	2.42	5.46	8.27

Expected term of stock options is estimated by observing general option holder behavior and actual historical terms of Nokia stock option plans.

Expected volatility has been set by reference to the implied volatility of options available on Nokia shares in the open market and in light of historical patterns of volatility.

**Performance shares**

During 2012, Nokia administered four global performance share plans, the Performance Share Plans of 2009, 2010, 2011 and 2012, each of which, including its terms and conditions, has been approved by the Board of Directors.

The performance shares represent a commitment by Nokia Corporation to deliver Nokia shares to employees at a future point in time, subject to Nokia's fulfillment of pre-defined performance criteria. No Nokia shares will be delivered unless the Group's performance reaches at least one of the threshold levels measured by two independent, pre-defined performance criteria. The below table illustrates the performance criteria of the Performance Share Plans from 2009 through 2012.

Performance Criteria	Performance Share Plan			
	2012	2011	2010	2009
Average Annual Net Sales Growth (Nokia Group)		Yes	Yes	Yes
EPS at the end of performance period (Nokia Group)			Yes	Yes
Average Annual Net Sales (Nokia Group excluding NSN)	Yes			
Average Annual EPS (Nokia Group)	Yes	Yes		

The 2009, 2010 and 2011 plans have a three-year performance period. The shares vest after the respective performance period. The 2012 plan has a two-year performance period and a subsequent one-year restriction period, after which the shares vest. The shares will be delivered to the participants as soon as practicable after they vest. Until the Nokia shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights associated with the performance shares. The performance share grants are generally forfeited if the employment relationship terminates with Nokia prior to vesting. The term "vesting" means that the performance period and/or restriction period specified in the plan rules has ended and does not indicate that actual share delivery took place.

The following table summarizes our global performance share plans.

Plan	Performance shares outstanding at threshold <sup>(1)(2)</sup>	Number of participants (approx.)	Performance period	Settlement
2009	0	4 000	2009-2011	2012
2010	0	3 000	2010-2012	2013
2011	3 346 428	3 000	2011-2013	2014
2012	5 226 959	3 000	2012-2013 <sup>(3)</sup>	2015



<sup>(1)</sup> Shares under Performance Share Plan 2010 vested on December 31, 2012 and are therefore not included in the outstanding numbers.

F-57

**Table of Contents**

- (2) Does not include 698 outstanding performance shares with deferred delivery due to leave of absence.
- (3) Performance Share Plan 2012 has a two-year performance period with an additional one-year restriction period.
- The following tables set forth the performance criteria of each global performance share plan.

Plan	Threshold Performance		Maximum Performance	
	EPS <sup>(1)(2)</sup>	Average Annual Net Sales Growth <sup>(1)</sup>	EPS <sup>(1)(2)</sup>	Average Annual Net Sales Growth <sup>(1)</sup>
	EUR		EUR	
2009	1.01	(5)%	1.53	10%
2010	0.82	0%	1.44	13.5%
2011	0.50	2.5%	1.10	10%

- (1) Both the EPS and Average Annual Net Sales Growth criteria have an equal weight of 50%.
- (2) Performance Share Plan 2009 and 2010: EPS at the end of the performance period. Performance Share Plan 2011: average annual EPS.

Plan	Threshold Performance		Maximum Performance	
	Average Annual EPS <sup>(1)</sup>	Average Annual Net Sales <sup>(1)</sup>	Average Annual EPS <sup>(1)</sup>	Average Annual Net Sales <sup>(1)</sup>
	EUR	EUR million	EUR	EUR million
2012	0.04	17 394	0.35	26 092

- (1) Both the EPS and Average Annual Net Sales criteria have an equal weight of 50%.

**Performance Shares Outstanding as at December 31, 2012<sup>(1)</sup>**

	Number of performance shares at threshold	Weighted average grant date fair value EUR <sup>(2)</sup>
<b>Performance shares at January 1, 2010</b>	<b>5 093 960</b>	
Granted	3 576 403	5.94
Forfeited	1 039 908	
Vested <sup>(3)</sup>	1 910 332	
<b>Performance shares at December 31, 2010</b>	<b>5 720 123</b>	
Granted	5 410 211	3.66
Forfeited	1 538 377	
Vested <sup>(4)</sup>	2 009 423	
<b>Performance shares at December 31, 2011</b>	<b>7 582 534</b>	
Granted	5 785 875	1.33
Forfeited	2 718 208	
Vested <sup>(5)</sup>	2 076 116	
<b>Performance shares at December 31, 2012</b>	<b>8 574 085</b>	

- (1) Includes also performance shares granted under other than global equity plans. For further information see Other equity plans for employees below.
- (2) The fair value of performance shares is estimated based on the grant date market price of the Company's share less the present value of dividends, if any, expected to be paid during the vesting period.
- (3) Includes performance shares under Performance Share Plan 2008 that vested on December 31, 2010.



**Table of Contents**

- (4) Includes performance shares under Performance Share plan 2009 that vested on December 31, 2011.
- (5) Includes performance shares under Performance Share plan 2010 that vested on December 31, 2012. Includes shares receivable through the one-time special CEO incentive program that vested on December 31, 2012.

There was no settlement under the Performance Share Plan 2010 as neither of the threshold performance criteria of EPS and Average Annual Net Sales Growth of this plan was met.

There was no settlement under the one-time special CEO incentive program as the performance criteria were not met.

**Restricted shares**

During 2012, Nokia administered four global restricted share plans, the Restricted Share Plans 2009, 2010, 2011 and 2012, each of which, including its terms and conditions, has been approved by the Board of Directors.

Restricted Shares are used on a selective basis to ensure retention and recruitment of individuals with functional mastery and other employees deemed critical to Nokia's future success.

All of the Group's restricted share plans have a restriction period of three years after grant. Until the Nokia shares are delivered, the participants will not have any shareholder rights, such as voting or dividend rights, associated with the restricted shares. The restricted share grants are generally forfeited if the employment relationship terminates with Nokia prior to vesting.

**Restricted Shares Outstanding as at December 31, 2012<sup>(1)</sup>**

	Number of Restricted Shares	Weighted average grant date fair value EUR <sup>(2)</sup>
<b>Restricted Shares at January 1, 2010</b>	<b>9 381 002</b>	
Granted	5 801 800	6.85
Forfeited	1 492 357	
Vested	1 330 549	
<b>Restricted Shares at December 31, 2010</b>	<b>12 359 896</b>	
Granted	8 024 880	3.15
Forfeited	2 063 518	
Vested	1 735 167	
<b>Restricted Shares at December 31, 2011<sup>(3)</sup></b>	<b>16 586 091</b>	
Granted	12 999 131	1.76
Forfeited	4 580 182	
Vested	1 324 508	
<b>Restricted Shares at December 31, 2012<sup>(4)</sup></b>	<b>23 680 532</b>	

(1) Includes also restricted shares granted under other than global equity plans. For further information see Other equity plans for employees below.

(2) The fair value of restricted shares is estimated based on the grant date market price of the Company's share less the present value of dividends, if any, expected to be paid during the vesting period.

(3) Includes 901 900 restricted shares granted in Q4 2008 under Restricted Share Plan 2008 that vested on January 1, 2012.

(4) Includes 1 960 700 restricted shares granted in Q4 2009 under Restricted Share Plan 2009 that vested on January 1, 2013.

---

**Table of Contents**
**Other equity plans for employees**

In addition to the global equity plans described above, Nokia has equity plans for Nokia acquired businesses or employees in the United States and Canada under which participants can receive Nokia ADSs or ordinary shares. These equity plans do not result in an increase in the fund for invested non-restricted equity of Nokia.

On the basis of these plans, the Group had 0.1 million stock options outstanding on December 31, 2012. The weighted average exercise price is USD 11.39.

In connection with the July 10, 2008 acquisition of NAVTEQ, the Group assumed NAVTEQ's 2001 Stock Incentive Plan ( NAVTEQ Plan ). All unvested NAVTEQ restricted stock units under the NAVTEQ Plan were converted to an equivalent number of restricted stock units entitling their holders to Nokia shares. The maximum number of Nokia shares to be delivered to NAVTEQ employees during the years 2008-2012 was approximately 3 million, all of which have been delivered by December 31, 2012. The Group does not intend to make further awards under the NAVTEQ Plan.

The Group also has an Employee Share Purchase Plan in the United States, which permits all full-time Nokia employees located in the United States to acquire Nokia ADSs at a 15% discount. The purchase of the ADSs is funded through monthly payroll deductions from the salary of the participants, and the ADSs are purchased on a monthly basis. As of December 31, 2012, approximately 1 750 000 ADSs had been purchased under this plan during 2012, and there were a total of approximately 1 230 participants in the plan. The plan will be ramped-down during 2013 as a new global Employee Share Purchase Plan will be implemented as described below.

During 2011-2012, Nokia had a one-time special CEO incentive program designed to align the CEO's compensation to increased shareholder value and to link a meaningful portion of CEO's compensation directly to the performance of Nokia's share price over the period of 2011-2012. Mr. Elop had the opportunity to earn 125 000 - 750 000 Nokia shares at the end of 2012 based on two independent criteria: Total Shareholder Return (TSR) relative to a peer group of companies over the two-year period and Nokia's absolute share price at the end of 2012. As the minimum performance for neither of the two performance criterion was reached, no share delivery took place. The number of shares earned and to be settled may be adjusted by the Board of Directors under certain exceptional circumstances up until June 30, 2013, should the results significantly change.

On January 24, 2013 Nokia introduced an Employee Share Purchase Plan, which is planned to be offered in 27 countries to all Nokia employees (excluding Nokia Siemens Networks' employees). Under the Plan, the eligible Nokia employees can elect to make monthly contributions from their salary to purchase Nokia shares. The contribution per employee cannot exceed EUR 1 200 per year. The share purchases will be made at market value on pre-determined dates on a monthly basis during a 12-month savings period. Nokia will offer one matching share for every two purchased shares the employee still holds after the last monthly purchase has been made in June 2014. In addition, 20 free shares will be delivered to employees who make the first three consecutive monthly share purchases. The participation in the plan is voluntary to the employees.

Nokia Siemens Networks established a share-based incentive program in 2012 under which options for Nokia Siemens Networks B.V. shares are granted to selected Nokia Siemens Networks' employees. The options generally become exercisable on the fourth anniversary of the grant date or, if earlier, on the occurrence of certain corporate transactions, such as initial public offering ( IPO ). The exercise price of the options is based on a per share value on grant as determined for the purposes of the incentive program. The options will be cash-settled at exercise unless an IPO has taken place, at which point they would be converted into equity-settled options. If an IPO has not taken place by the sixth anniversary of the grant date, Nokia Siemens Networks will cash out any remaining options. If an IPO has taken place, equity options remain exercisable until the tenth anniversary of the grant date.

**Table of Contents**

The fair value of the liability is determined based on the estimated fair value of shares less the exercise price of the options on the reporting date. The total carrying amount for liabilities arising from share-based payment transactions is EUR 11 million at December 31, 2012.

**25. Deferred taxes**

	2012 EURm	2011 EURm
<b>Deferred tax assets:</b>		
Intercompany profit in inventory	58	66
Tax losses carried forward and unused tax credits	564	715
Warranty provision	47	63
Other provisions	261	363
Depreciation differences	868	711
Share-based compensation		11
Other temporary differences	145	362
Reclassification due to netting of deferred taxes	(689)	(443)
<b>Total deferred tax assets</b>	<b>1 254</b>	<b>1 848</b>
<b>Deferred tax liabilities:</b>		
Depreciation differences and untaxed reserves	(892)	(500)
Fair value gains/losses		(65)
Undistributed earnings	(313)	(268)
Other temporary differences <sup>(1)</sup>	(184)	(410)
Reclassification due to netting of deferred taxes	689	443
<b>Total deferred tax liabilities</b>	<b>(700)</b>	<b>(800)</b>
<b>Net deferred tax asset</b>	<b>554</b>	<b>1 048</b>
<b>Tax charged to equity</b>	<b>3</b>	<b>(4)</b>

<sup>(1)</sup> In 2011, other temporary differences included a deferred tax liability of EUR 339 million arising from purchase price allocation related to Nokia Siemens Networks and NAVTEQ. In 2012 the deferred tax liabilities for these two items were nil.

At December 31, 2012, the Group had tax losses carry forward of EUR 6 528 million (EUR 2 702 million in 2011) of which EUR 4 554 million will expire within 10 years (EUR 969 million in 2011).

At December 31, 2012, the Group had tax losses carry forward, temporary differences and tax credits of EUR 10 294 million (EUR 4 302 million in 2011) for which no deferred tax asset was recognized due to uncertainty of utilization of these items. EUR 4 392 million of those will expire within 10 years (EUR 147 million in 2011).

The recognition of the remaining deferred tax assets is supported by offsetting deferred tax liabilities, earnings history and profit projections in the relevant jurisdictions.

At December 31, 2012, the Group had undistributed earnings of EUR 347 million (EUR 424 million in 2011) on which no deferred tax liability has been formed as these will not reverse in the foreseeable future.

**Table of Contents****26. Accrued expenses and other liabilities**

	2012 EURm	2011 EURm
Social security, VAT and other taxes	821	1 358
Wages and salaries	1 031	933
Deferred revenue	369	751
Advance payments	1 887	1 524
Other	2 973	2 884
<b>Total</b>	<b>7 081</b>	<b>7 450</b>

Other accruals include accrued discounts, royalties and marketing expenses as well as various amounts which are individually insignificant. Majority of the deferred revenue and advance payments will be recognized as revenue within the next 12 months.

**27. Provisions**

	Warranty EURm	Restructuring EURm	IPR infringements EURm	Material liability EURm	Project losses	Tax EURm	Other EURm	Total EURm
<b>At January 1, 2012</b>	688	459	431	125	205	299	420	2 627
Exchange differences	3			4		(11)	(7)	(11)
Acquisitions								
Additional provisions	340	1 458	38	300	247	99	159	2 641
Changes in estimates	(28)	(112)	(63)	(85)	(65)	(45)	(73)	(471)
Charged to profit and loss account	312	1 346	(25)	215	182	54	86	2 170
Utilized during year	(596)	(1 152)	(18)	(102)	(238)	(15)	(46)	(2 167)
<b>At December 31, 2012</b>	407	653	388	242	149	327	453	2 619

	Warranty EURm	Restructuring EURm	IPR infringements EURm	Material liability EURm	Project losses	Tax EURm	Other EURm	Total EURm
<b>At January 1, 2011</b>	928	195	449	139	207	296	376	2 590
Exchange differences	(5)					(4)		(9)
Acquisitions	30						5	35
Additional provisions	671	584	70	88	237	124	286	2 060
Changes in estimates	(33)	(95)	(74)		(70)	(103)	(135)	(510)
Charged to profit and loss account	638	489	(4)	88	167	21	151	1 550
Utilized during year	(903)	(225)	(14)	(102)	(169)	(14)	(112)	(1 539)
<b>At December 31, 2011</b>	688	459	431	125	205	299	420	2 627

**Table of Contents**

	2012 EURm	2011 EURm
Analysis of total provisions at December 31:		
Non-current	971	1 175
Current	1 648	1 452

Outflows for the warranty provision are generally expected to occur within the next 18 months. Timing of outflows related to tax provisions is inherently uncertain.

The restructuring provision is mainly related to restructuring activities in Devices & Services and Nokia Siemens Networks businesses. The majority of outflows related to the restructuring is expected to occur during 2013.

In February 2012, Nokia announced planned changes at its factories in Komarom, Hungary, Reynosa, Mexico and Salo, Finland to increase efficiency in smartphone manufacturing. In June 2012, Nokia announced additional actions to align its workforce and operations. The planned actions was expected to lead to a total reduction of up to 10 000 positions globally by the end of 2013. As part of this Nokia planned to make significant reductions in certain R&D projects, which resulted in the closure of Ulm in Germany and Burnaby, Canada; reduce factory operations, including the closure of the factory in Salo; prioritize sales efforts around certain markets resulting in reducing headcount in certain other markets; align support functions around Nokia's focused strategy resulting in a significant reduction in the number of employees in corporate functions. As a result, Devices & Services recognized restructuring charges of EUR 550 million in total.

In April 2011, Nokia announced plans to reduce its global workforce by about 4 000 employees by the end of 2012, as well as plans to consolidate the company's research and product development sites so that each site has a clear role and mission. In September 2011, Nokia announced plans to take further actions to align its workforce and operations, which includes reductions in Sales and Marketing and Corporate functions in line with Nokia's earlier announcement in April 2011. The measures also include the closure of Nokia's manufacturing facility in Cluj, Romania, which together with adjustments to supply chain operations has affected approximately 2 200 employees. As a result, Devices & Services recognized restructuring charges of EUR 456 million in total.

In 2012, Location & Commerce announced further plans to reduce its workforce and as a result recognized restructuring charges of EUR 31 million in total.

In September 2011, Nokia announced a plan to concentrate the development efforts of the Location & Commerce business in Berlin, Germany and Boston and Chicago in the U.S., and other supporting sites and plans to close its operations in Bonn, Germany and Malvern, U.S. As a result, Location & Commerce recognized restructuring charges of EUR 25 million.

In November 2011, Nokia Siemens Networks announced a new strategy to focus on mobile broadband and services and the launch of an extensive global restructuring program. At the same time, Nokia Siemens Networks announced its intention to reduce its global workforce by approximately 17 000 by the end of 2013. Restructuring and other associated expenses incurred in Nokia Siemens Networks in 2012 totaled EUR 1 226 million (EUR 145 million in 2011) including mainly personnel related expenses as well as expenses arising from the country and contract exits based on Nokia Siemens Networks' strategy that focuses on key markets and product segments.

The IPR provision is based on estimated potential future settlements for asserted past IPR infringements. Final resolution of IPR claims generally occurs over several periods.

Material liability provision relates to non-cancellable purchase commitments with suppliers. The outflows are expected to occur over the next 12 months.



**Table of Contents**

Provisions for losses on projects in progress are related to Nokia Siemens Networks onerous contracts. Utilization of provisions for project losses is generally expected to occur in the next 12 months.

Other provisions include provisions for various contractual obligations and provisions for pension and other social security costs on share-based awards.

**28. Earnings per share**

	2012	2011	2010
Numerator/EURm			
Basic:			
Profit attributable to equity holders of the parent	<b>(3 106)</b>	(1 164)	1 850
Diluted:			
Profit attributable to equity holders of the parent	<b>(3 106)</b>	(1 164)	1 850
Elimination of interest expense, net of tax, on convertible bond, where dilutive			
Profit used to determine diluted earnings per share	<b>(3 106)</b>	(1 164)	1 850
Denominator/1000 shares			
Basic:			
Weighted average number of shares in issue	<b>3 710 845</b>	3 709 947	3 708 816
Effect of dilutive securities:			
Stock options			
Performance shares			324
Restricted shares			4 110
Assumed conversion of convertible bond			
			4 434
Diluted:			
Adjusted weighted average number of shares and assumed conversions	<b>3 710 845</b>	3 709 947	3 713 250

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the parent by the weighted average number of shares outstanding during the year excluding shares purchased by the Group and held as treasury shares. Diluted earnings per share is calculated by adjusting the profit attributable to equity holders of the parent to eliminate the interest expense of the convertible bond and by adjusting the weighted average number of shares outstanding with the dilutive effect of stock options, performance shares and restricted shares outstanding during the year as well as the assumed conversion of convertible bond.

In 2012, stock options equivalent to 22 million shares (16 million in 2011 and 13 million in 2010) were excluded from the calculation of diluted earnings per share because they were determined to be anti-dilutive.

In addition, 2 million of performance shares were excluded from the calculation of dilutive shares because contingency conditions have not been met.

As at 31 December 2012, there were 4 million of restricted shares outstanding that could potentially have a dilutive impact in the future but were currently excluded from the calculation because they were determined anti-dilutive.

The convertible bond includes a voluntary conversion option. Based on the initial conversion price, voluntary conversion of the entire bond would result in the issue of 287 million shares. The potential



**Table of Contents**

shares related to the bond as well as the interest on the convertible bond were currently excluded from the calculation of dilutive shares because they were determined to be anti-dilutive at December 31, 2012.

**29. Commitments and contingencies**

	2012 EURm	2011 EURm
<b>Collateral for our own commitments</b>		
Property under mortgages		18
Assets pledged	38	2
<b>Contingent liabilities on behalf of Group companies</b>		
Other guarantees	937	1 292
<b>Contingent liabilities on behalf of Associated companies</b>		
Financial guarantees on behalf of associated companies	11	
<b>Contingent liabilities on behalf of other companies</b>		
Financial guarantees on behalf of third parties <sup>(1)</sup>	12	
Other guarantees	68	16
<b>Financing commitments</b>		
Customer finance commitments <sup>(1)</sup>	34	86
Venture fund commitments	282	133

<sup>(1)</sup> See also Note 34.

The amounts above represent the maximum principal amount of commitments and contingencies.

Other guarantees include commercial guarantees of EUR 598 million in 2012 (EUR 997 million in 2011) provided to certain Nokia Siemens Networks customers in the form of bank guarantees or corporate guarantees issued by Nokia Siemens Networks Group entity. These instruments entitle the customer to claim payment as compensation for non-performance by Nokia Siemens Networks of its obligations under network infrastructure supply agreements. Depending on the nature of the guarantee, compensation is payable on demand or subject to verification of non-performance. Volume of Other guarantees has decreased mainly due to expired guarantees.

Financing commitments of EUR 34 million in 2012 (EUR 86 million in 2011) are available under loan facilities negotiated mainly with Nokia Siemens Networks customers. Availability of the amounts is dependent upon the borrower's continuing compliance with stated financial and operational covenants and compliance with other administrative terms of the facility. The loan facilities are primarily available to fund capital expenditure relating to purchases of network infrastructure equipment and services.

Venture fund commitments of EUR 282 million in 2012 (EUR 133 million in 2011) are financing commitments to a number of funds making technology related investments. As a limited partner in these funds Nokia is committed to capital contributions and also entitled to cash distributions according to respective partnership agreements and underlying fund activities.

As of December 31, 2012, the Group had purchase commitments of EUR 2 042 million (EUR 2 305 million in 2011) relating to inventory purchase obligations, service agreements and outsourcing arrangements, primarily for purchases in 2013. The Group has also entered into a partnership with Microsoft whereas the Group is committed to a software royalty structure which includes annual minimum software royalty

**Table of Contents**

commitments. In consideration for Nokia's contribution under the arrangement, the Group will also receive quarterly platform support payments from Microsoft. Over the lifetime of the agreement the total amount of the platform support payments is expected to slightly exceed the total amount of the minimum software royalty commitments.

The Group is party to routine litigation incidental to the normal conduct of business, including, but not limited to, several claims, suits and actions both initiated by third parties and initiated by Nokia relating to infringements of patents, violations of licensing arrangements and other intellectual property related matters, as well as actions with respect to products, contracts and securities. Based on the information currently available, in the opinion of the management outcome of and liabilities in excess of what has been provided for related to these or other proceedings, in the aggregate, are not likely to be material to the financial condition or result of operations.

**30. 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 non-cancellable leasing contracts are as follows:

		Operating leases
Leasing payments, EURm	2013	238
	2014	176
	2015	130
	2016	87
	2017	68
	Thereafter	309
	<b>Total</b>	<b>1 008</b>

Rental expense amounted to EUR 508 in 2012 (EUR 457 million in 2011 and EUR 429 million in 2010).

**31. Related party transactions**

At December 31, 2012, the Group had borrowings amounting to EUR 69 million (EUR 69 million in 2011) from Nokia Unterstützungskasse GmbH, the Group's German pension fund, which is a separate legal entity. The loan bears interest at 6% annum and its duration is pending until further notice by the loan counterparts who have the right to terminate the loan with a 90 day notice.

There were no loans granted to the members of the Nokia Leadership Team and the Board of Directors at December 31, 2012, 2011 or 2010.

	2012 EURm	2011 EURm	2010 EURm
<b>Transactions with associated companies</b>			
Share of results of associated companies	(1)	(23)	1
Dividend income			1
Share of shareholders' equity of associated companies	46	47	61
Sales to associated companies	12	37	15
Purchases from associated companies	150	91	186
Receivables from associated companies	1		3
Liabilities to associated companies	32	14	22



**Table of Contents**

At December 31, 2012, the Group has an outstanding financial guarantee of EUR 11 million for an associated company of the Group.

**Management compensation**

The following table sets forth the salary and cash incentive information awarded and paid or payable by the company to the President and CEO of Nokia Corporation for fiscal years 2010-2012 as well as the share-based compensation expense relating to equity-based awards, expensed by the company.

	2012	2011	2010
	Cash	Cash	Cash
	incentive	incentive	incentive
	payments	payments	payments
	Share-based	Share-based	Share-based
	compensation	compensation	compensation
	expense	expense	expense
	EUR	EUR	EUR
Base salary	Base salary	Base salary	Base salary
EUR	EUR	EUR	EUR
Stephen Elop,			
President and CEO from			
September 21, 2010	1 079 500	0	1 597 496
		1 020 000	473 070
		2 086 351	280 303
		440 137	67 018

Total remuneration of the Nokia Leadership Team awarded for the fiscal years 2010-2012 was EUR 7 304 269 in 2012 (EUR 8 396 423 in 2011 and EUR 9 009 253 in 2010), which consisted of base salaries and cash incentive payments. Total share-based compensation expense relating to equity-based awards expensed by the company was EUR 318 110 in 2012 (EUR 4 513 671 in 2011 and EUR 3 186 223 in 2010). For the Nokia Leadership Team members whose employment terminated during 2012, the equity-based incentives were forfeited following the termination of employment in accordance with plan rules.

**Board of Directors**

The following table depicts the annual remuneration structure paid to the members of our Board of Directors, as resolved by the Annual General Meetings in the respective years.

	2012	2011	2010
	Gross	Gross	Gross
	Annual	Annual	Annual
	Fee <sup>(1)</sup>	Fee <sup>(1)</sup>	Fee <sup>(1)</sup>
	EUR	EUR	EUR
2012	2012	2011	2010
Shares	Shares	Shares	Shares
Received	Received	Received	Received
<b>Board of Directors</b>			
Risto Siilasmaa,			
Chairman as from May 3, 2012 <sup>(2)</sup>	440 000	70 575	155 000
Jorma Ollila,			
Chairman until May 3, 2012 <sup>(3)</sup>		440 000	29 604
Dame Marjorie Scardino,			
Vice Chairman <sup>(4)</sup>	150 000	24 062	150 000
Bruce Brown	130 000	20 850	
Stephen Elop <sup>(5)</sup>			
Lalita D. Gupte <sup>(6)</sup>			140 000
Bengt Holmström		130 000	8 746
Henning Kagermann <sup>(7)</sup>	155 000	24 860	155 000
Olli-Pekka Kallasvuo <sup>(8)</sup>			130 000
Per Karlsson <sup>(9)</sup>		130 000	8 746
Jouko Karvinen <sup>(10)</sup>	155 000	24 860	140 000
Helge Lund	130 000	20 850	130 000
Isabel Marey-Semper <sup>(11)</sup>	140 000	22 454	140 000
Mårten Mickos	130 000	20 850	
Elizabeth Nelson <sup>(12)</sup>	140 000	22 454	
Kari Stadigh	130 000	20 850	130 000
			8 746



**Table of Contents**

- (1) Approximately 40% of each Board member's gross annual fee is paid in Nokia shares and the remaining approximately 60% of the gross annual fee is paid in cash. Further, it is Nokia policy that the directors retain all company stock received as director compensation until the end of their board membership, subject to the need to finance any costs relating to the acquisition of the shares, including taxes.
- (2) The 2012 fee paid to Risto Siilasmaa amounted to an annual total of EUR 440 000 for services as Chairman of the Board. The 2011 and 2010 fees paid to Risto Siilasmaa amounted to an annual total of EUR 155 000 each year indicated, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 25 000 for services as Chairman of the Audit Committee.
- (3) The 2011 and 2010 fees paid to Jorma Ollila amounted to an annual total of EUR 440 000 each year indicated for his services as Chairman of the Board.
- (4) The 2012, 2011 and 2010 fees paid to Dame Marjorie Scardino amounted to an annual total of EUR 150 000 each year indicated for services as Vice Chairman of the Board.
- (5) Stephen Elop did not receive remuneration for his services as a member of the Board. This table does not include remuneration paid to Mr. Elop for services as the President and CEO.
- (6) The 2010 fee paid to Lalita D. Gupte amounted to an annual total of EUR 140 000, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 10 000 for services as a member of the Audit Committee.
- (7) The 2012 and 2011 fees paid to Henning Kagermann amounted to an annual total of EUR 155 000 each year indicated, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 25 000 for services as Chairman of the Personnel Committee.
- (8) Olli-Pekka Kallasvuo left his position on the Nokia Board of Directors in 2010. This table includes fees paid to Olli-Pekka Kallasvuo for his services as a member of the Board, only.
- (9) The 2010 fee paid to Per Karlsson amounted to an annual total of EUR 155 000, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 25 000 for services as Chairman of the Personnel Committee.
- (10) The 2012 fee paid to Jouko Karvinen amounted to an annual total of EUR 155 000, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 25 000 for service as Chairman of the Audit Committee. The 2011 fee paid to Jouko Karvinen amounted to an annual total of EUR 140 000, consisting of a fee of 130 000 for services as a member of the Board and EUR 10 000 for services as a member of the Audit Committee.
- (11) The 2012, 2011 and 2010 fees paid to Isabel Marey-Semper amounted to an annual total of EUR 140 000 each year indicated, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 10 000 for services as a member of the Audit Committee.
- (12) The 2012 fee paid to Elizabeth Nelson amounted to an annual total of EUR 140 000, consisting of a fee of EUR 130 000 for services as a member of the Board and EUR 10 000 for services as a member of the Audit committee.

**Pension arrangements of certain Nokia Leadership Team Members**

The members of the Nokia Leadership Team participate in the local retirement programs applicable to employees in the country where they reside. Executives in Finland, including Mr. Elop, participate in the Finnish TyEL pension system, which provides for a retirement benefit based on years of service and earnings according to prescribed statutory rules. Under the Finnish TyEL pension system, base pay, incentives and other taxable fringe benefits are included in the definition of earnings, although gains realized from equity are not. The Finnish TyEL pension scheme provides for early retirement benefits at age 62 with a reduction in the amount of retirement benefits. Standard retirement benefits are available from age 63 to 68, according to an increasing scale. The Nokia Leadership Team members in the United States participate in Nokia's US Retirement Savings and Investment Plan. Under this 401(k) plan, participants elect to make voluntary pre-tax contributions that are 100% matched by Nokia up to 8% of eligible earnings. 25% of the employer's match vests for the participants during each year of the first four years of their employment. The Nokia Leadership Team members in



**Table of Contents**

Germany participate in the Nokia German Pension Plan that is 100% company funded. Contributions are based on pensionable earnings, the pension table and retirement age. For the Nokia Leadership Team members in UK, the pension accrued in the UK Pension Scheme is a Money Purchase benefit. Contributions are paid into the UK Pension Scheme by both the member and employer. These contributions are held within the UK Pension Scheme and are invested in funds selected by the member.

**Termination benefits of the President and CEO**

In case of termination by Nokia for reasons other than cause, Mr. Elop is entitled to a severance payment of up to 18 months of compensation (both annual base salary and target incentive) and his equity will be forfeited as determined in the applicable equity plan rules, with the exception of the equity out of the Nokia Equity Program 2010 which will vest in an accelerated manner (the performance period of Nokia Performance Share Plan 2010 ended in 2012 and no shares were delivered in accordance with its terms). In case of termination by Mr. Elop, the notice period is six months and he is entitled to a payment for such notice period (both annual base salary and target incentive for six months) and all his equity will be forfeited. In the event of a change of control of Nokia, Mr. Elop may terminate his employment upon a material reduction of his duties and responsibilities, upon which he will be entitled to a compensation of 18 months (both annual base salary and target incentive), and his unvested equity will vest in an accelerated manner. In case of termination by Nokia for cause, Mr. Elop is entitled to no additional compensation and all his equity will be forfeited. In case of termination by Mr. Elop for cause, he is entitled to a severance payment equivalent to 18 months of notice (both annual base salary and target incentive), and his unvested equity will vest in an accelerated manner. Mr. Elop is subject to a 12-month non-competition obligation after termination of the contract. Unless the contract is terminated by Nokia for cause, Mr. Elop may be entitled to compensation during the non-competition period or a part of it. Such compensation amounts to the annual base salary and target incentive for the respective period during which no severance payment is paid.

**Table of Contents****32. Notes to cash flow statement**

	<b>2012</b>	2011	2010
	<b>EURm</b>	EURm	EURm
Adjustments for:			
Depreciation and amortization (Note 10)	<b>1 326</b>	1 562	1 771
(Profit)/loss on sale of property, plant and equipment and available-for-sale investments	<b>(131)</b>	(49)	(193)
Income taxes (Note 12)	<b>1 145</b>	290	443
Share of results of associated companies (Note 15)	<b>1</b>	23	(1)
Non-controlling interest	<b>(683)</b>	(324)	(507)
Financial income and expenses (Note 11)	<b>333</b>	49	191
Transfer from hedging reserve to sales and cost of sales (Note 21)	<b>(16)</b>	(4)	(22)
Impairment charges (Note 8)	<b>109</b>	1 338	110
Asset retirements (Note 13)	<b>31</b>	13	37
Share-based compensation (Note 24)	<b>13</b>	18	47
Restructuring and related charges <sup>(1)</sup> (Note 7, 27)	<b>1 659</b>	565	245
Other income and expenses	<b>51</b>	5	(9)
Adjustments, total	<b>3 838</b>	3 486	2 112
Change in net working capital			
Decrease (increase) in short-term receivables	<b>2 040</b>	137	1 281
Decrease (increase) in inventories	<b>707</b>	289	(512)
(Decrease) increase in interest-free short-term borrowings	<b>(2 702)</b>	(1 145)	1 563
Loans made to customers	<b>78</b>	81	17
Change in net working capital	<b>123</b>	(638)	2 349

<sup>(1)</sup> The adjustments for restructuring and related charges represent the non-cash portion of the restructuring and related charges recognized in the income statement.

In 2010, Nokia Siemens Networks EUR 750 million loans and capitalized interest of EUR 16 million from Siemens were converted into equity impacting the non-controlling interests in the Consolidated Statements of Financial Position. The Group did not engage in any material non-cash investing activities in 2012 and 2011.

**Table of Contents****33. Principal Nokia Group companies at December 31, 2012**

		<b>Parent holding %</b>	<b>Group majority %</b>
FI	Nokia Sales International Oy	100.0	100.0
US	Nokia Inc.		100.0
DE	Nokia GmbH	100.0	100.0
GB	Nokia UK Limited		100.0
KR	Nokia TMC Limited	100.0	100.0
CN	Nokia (China) Investment Co. Ltd	100.0	100.0
CN	Nokia Telecommunications Ltd	4.5	83.9
NL	Nokia Finance International B.V.	100.0	100.0
IN	Nokia India Pvt Ltd	99.9	100.0
BR	Nokia do Brazil Tecnologia Ltda	99.9	100.0
RU	OOO Nokia	100.0	100.0
US	NAVTEQ Corp		100.0
NL	NAVTEQ B.V.	1.45	100.0
NL	NAVTEQ Europe B.V.		100.0
NL	Nokia Siemens Networks B.V.		50.0 <sup>(1)</sup>
FI	Nokia Siemens Networks Oy		50.0
DE	Nokia Siemens Networks GmbH & Co KG		50.0
IN	Nokia Siemens Networks Pvt. Ltd.		50.0
JP	Nokia Siemens Networks Japan Corp.		50.0
US	Nokia Siemens Networks US LLC		50.0

<sup>(1)</sup> Nokia Siemens Networks B.V., the ultimate parent of the Nokia Siemens Network group, is owned approximately 50% by each of Nokia and Siemens and consolidated by Nokia. Nokia effectively controls Nokia Siemens Networks as it has the ability to appoint key officers and the majority of the members of its Board of Directors, and accordingly, Nokia consolidated Nokia Siemens Networks.

A complete list of subsidiaries and associated companies is included in Nokia's Statutory Accounts.

**34. Risk Management****General risk management principles**

Nokia has a common and systematic approach to risk management across business operations and processes. Material risks and opportunities are identified, analyzed, managed and monitored as part of business performance management. Relevant key risks are identified against business targets either in business operations or as an integral part of long and short-term planning. Nokia's overall risk management concept is based on visibility of the key risks preventing Nokia from reaching its business objectives rather than solely focusing on eliminating risks.

The principles documented in Nokia's Risk Policy and accepted by the Audit Committee of the Board of Directors require risk management and its elements to be integrated into business processes. One of the main principles is that the business, function or category owner is also the risk owner, but it is everyone's responsibility at Nokia to identify risks, which prevent Nokia to reach its objectives. Risk management covers strategic, operational, financial and hazard risks.

Key risks are reported to the Group level management to create assurance on business risks as well as to enable prioritization of risk management activities at Nokia. In addition to general principles there are specific risk management policies covering, for example, treasury and customer related credit risks.

---

**Table of Contents****Financial risks**

The objective for Treasury activities in Nokia is to guarantee sufficient funding for the Group at all times, and to identify, evaluate and manage financial risks. Treasury activities support this aim by mitigating the adverse effects caused by fluctuations in the financial markets on the profitability of the underlying businesses and by managing the capital structure of the Group by prudently balancing the levels of liquid assets and financial borrowings.

Treasury activities are governed by the Treasury Policy approved by the CEO, that provides principles for overall financial risk management and determines the allocation of responsibilities for financial risk management in Nokia. Standard Operating Procedures approved by the CFO cover specific areas such as foreign exchange risk, interest rate risk, credit and liquidity risk as well as use of derivative financial instruments in managing these risks. Nokia is risk averse in its Treasury activities.

Financial risks are divided into (a) market risk (covering foreign exchange risk, interest risk and equity price risk), (b) credit risk (covering business related credit risk and financial credit risk) and (c) liquidity risk.

**(a) Market Risk****Methodology for assessing market risk exposures: Value-at-Risk**

Nokia uses the Value-at-Risk (VaR) methodology to assess the Group exposures to foreign exchange (FX), interest rate, and equity risks. The VaR gives estimates of potential fair value losses in market risk sensitive instruments as a result of adverse changes in specified market factors, at a specified confidence level over a defined holding period.

In Nokia, the FX VaR is calculated with the Monte Carlo method which simulates random values for exchange rates in which the Group has exposures and takes the non-linear price function of certain FX derivative instruments into account. The variance-covariance methodology is used to assess and measure the interest rate risk and equity price risk.

The VaR is determined by using volatilities and correlations of rates and prices estimated from a one-year sample of historical market data, at 95% confidence level, using a one-month holding period. To put more weight on recent market conditions, an exponentially weighted moving average is performed on the data with an appropriate decay factor.

This model implies that within a one-month period, the potential loss will not exceed the VaR estimate in 95% of possible outcomes. In the remaining 5% of possible outcomes, the potential loss will be at minimum equal to the VaR figure, and on average substantially higher.

The VaR methodology relies on a number of assumptions, such as a) risks are measured under average market conditions, assuming that market risk factors follow normal distributions; b) future movements in market risk factors follow estimated historical movements; c) the assessed exposures do not change during the holding period. Thus it is possible that, for any given month, the potential losses at 95% confidence level are different and could be substantially higher than the estimated VaR.

**Foreign exchange risk**

Nokia operates globally and is exposed to transactional and translational foreign exchange risks. Transaction risk arises from foreign currency denominated assets and liabilities together with foreign currency denominated future cash flows. Transaction exposures are managed in the context of various functional currencies of foreign Group companies.

**Table of Contents**

According to the foreign exchange policy guidelines of the Group, which remains the same as in the previous year, material transactional foreign exchange exposures are hedged unless hedging would be uneconomical due to market liquidity and/or hedging cost. Exposures are defined using nominal values of the transactions. 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 duration of less than a year. The Group does not hedge forecast foreign currency cash flows beyond two years.

Since Nokia has subsidiaries outside the euro zone, translation risk arises from the euro-denominated value of the shareholders' equity of foreign Group companies being exposed to fluctuations in exchange rates. Equity changes resulting from movements in foreign exchange rates are shown as a translation difference in the Group consolidation.

Nokia uses, from time to time, forward foreign exchange contracts, foreign exchange options and foreign currency denominated loans to hedge its equity exposure arising from foreign net investments.

At the end of years 2012 and 2011, the following currencies represent a significant portion of the currency mix in the outstanding financial instruments:

<b>2012</b>	<b>USD EURm</b>	<b>JPY EURm</b>	<b>CNY EURm</b>	<b>INR EURm</b>
FX derivatives used as cashflow hedges (net amount) <sup>(1)</sup>	550	(281)		
FX derivatives used as net investment hedges (net amount) <sup>(2)</sup>	(281)	(16)	(1 043)	(763)
FX exposure from balance sheet items (net amount) <sup>(3)</sup>	1 156	38	263	(539)
FX derivatives not designated in a hedge relationship and carried at fair value through profit and loss (net amount) <sup>(3)</sup>	(1 439)	106	(114)	420
Cross currency / interest rate hedges	428			

  

<b>2011</b>	<b>USD EURm</b>	<b>JPY EURm</b>	<b>CNY EURm</b>	<b>INR EURm</b>
FX derivatives used as cashflow hedges (net amount) <sup>(1)</sup>	1 282	110		(20)
FX derivatives used as net investment hedges (net amount) <sup>(2)</sup>	(1 045)	(17)	(2 023)	(818)
FX exposure from balance sheet items (net amount) <sup>(3)</sup>	(962)	(19)	880	(109)
FX derivatives not designated in a hedge relationship and carried at fair value through profit and loss (net amount) <sup>(3)</sup>	875	255	(825)	(264)
Cross currency / interest rate hedges	420			

(1) The FX derivatives are used to hedge the foreign exchange risk from forecast highly probable cashflows related to sales, purchases and business acquisition activities. In some of the currencies, especially in US dollar, Nokia has substantial foreign exchange risks in both estimated cash inflows and outflows, which have been netted in the table. The underlying exposures for which these hedges are entered into are not presented in the table, as they are not financial instruments.

(2) The FX derivatives are used to hedge the Group's net investment exposure. The underlying exposures for which these hedges are entered into are not presented in the table, as they are not financial instruments.

(3) The balance sheet items and some probable forecast cash flows which are denominated in foreign currencies are hedged by a portion of FX derivatives not designated in a hedge relationship and carried at fair value through profit and loss.

**Table of Contents**

The VaR figures for the Group's financial instruments which are sensitive to foreign exchange risks are presented in the table below. The VaR calculation includes foreign currency denominated monetary financial instruments such as:

Available-for-sale investments, loans and accounts receivables, investments at fair value through profit and loss, cash, loans and accounts payable.

FX derivatives carried at fair value through profit and loss which are not in a hedge relationship and are mostly used for hedging balance sheet FX exposure.

FX derivatives designated as forecasted cash flow hedges and net investment hedges. Most of the VaR is caused by these derivatives as forecasted cash flow and net investment exposures are not financial instruments as defined under IFRS 7 and thus not included in the VaR calculation.

	VaR from financial instruments	
	2012 EURm	2011 EURm
At December 31	67	141
Average for the year	128	218
Range for the year	67 - 192	141 - 316

**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 through changes in interest income or expenses (i.e. refinancing or reinvestment 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.

The objective of interest rate risk management is to balance uncertainty caused by fluctuations in interest rates and net long-term funding costs.

At the reporting date, the interest rate profile of the Group's interest-bearing assets and liabilities is presented in the table below:

	2012		2011	
	Fixed rate EURm	Floating rate EURm	Fixed rate EURm	Floating rate EURm
Assets	3 488	6 627	6 384	4 733
Liabilities	(4 191)	(1 312)	(4 313)	(950)
Assets and liabilities before derivatives	(703)	5 315	2 071	3 783
Interest rate derivatives	1 880	(1 784)	1 736	(1 656)
Assets and liabilities after derivatives	1 177	3 531	3 807	2 127

The interest rate exposure of the Group is monitored and managed centrally. Nokia uses the Value-at-Risk (VaR) methodology complemented by selective shock sensitivity analyses to assess and measure the interest rate risk of interest-bearing assets, interest-bearing liabilities and related derivatives, which together create the Group's interest rate exposure. The VaR for the Group interest rate exposure in the investment and debt portfolios is presented in the table below. Sensitivities to credit spreads are not reflected in the below numbers.



**Table of Contents**

	2012 EURm	2011 EURm
At December 31	22	33
Average for the year	19	34
Range for the year	9 - 44	19 - 45

**Equity price risk**

Nokia's exposure to equity price risk is related to certain publicly listed equity shares.

The fair value of these investments at December 31, 2012 was EUR 11 million (EUR 7 million in 2011). The VaR for the Group equity investment in publicly traded companies is insignificant.

**(b) Credit Risk**

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. Credit risk arises from credit exposures to customers, including outstanding receivables, financial guarantees and committed transactions as well as financial institutions, including bank and cash, fixed income and money-market investments and derivative financial instruments. Credit risk is managed separately for business related and financial credit exposures.

Except as detailed in the following table, the maximum exposure to credit risk is limited to the book value of the financial assets as included in the Group's balance sheet:

	2012 EURm	2011 EURm
Financial guarantees given on behalf of customers and other third parties	12	
Loan commitments given but not used	34	86
	46	86

**Business Related Credit Risk**

The Group aims to ensure highest possible quality in accounts receivable and loans due from customers and other third parties. Nokia and Nokia Siemens Networks Credit Policies (both approved by the respective Leadership Teams) lay out the framework for the management of the business related credit risks in Nokia and Nokia Siemens Networks.

Nokia and Nokia Siemens Networks Credit Policies provide that credit decisions are based on credit evaluation including credit rating for larger exposures. Nokia and Nokia Siemens Networks Rating Policies define the rating principles. Ratings are approved by Nokia and Nokia Siemens Networks Rating Committees. Credit risks are approved and monitored according to the credit policy of each business entity. When appropriate, credit risks are mitigated with the use of approved instruments, such as letters of credit, collateral or insurance and sale of selected receivables.

Credit exposure is measured as the total of accounts receivable and loans outstanding due from customers and other third parties, and committed credits.

The accounts receivable do not include any major concentrations of credit risk by customer or by geography. Top three customers account for approximately 7.0%, 2.5% and 2.1% (3.2%, 2.3% and 1.9% in 2011) of Group accounts receivable and loans due from customers and other third parties as at December 31, 2012, while the top three credit exposures by country amounted to 9.5%, 8.5% and 7.5% (10.6%, 7.5% and 4.4% in 2011).



**Table of Contents**

The Group has provided allowances for doubtful accounts as needed on accounts receivable and loans due from customers and other third parties not past due, based on the analysis of debtors' credit quality and credit history. The Group establishes allowances for doubtful accounts that represent an estimate of incurred losses as of the end of reporting period. All receivables and loans due from customers and other third parties are considered on an individual basis in establishing the allowances for doubtful accounts.

As at December 31, 2012, the carrying amount before deducting any allowances for doubtful accounts as well as amounts expected to be uncollectible for acquired receivables relating to customers for which an allowance was provided or an uncollectible amount has been identified amounted to EUR 1 727 million (EUR 2 109 million in 2011). The amount of provision taken against that portion of these receivables considered to be impaired as well as the amount expected to be uncollectible for acquired receivables was a total of EUR 264 million (EUR 395 million in 2011) (see also Note 9 and Note 20). These aforementioned amounts are relative to total net accounts receivable and loans due from customers and other third parties of EUR 5 625 in 2012 (EUR 7 295 million in 2011).

An amount of EUR 365 million (EUR 316 million in 2011) relates to past due receivables from customers for which no allowances for doubtful accounts were recognized. The aging of these receivables is as follows:

	2012 EURm	2011 EURm
Past due 1-30 days	250	169
Past due 31-180 days	70	118
More than 180 days	45	29
	<b>365</b>	316

In 2012, Nokia adjusted the way aging credit notes are taken into account when calculating past due receivables presented in the table above. This adjustment has increased the amounts of past due receivables compared to the method used by Nokia in 2011.

**Financial Credit Risk**

Financial instruments contain an element of risk resulting from changes in market price of such instruments due to counterparties becoming less creditworthy or risk of loss due to counterparties that are unable to meet their obligations. This risk is measured and monitored centrally by Treasury. Nokia manages financial credit risk actively by limiting its counterparties to a sufficient number of major banks and financial institutions and monitoring the creditworthiness and exposure sizes continuously. Nokia also enters into netting arrangements (which gives Nokia the right to offset in the event that the counterparty would not be able to fulfill the obligations) with all major counterparties as well as collateral agreements (which require counterparties to post collateral against derivative receivables) with certain counterparties.

Nokia's investment decisions are based on strict creditworthiness and maturity criteria as defined in the Treasury Policy and Operating Principles. As a result of this investment policy approach and active management of outstanding investment exposures, Nokia has not been subject to any material credit losses in its financial investments in the years presented.

**Table of Contents**

The table below presents the breakdown of the outstanding fixed income and money market investments by sector and credit rating grades ranked as per Moody's rating categories.

At December 31,

2012	Rating <sup>(3)</sup>	Total amount <sup>(1),(2)</sup> EURm	Due within 3 months EURm	Due between 3 and 12 months EURm	Due between 1 and 3 years EURm	Due between 3 and 5 years EURm	Due beyond 5 years EURm
<b>Banks</b>	Aaa	1 401	1 401				
	Aa1-Aa3	756	755	1			
	A1-A3	1 106	1 082	24			
	Baa1-Baa3	942	940			2	
	Non rated	215	215				
<b>Governments</b>	Aaa	1 572	1 342	31	42	18	139
	Aa1-Aa3	401	37	57	24	283	
<b>Other</b>	Aaa						
	Aa1-Aa3						
	A1-A3	10			10		
	Baa1-Baa3						
	Ba1-C						
Non rated	2		2				
<b>Total</b>		<b>6 405</b>	<b>5 772</b>	<b>115</b>	<b>76</b>	<b>303</b>	<b>139</b>

At December 31,

2011	Rating <sup>(3)</sup>	Total amount <sup>(1),(2)</sup> EURm	Due within 3 months EURm	Due between 3 and 12 months EURm	Due between 1 and 3 years EURm	Due between 3 and 5 years EURm	Due beyond 5 years EURm
<b>Banks</b>	Aaa	1 368	1 368				
	Aa1-Aa3	1 319	1 316		1	2	
	A1-A3	1 706	1 706				
	Baa1-Baa3	616	616				
	Non rated	270	260	10			
<b>Governments</b>	Aaa	3 224	2 508	221	50	266	179
	Aa1-Aa3	408	400	6	2		
<b>Other</b>	Aaa						
	Aa1-Aa3	11					11
	A1-A3	18			12		6
	Baa1-Baa3	2					2
	Ba1-C	1					1
Non rated	2		2				
<b>Total</b>		<b>8 945</b>	<b>8 174</b>	<b>239</b>	<b>65</b>	<b>268</b>	<b>199</b>

(1) Fixed income and money-market investments include term deposits, investments in liquidity funds and investments in fixed income instruments classified as available-for-sale investments and investments at fair value through profit and loss. Liquidity funds invested solely in government securities are included under Governments. Other liquidity funds are included under Banks.

(2) Included within fixed income and money-market investments is EUR 77 million of restricted investment at December 31, 2012 (EUR 40 million at December 31, 2011). They are restricted financial assets under various contractual or legal obligations.

## Edgar Filing: NOKIA CORP - Form 20-F

<sup>(3)</sup> Bank parent company ratings used here for bank groups. In some emerging markets countries actual bank subsidiary ratings may differ from parent company rating.

95% of Nokia's cash in bank accounts is held with banks of investment grade credit rating (92% for 2011).

F-77

**Table of Contents****(c) Liquidity Risk**

Liquidity risk is defined as financial distress or extraordinarily high financing costs arising due to a shortage of liquid funds in a situation where outstanding debt needs to be refinanced or where business conditions unexpectedly deteriorate and require financing. Transactional liquidity risk is defined as the risk of executing a financial transaction below fair market value, or not being able to execute the transaction at all, within a specific period of time.

The objective of liquidity risk management is to maintain sufficient liquidity, and to ensure that it is available fast enough without endangering its value, in order to avoid uncertainty related to financial distress at all times.

Nokia aims to secure sufficient liquidity at all times by efficient cash management and by investing in short-term liquid interest bearing securities. Depending on overall liquidity position Nokia aims to pre- or refinance upcoming debt maturities before contractual maturity dates. The transactional liquidity risk is minimized by entering into transactions where proper two-way quotes can be obtained from the market.

Due to the dynamic nature of the underlying business, Nokia and Nokia Siemens Networks aim at maintaining flexibility in funding by keeping committed and uncommitted credit lines available. Nokia and Nokia Siemens Networks manage their respective credit facilities independently and facilities do not include cross-default clauses between Nokia and Nokia Siemens Networks or any forms of guarantees from either party. At the end of December 31, 2012, the Group's committed revolving credit facilities totaled EUR 2 250 million (EUR 3 500 million in 2011).

The most significant existing long-term funding programs as of December 31, 2012 were:

<b>Issuer(s):</b>	<b>Program:</b>	<b>Issued</b>
Nokia Corporation	Shelf registration statement on file with the US Securities and Exchange Commission	USD 1 500 million
Nokia Corporation	Euro Medium-Term Note Program, totaling EUR 5 000 million	EUR 1 750 million

The most significant existing short-term funding programs as of December 31, 2012 were:

<b>Issuer(s):</b>	<b>Program:</b>	<b>Issued</b>
Nokia Corporation	Local commercial paper program in Finland, totaling EUR 750 million	
Nokia Corporation	US Commercial Paper program, totaling USD 4 000 million	
Nokia Corporation and Nokia Finance International B.V.	Euro Commercial Paper program, totaling USD 4 000 million	
Nokia Siemens Networks Finance B.V.	Local commercial paper program in Finland, totaling EUR 500 million	EUR 82 million

**Table of Contents**

As of 31 December, 2012, Group's interest bearing liabilities consisted of:

Nokia	Issuer/Borrower	Final Maturity	2012	2011
			EURm	EURm
Revolving Credit Facility (EUR 1 500 million)	Nokia Corporation	March 2016		
EUR Bond 2014 (EUR 1 250 million 5.5%)	Nokia Corporation	February 2014	1 250	1 250
EUR Bond 2019 (EUR 500 million 6.75%)	Nokia Corporation	February 2019	500	500
USD Bond 2019 (USD 1 000 million 5.375%)	Nokia Corporation	May 2019	761	766
USD Bond 2039 (USD 500 million 6.625%)	Nokia Corporation	May 2039	381	383
EUR EIB R&D Loan	Nokia Corporation	February 2014	500	500
EUR Convertible Bond 2017 (EUR 750 million 5%)	Nokia Corporation	October 2017	750	
Differences between Bond nominal and carrying values <sup>(1)</sup>	Nokia Corporation		55	129
Other interest-bearing liabilities	Nokia Corporation and various subsidiaries		209	168
<b>Total Nokia</b>			<b>4 406</b>	<b>3 696</b>
Nokia Siemens Networks	Issuer/Borrower	Final Maturity	2012	2011
			EURm	EURm
Revolving Credit Facility (EUR 2 000 million)	Nokia Siemens Networks Finance B.V.	June 2012		613
Bank Term Loan (EUR 600 million)	Nokia Siemens Networks Finance B.V.	March 2014	600	
Revolving Credit Facility (EUR 750 million)	Nokia Siemens Networks Finance B.V.	June 2015		
EUR Finnish Pension Loan	Nokia Siemens Networks Oy	October 2015	132	176
EUR EIB R&D Loan	Nokia Siemens Networks Finance B.V.	January 2015	150	250
EUR Nordic Investment Bank	Nokia Siemens Networks Finance B.V.	March 2015	80	80
Other interest-bearing liabilities	Nokia Siemens Networks Finance B.V. and various subsidiaries		181	506
<b>Total Nokia Siemens Networks</b>			<b>1 143</b>	<b>1 625</b>
<b>Total Nokia Group</b>			<b>5 549</b>	<b>5 321</b>

<sup>(1)</sup> This line includes mainly fair value adjustments for bonds that are designated under Fair value hedge accounting and difference between convertible bond nominal value and carrying value of the financial liability component.

All Nokia borrowings specified above are senior unsecured and have no financial covenants. All borrowings, apart from EIB R&D loan, are used for general corporate purposes.

All Nokia Siemens Networks borrowings specified above are senior unsecured and include financial covenants relating to financial leverage and interest coverage of the Nokia Siemens Networks. As at year end 2012 all financial covenants were satisfied. All borrowings, apart from EIB and Nordic Investment bank R&D loans, are used for general corporate purposes.



**Table of Contents**

Nokia has not guaranteed any of the Nokia Siemens Networks borrowings and thus these are non-recourse to Nokia. All Nokia Siemens Networks Finance B.V. borrowings above are guaranteed by Nokia Siemens Networks Oy and/or Nokia Siemens Networks BV.

In October 2012, Nokia issued a EUR 750 million convertible bond that matures in October 2017. The bond includes a voluntary conversion option starting from December 2012 until maturity. Based on initial conversion price, voluntary conversion of the entire bond would result in the issue of 287 million shares.

In December 2011, Nokia Siemens Networks entered into a EUR 1 255 million committed forward starting credit facility effective from the forward start date of June 1, 2012. By April 2012 the committed facility had been increased to EUR 1 500 million. The facility replaced EUR 2 000 million revolving credit facility from 2009 that matured in June 2012. EUR 1 500 million committed facility comprised in two equal parts, EUR 750 million revolving credit facility maturing in June 2015 and EUR 750 million term loan maturing in June 2013. In December 2012, EUR 150 million of the term loan was prepaid and the maturity of the remaining EUR 600 million term loan was extended to March 2014.

Of the Nokia Siemens Networks EUR Finnish Pension Loan, EUR EIB R&D Loan and EUR Nordic Investment Bank Loan EUR 44 million, EUR 100 million and EUR 45 million respectively are included in current maturities as of 31 December, 2012.

The following table below is an undiscounted cash flow analysis for both financial liabilities and financial assets that are presented on the balance sheet, and off-balance sheet instruments such as loan commitments according to their remaining contractual maturity. Line-by-line reconciliation with the balance sheet is not possible.

<b>At 31 December 2012</b>	<b>Total amount EURm</b>	<b>Due within 3 months EURm</b>	<b>Due between 3 and 12 months EURm</b>	<b>Due between 1 and 3 years EURm</b>	<b>Due between 3 and 5 years EURm</b>	<b>Due beyond 5 years EURm</b>
<b>Non-current financial assets</b>						
Long-term loans receivable	217	1	2	46	37	131
<b>Current financial assets</b>						
Current portion of long-term loans receivable	40	12	28			
Short-term loans receivable	1	1				
Investments at fair value through profit and loss	493	1	5	11	260	216
Available-for-sale investment	6 008	5 782	119	82	25	
Cash	3 504	3 504				
Cash flows related to derivative financial assets net settled:						
Derivative contracts - receipts	240	78	(30)	86	25	81
Cash flows related to derivative financial assets gross settled:						
Derivative contracts - receipts	13 864	10 299	3 072	41	41	411
Derivative contracts - payments	(13 596)	(10 212)	(2 959)	(17)	(17)	(391)
Accounts receivable <sup>(1)</sup>	4 579	3 952	615	12		
<b>Non-current financial liabilities</b>						
Long-term liabilities	(6 642)	(111)	(163)	(2 933)	(1 123)	(2 312)
<b>Current financial liabilities</b>						
Current portion of long-term loans	(216)	(83)	(133)			
Short-term liabilities	(262)	(207)	(55)			
Cash flows related to derivative financial liabilities net settled:						
Derivative contracts - payments	(99)	(2)	(3)	(7)	(7)	(80)
Cash flows related to derivative financial liabilities gross settled:						
Derivative contracts - receipts	7 966	6 964	889	113		
Derivative contracts - payments	(8 016)	(6 999)	(903)	(114)		
Accounts payable	(4 394)	(4 241)	(136)	(17)		
<b>Contingent financial assets and liabilities</b>						
Loan commitments given, undrawn <sup>(2)</sup>	(34)	(28)	(6)			
Loan commitments obtained, undrawn <sup>(3)</sup>	2 261	46	(11)	727	1 499	





**Table of Contents**

At 31 December 2011	Total amount EURm	Due within 3 months EURm	Due between 3 and 12 months EURm	Due between 1 and 3 years EURm	Due between 3 and 5 years EURm	Due beyond 5 years EURm
<b>Non-current financial assets</b>						
Long-term loans receivable	112	1	2	43	62	4
<b>Current financial assets</b>						
Current portion of long-term loans receivable	59	10	49			
Short-term loans receivable	14	12	2			
Investments at fair value through profit and loss	575		7	14	264	290
Available-for-sale investment	8 557	8 305	133	69	15	35
Cash	1 957	1 957				
Cash flows related to derivative financial assets net settled:						
Derivative contracts - receipts	215	72	(46)	90	17	82
Cash flows related to derivative financial assets gross settled:						
Derivative contracts - receipts	16 014	14 272	1 226	41	41	434
Derivative contracts - payments	(15 779)	(14 113)	(1 200)	(27)	(27)	(412)
Accounts receivable <sup>(1)</sup>	5 872	5 030	802	40		
<b>Non-current financial liabilities</b>						
Long-term liabilities	(5 391)	(106)	(153)	(2 374)	(316)	(2 442)
<b>Current financial liabilities</b>						
Current portion of long-term loans	(387)	(61)	(326)			
Short-term liabilities	(1 002)	(915)	(87)			
Cash flows related to derivative financial liabilities net settled:						
Derivative contracts - payments	(107)		(3)	(2)	(3)	(99)
Cash flows related to derivative financial liabilities gross settled:						
Derivative contracts - receipts	17 354	15 480	1 874			
Derivative contracts - payments	(17 775)	(15 775)	(2 000)			
Accounts payable	(5 532)	(5 449)	(65)	(18)		
<b>Contingent financial assets and liabilities</b>						
Loan commitments given, undrawn <sup>(2)</sup>	(86)	(37)	(49)			
Loan commitments obtained, undrawn <sup>(3)</sup>	2 917	45	1 382	(6)	1 496	

(1) Accounts receivable maturity analysis does not include receivables accounted based on the percentage of completion method of EUR 972 million (EUR 1 309 million in 2011).

(2) Loan commitments given, undrawn, have been included in the earliest period in which they could be drawn or called.

(3) Loan commitments obtained, undrawn, have been included based on the period in which they expire. These amounts include related commitment fees.

**Hazard risk**

Nokia strives to ensure that all financial, reputation and other losses to the Group and our customers are minimized through preventive risk management measures. Insurance is purchased for risks, which cannot be efficiently internally managed and where insurance markets offer acceptable terms and conditions. The objective is to ensure that hazard risks, whether related to physical assets (e.g. buildings) or intellectual assets (e.g. Nokia brand) or potential liabilities (e.g. product liability) are optimally insured taking into account both cost and retention levels.

Nokia purchases both annual insurance policies for specific risks as well as multiline and/or multiyear insurance policies, where available.

**Table of Contents**

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

NOKIA CORPORATION

By: /s/ KRISTIAN PULLOLA  
Name: Kristian Pullola  
Title: Senior Vice President, Corporate Controller

By: /s/ RIIKKA TIEAHO  
Name: Riikka Tieaho  
Title: Vice President, Corporate Legal

March 7, 2013