Corporate governance statement

This corporate governance statement is prepared in accordance with Chapter 7, Section 7 of the Finnish Securities Markets Act (2012/746, as amended) and the Finnish Corporate Governance Code 2015 (the "Finnish Corporate Governance Code").

Introduction

In 2018, we continued on delivering on Nokia's commitment to strong corporate governance and related practices. To do that, the Board activities were structured to develop the Company's strategy and to enable the Board to support the management on the delivery of it within a transparent governance framework. In addition to regular business and financial updates at each Board meeting, the table below sets out a high-level overview of the key areas of focus for the Board's and its Committee's activities during the year.

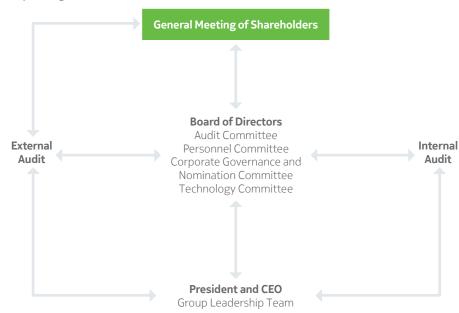
Furthermore, we engaged with our shareholders at the Annual General Meeting held in May where shareholders exercised decision-making power and their right to present questions to the Board and management. At that meeting, we also met our aim to have representation of at least 40% of both genders on our Board well in advance of the target date of January 1, 2020. In addition, the Board established a Technology Committee to review high level innovation and technology strategies of the Company and to engage in a dialogue with the management with respect to major

	January	March	April
Board	 Approval of the long-range and annual plans Group key risks Capital structure Al strategy Strategic deep-dive into a business unit Privacy Compliance and litigation Equity programs Board evaluation 	 Strategy update Approval of financial statements AGM proposals and convening of the AGM Talent development and leadership succession 	
CGN Committee	 Board composition and remuneration Board evaluation results Corporate Governance statement Corporate Governance update 	- AGM proposals	
Personnel Committee	Achievement & performance outcomesIncentive targets and objectivesEquity programsCulture update	 Incentive finalization Succession update Executive compensation review Culture, demography and diversity updates 	
Audit Committee	 Q4 and full year financials Compliance, Internal Audit and Internal Controls updates Review of audit services Audit firm rotation 	Review of Annual reportsAGM proposalsAudit firm rotation	 Q1 financials Compliance, Internal Audit and Internal Controls updates Annual audit plan Review of Auditor services Security Audit firm rotation
Technology Committee			

innovation and technology trends, related risks and opportunities and the Company's technology competitiveness and bets. We also noted in the Annual General Meeting that we have started a tender process regarding the rotation of our audit firm in accordance with the EU Audit Regulation. This has been one of the key focus areas of the Board's Audit Committee in 2018. During 2018, the Chair of the Personnel Committee also engaged with our largest investors to discuss executive remuneration as well as the related governance and disclosure practices.

May	July	October	November
 Corporate strategy and strategy use cases review Past M&A cases Corporate responsibility Appointment of the Chairs and Committees Establishment of Technology Committee 	 Customer Operations and business group strategy execution update Bond refinancing Privacy 	 Annual strategy meeting Talent development and leadership succession 	 Corporate and detailed business group strategy recapitulation IT and Security
 Proposal for the Chair and Vice Chair of the Board and composition of the Board's Committees 		 Board evaluation planning Board remuneration benchmarking Corporate Governance update 	Board compositionCorporate Governance Statement
	- Diversity review	Compensation strategy and philosophyTalent summit review	Incentive frameworkDetailed equity plansCompensation risk assessment
Technology presentations by the Audit firm candidates	 Q2 financials Audit scope Review of audit services Compliance, Internal Audit and Internal Controls updates Audit firm rotation 	Q3 financialsPension assets and liabilitiesSecurityAudit firm rotation	 Financial update Enterprise Risk Management (ERM) update Audit firm rotation
Review of new strategic technology initiativesUpdates on major innovation and technology trends		Review of new strategic technology initiativesUpdates on major innovation and technology trends	

Corporate governance framework



Regulatory framework

Our corporate governance practices comply with Finnish laws and regulations as well as with our Articles of Association. We also comply with the Finnish Corporate Governance Code, available at www.cgfinland. fi. Under the Finnish Corporate Governance Code a company is deemed to be in compliance with the Corporate Governance Code even if it departs from individual recommendations, provided that the departures are reported and explained.

In 2018, we complied with the Finnish Corporate Governance Code, with the exception that we were not in full compliance with the recommendation 24 as our restricted share plans did not include performance criteria but were time-based only. The restricted shares vest in three equal tranches on the first, second and third anniversary of the award subject to continued employment with Nokia. Restricted Shares are and will be granted on a limited basis for exceptional purposes related to retention and recruitment to ensure Nokia is able to retain and recruit vital talent for the future success of the company. The restricted share plan for 2019 is designed in a similar manner. The Board approves, upon recommendation from the Board's Personnel Committee, any long-term incentive compensation and all equity plans, programs or similar arrangements of significance that the company establishes for its employees.

We comply with the corporate governance standards of Nasdag Helsinki which are applicable to us due to the listing of our shares on the exchange. Furthermore, as a result of the listing of our American Depositary Shares on the New York Stock Exchange (the NYSE) and our registration under the U.S. Securities Exchange Act of 1934, we must comply with the applicable U.S. federal securities laws and regulations, including the Sarbanes-Oxley Act of 2002 as well as the rules of the NYSE, in particular the corporate governance standards under Section 303A of the NYSE Listed Company Manual available at http://nysemanual.nyse. com/lcm/. We comply with these standards to the extent such provisions are applicable

To the extent any non-domestic rules would require a violation of the laws of Finland, we are obliged to comply with Finnish law. There are no significant differences in the corporate governance practices applied by Nokia compared to those applied by the U.S. companies under the NYSE corporate governance standards with the exception that Nokia complies with 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 shareholder approval at the time of the

delivery of the shares unless a shareholder approval has been granted through an authorization to the Board, a maximum of five years earlier. The NYSE corporate governance standards require that the equity compensation plans are approved by the company's shareholders. Nokia aims to minimize the necessity for, or consequences of, conflicts between the laws of Finland and applicable non-domestic corporate governance standards.

The Board has also adopted corporate governance guidelines (Corporate Governance Guidelines) to reflect our commitment to good corporate governance. The Corporate Governance Guidelines include the directors' responsibilities, the composition and election of the members of the Board, its committees and certain other matters relating to corporate governance. In addition, the Committees of the Board have adopted charters that define committees' main duties and operating principles. We also have a Code of Conduct that is applicable to all of our employees, directors and management and the Code of Ethics applicable to the President and CEO, Chief Financial Officer, Deputy Chief Financial Officer, and Corporate Controller. All of the mentioned documents are available on our website at http://www.nokia.com/en_int/ investors/corporate-governance.

Main corporate governance bodies of Nokia

Pursuant to the provisions of the Finnish Limited Liability Companies Act (2006/624, as amended) (the Finnish Companies Act) and Nokia's Articles of Association, the control and management of Nokia are divided among the shareholders at a general meeting, the Board, the President and CEO and the Group Leadership Team, chaired by the President and CEO.

General meeting of shareholders

Nokia shareholders play a key role in corporate governance, with our Annual General Meeting offering a regular opportunity to exercise their decision-making power in the company. In addition, at the meeting the shareholders may exercise their right to speak and ask questions. Each Nokia share entitles a shareholder to one vote at general meetings of Nokia. The Annual General Meeting decides, among other things, on the election and remuneration of the Board, the adoption of the annual accounts, the distribution of profit shown on the balance sheet, and discharging the members of the Board and the President and CEO from liability, as well as on the election and fees of the external auditor.

In addition to the Annual General Meeting, an Extraordinary General Meeting may be convened when the Board considers such meeting to be necessary, or when the provisions of the Finnish Companies Act mandate that such a meeting must be held.

Board of Directors

The operations of Nokia are managed under the direction of the Board, within the framework set by the Finnish Companies Act and Nokia's Articles of Association as well as any complementary rules of procedure as defined by the Board, such as the Corporate Governance Guidelines and the charters of the Board's committees.

Election and composition of the Board of Directors, election of the Chair and Vice Chair of the Board and the Chairs and members of the Board's Committees Pursuant to the Articles of Association of Nokia Corporation, we have a Board that is composed of a minimum of seven and a maximum of 12 members. The Board is elected at least annually at each Annual General Meeting with a simple majority of the shareholders' votes cast at the meeting. The term of a Board member begins at the closing of the general meeting at which he or she was elected, or later as resolved by the general meeting, and expire at the closing of the following Annual General Meeting. The Annual General Meeting convenes by June 30 annually.

Our Board's leadership structure consists of a Chair and Vice Chair elected annually by the 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 Chair of the Board has certain specific duties as stipulated by Finnish law and our Corporate Governance Guidelines. The Vice Chair of the Board assumes the duties of the Chair of the Board in the event he or she is prevented from performing his or her duties.

The independent directors of the new Board also confirm the election of the members and chairs 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 take place at the Board's assembly meeting following the general meeting.

Board diversity

The Board has adopted principles concerning Board diversity describing our commitment to promoting diverse Board composition and how diversity is embedded into our processes and practices when identifying and proposing new Board candidates as well as re-election of current Board members.

At Nokia, the Board diversity consists of a number of individual elements, including gender, age, nationality, cultural and educational backgrounds, skills and experience. At Nokia, diversity is not a static concept but rather a relevant mix of required elements for the Board as a whole that evolves with time based on, among other things, the relevant business objectives and future needs of Nokia. The Board diversity is treated as a means of improvement and development rather than an end in itself.

Nokia acknowledges and supports the resolution adopted by the Finnish Government on February 17, 2015 on gender equality on the boards of directors of Finnish large and mid-cap listed companies. We report annually our objectives relating to both genders being represented on our Board, the means to achieve them, and the progress we have made in achieving them. In 2018 we met our aim to have representation of at least 40% of both genders on our Board by January 1, 2020.

Currently there are five different nationalities represented in the Board and 40% of the Board members are female.

	Risto Siilasmaa	Olivier Piou	Sari Baldauf	Bruce Brown	Jeanette Horan	Louis R. Hughes	Edward Kozel	Elizabeth Nelson	Carla Smits- Nusteling	Kari Stadigh
Gender	Male	Male	Female	Male	Female	Male	Male	Female	Female	Male
Year of birth	1966	1958	1955	1958	1955	1949	1955	1960	1966	1955
Nationality	Finnish	French	Finnish	American	British	American	American	American	Dutch	Finnish
On Board since	2008	2016	2018	2012	2017	2016	2017	2012	2016	2011
Tenure at AGM 2018	10	2	0	6	1	2	1	6	2	7

Experience and skills of the Board members

General management and business operations		Finance and accounting	
Chief executive officer		Communications Service Provider market	nnn
Chief financial officer		Enterprise business	
Chief technology officer	nn 	Technology	

Members of the Board of Directors

The Annual General Meeting held on May 30, 2018 elected ten members Sari Baldauf, Bruce Brown, Jeanette Horan, Louis Hughes, Edward Kozel, Elizabeth Nelson, Olivier Piou, Risto Siilasmaa, Carla Smits-Nusteling and Kari Stadigh to the Board for a term ending at the close of the Annual General Meeting in 2019. Following the meeting, the Board also re-elected Risto Siilasmaa to continue to serve as the Chair and Olivier Piou as the Vice Chair of the Board.

The current members of the Board are all non-executive. For the term of the Board that began at the Annual General Meeting, all Board member candidates were determined to be independent under the Finnish corporate governance standards and the rules of the NYSE.

We do not have a policy concerning the combination or separation of the roles of the Chair of the Board and the President and CEO. Our leadership structure is dependent on our needs, shareholder value and other relevant factors applicable from time to time, while respecting the highest corporate governance standards. In 2018, Rajeev Suri served as the President and CEO while Risto Siilasmaa served as the Chair of the Board.

Biographical details of our current Board members

Chair Risto Siilasmaa

b. 1966

Chair of the Nokia Board. Board member since 2008. Chair since 2012. Chair of the Corporate Governance and Nomination Committee and member of the Technology Committee.

Master of Science (Eng.), Helsinki University of Technology, Finland.

President and CEO of F-Secure Oyj 1988–2006.

Chairman of the Board of Directors of F-Secure Oyj. Member of the Board of Directors of Futurice Oy. Member of the Board of Directors of Technology Industries of Finland. Member of European Roundtable of Industrialists. Member of the Global Tech panel, an initiative of EU High Representative Federica Mogherini.

Member 2013–2016 and Vice Chairman of the Board of Directors of the Confederation of Finnish Industries (EK) 2017–2018. Vice Chairman 2013–2015 and Chairman of the Board of Directors of Technology Industries of Finland 2016–2018. Chairman of the Board of Directors of Elisa Corporation 2008–2012.

Vice Chair Olivier Piou

b. 1958

Vice Chair of the Nokia Board. Board member and Vice Chair since 2016. Member of the Personnel Committee and the Technology Committee.

Engineer, École Centrale de Lyon, France.

Chief Executive Officer of Gemalto N.V. 2006–2016. Chief Executive Officer of Axalto N.V. 2004–2006. With Schlumberger Ltd 1981–2004, including numerous management positions in the areas of technology, marketing and operations, in France and the United States.

Member of the Board of Directors of Gemalto N.V. Member of the Board of Directors of the PESH foundation.

Member of the Board of Directors of Alcatel Lucent SA 2008–2016.

Sari Baldauf

b. 1955

Nokia Board member since 2018. Member of the Personnel Committee and the Corporate Governance and Nomination Committee.

Master of Business Administration, Helsinki School of Economics and Business Administration. Bachelor of Science, Helsinki School of Economics and Business Administration. Honorary doctorates in Technology (Helsinki University of Technology) and Business Administration (Turku School of Economics and Business Administration and Aalto University School of Business).

Executive Vice President and General Manager, Networks Business Group, Nokia, 1998–2005. Various executive positions at Nokia in Finland and the United States 1983–1998.

Member of the Supervisory Board and Member of the Nomination Committee of Daimler AG. Member of the Board of Directors of Aalto University. Chair of the Vexve Holding Oy. Senior Advisor of DevCo Partners Oy.

Member of the Supervisory Board of Deutsche Telekom AG 2012–2018. Chair of the Board of Directors of Fortum Oyj 2011– 2018. Member of the Board of Directors of Akzo Nobel 2012–2017. Member of the Board of Directors of F-Secure Oyj 2005–2014.

Bruce Brown

b. 1958

Nokia Board member since 2012. Chair of the Personnel Committee. Member of the Corporate Governance and Nomination Committee and the Technology Committee.

MBA, Xavier University, the United States. BS (Chemical Engineering), Polytechnic Institute of New York University, the United States.

Retired from The Procter & Gamble Company in 2014. Chief Technology Officer of the Procter & Gamble Company 2008–2014. 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, the Audit Committee and the Nominating and Corporate Governance Committee of P. H. Glatfelter Company. Member of the Board of Directors, the Audit Committee and the Compensation Committee of Medpace, Inc.

Member of the Board of Directors of Agency for Science, Technology & Research (A*STAR) in Singapore 2011–2018.

Jeanette Horan

b. 1955

Nokia Board member since 2017. Member of the Audit Committee and the Technology Committee.

MBA, Business Administration and Management, Boston University, the United States. BSc, Mathematics, University of London, United Kingdom.

Various executive and managerial positions in IBM 1998-2015. Vice President of Digital Equipment Corporation 1994–1998. Vice President, Development, of Open Software Foundation 1989-1994.

Member of the Supervisory Board at Wolters Kluwer, and the Chair of the Remuneration Committee. Member of the Board of Advisors at Jane Doe No More, a non-profit organization.

Member of the Board of Advisors of Cyberreason 2017–2018. Member of the Board of Directors of West Corporation 2016–2017. Member of the Board of Directors of Microvision 2006-2017.

Louis R. Hughes

b. 1949

Nokia Board member since 2016. Member of the Audit Committee and the Technology Committee.

Master's Degree in Business Administration, Harvard University, Graduate School of Business, the United States. Bachelor of Mechanical Engineering, General Motors Institute, now Kettering University, the United States.

President & Chief Operating Officer of Lockheed Martin in 2000. Executive Vice President of General Motors Corporation 1992–2000. President of General Motors International Operations 1992–1998. President of General Motors Europe 1992–1994.

Chairman of InZero Systems (formerly GBS Laboratories) (the United States). Executive advisor partner of Wind Point Partners. Member of the Advisory Board, Cognomotiv (the United States).

Independent director and member of the Audit Committee of AkzoNobel 2006-2018. Independent director 2003-2018 and Chairman of the Audit, Finance and Compliance Committee of ABB 2011-2018. Member of the Board of Directors of Alcatel Lucent SA 2008-2016.

Chair Risto Siilasmaa





Jeanette Horan



Vice Chair Olivier Piou



Bruce Brown



Louis R. Hughes



Edward Kozel

b. 1955

Nokia Board member since 2017. Chair of the Technology Committee and member of the Audit Committee.

Degree in Electrical Engineering and Computer Science, University of California, the United States.

President and CEO of Range Networks 2013–2014, Owner of Open Range 2000–2013, Chief Technology and Innovation Officer and member of the Board of Management of Deutsche Telecom 2010–2012, CEO of Skyrider 2006–2008, Managing Director of Integrated Finance 2005–2006, Senior Vice President, Business development and Chief Technology Officer and Board Member of Cisco 1989–2001.

Various Board Memberships in 1999-2009.

Elizabeth Nelson

b. 1960

Nokia Board member since 2012. Member of the Audit Committee and the Personnel Committee.

MBA (Finance), the Wharton School, University of Pennsylvania, the United States. BS (Foreign Service), Georgetown University, the United States.

Executive Vice President and Chief Financial Officer, Macromedia, Inc. 1997–2005. Vice President, Corporate Development, Macromedia, Inc. 1996–1997. Various roles in Corporate Development and International Finance, Hewlett-Packard Company 1988–1996.

Chairman of the Board of Directors of DAI. Independent Lead Director and Chair of the Audit Committee of Zendesk Inc. Independent Director and Chair of the Audit Committee of Upwork Inc.

Member of the Board of Directors of Pandora Media 2013–2017. Member of the Board of Directors of Brightcove, Inc. 2010–2014.

Carla Smits-Nusteling

b. 1966

Nokia Board member since 2016. Chair of the Audit Committee and member of the Corporate Governance and Nomination Committee.

Master's Degree in Business Economics, Erasmus University Rotterdam, the Netherlands. Executive Master of Finance and Control, Vrije University Amsterdam, the Netherlands.

Member of the Board of Directors and Chief Financial Officer of KPN 2009–2012. Various financial positions in KPN 2000–2009. Various financial and operational positions in TNT/PTT Post 1990–2000.

Member of the Supervisory Board since 2013 and Chair of the Audit Committee of ASML. Member of the Board of Directors since 2013 and Chair of the Audit Committee of TELE2 AB. Member of the Management Board of the Unilever Trust Office since 2015. Lay Judge in the Enterprise Court of the Amsterdam Court of Appeal since 2015.

Kari Stadigh

b. 1955

Group CEO and President of Sampo plc. Nokia Board member since 2011. Member of the Personnel Committee and the Corporate Governance and Nomination Committee.

Master of Science (Eng.), Helsinki University of Technology, Finland. Bachelor of Business Administration, Hanken School of Economics, Helsinki, Finland.

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.

Chairman of the Board of Directors of Mandatum Life Insurance Company Limited. Member of the Board of Directors of Waypoint Capital Group Holdings SA.

Chairman of the Board of Directors of If P&C Insurance Holding Ltd 2002-2019. Member of the Board of Directors of Nordea Bank AB (publ) 2010-2018. Chair of the Board Risk Committee (BRIC) of Nordea Bank AB (publ) 2011-2018. Member of the Board of Directors of Niilo Helanderin Säätiö 2005-2018.

Edward Kozel



Elizabeth Nelson



Carla Smits-Nusteling



Kari Stadigh



Operations of the Board of Directors

The Board represents and is accountable to the shareholders of Nokia. While its ultimate statutory accountability is to the shareholders. the Board also takes into account the interests of the Company's other stakeholders. The Board's responsibilities are active, not passive, and include the responsibility to evaluate the strategic direction of Nokia, its management policies and the effectiveness of the implementation of such by the management on a regular basis. 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 a manner which they reasonably and honestly believe to be in the best interests of Nokia and its shareholders. In discharging that obligation, the members of the Board must inform themselves of all relevant information reasonably available to them. The Board and each Board committee also have the power to appoint independent legal, financial or other advisers as they deem necessary. The Company will provide sufficient funding to the Board and to each committee to exercise their functions and provide compensation for the services of their advisers.

The Board is ultimately responsible for monitoring and reviewing Nokia's financial reporting process, effectiveness of related control and audit functions and the independence of Nokia's external auditor, as well as for monitoring the statutory audit

of the annual and consolidated financial statements. The Board's responsibilities also include overseeing the structure and composition of our top management and monitoring legal compliance and the management of risks related to our operations. In doing so, the Board may set annual ranges and/or individual limits for capital expenditures, investments and divestitures and financial and non-financial commitments that may not be exceeded without a separate Board approval.

In risk management policies and processes, the Board's role includes risk analysis and assessment in connection with financial, strategy and business reviews, updates and decision-making proposals. Risk management policies and processes are integral parts of Board deliberations and risk-related updates are provided to the Board on a recurring basis. For a more detailed description of our risk management policies and processes, refer to "—Risk management, internal control and internal audit functions at Nokia—Main features of risk management systems" below.

The Board has the responsibility for appointing and discharging the President, the Chief Executive Officer, Chief Financial Officer and Chief Legal Officer. Since May 2014, Rajeev Suri has served as the President and CEO. His rights and responsibilities include those allotted to the President under Finnish law and he also chairs the Group Leadership Team.

Subject to the requirements of Finnish law, the independent directors of the Board confirm the compensation and terms of employment of the President and CEO upon the recommendation of the Personnel Committee of the Board. The compensation and employment conditions of the other members of the Group Leadership Team are approved by the Personnel Committee upon the recommendation of the President and CEO.

Board evaluation

In line with our Corporate Governance Guidelines, the Board conducts annual performance evaluation which also include evaluation of the Board committees' work, the Board and Committee Chairs and individual Board members. In connection with the same, the Board conducts an evaluation of the President and CEO. In 2018. an independent external evaluator conducted the Board's evaluation processes consisting of Board self-evaluations, peer evaluations and interviews as well as the evaluation of the President and CEO. The evaluation process included both numeric assessments and the possibility to provide more detailed written and verbal comments. Feedback was also requested from selected members of management as part of the Board evaluation process. Each year, the results of the evaluation are discussed and analyzed by the entire Board and improvement actions are agreed based on such discussion.

Meetings of the Board of Directors

The Board held 19 meetings excluding committee meetings during 2018, of which approximately 37% were regularly scheduled meetings held in person, occasionally complemented by access via video or conference calls. The other meetings were held in writing.

	Number of meetings in person	Number of meetings in writing	Attendance in all meetings %
Full Board	7	12	100
Audit Committee	8	-	98
Personnel Committee	6	5	100
Corporate Governance and Nomination Committee	5	-	100
Technology Committee ⁽¹⁾	2	-	100

(1) From May 30, 2018 when the Board's Technology Committee was officially established.

Directors' attendance at Board and Committee meetings in 2018 is set forth in the table below:

	Board meetings %	Audit Committee meetings %	Corporate Governance and Nomination Committee meetings %	Personnel Committee meetings %	Technology Committee meetings ⁽¹⁾
Risto Siilasmaa (Board Chair)	100		100		100
Olivier Piou (Board Vice Chair)	100			100(2)	100
Sari Baldauf (from May 30, 2018)	100		100	100	
Bruce Brown	100		100	100	100
Jeanette Horan	100	88			100
Louis R. Hughes	100	100			100
Edward Kozel	100	100			100
Jean Monty (until May 30, 2018)	100			100	
Elizabeth Nelson	100	100		100(3)	
Carla Smits-Nusteling	100	100	100(3)		
Kari Stadigh	100		100	100	

- (1) From May 30, 2018 when the Board's Technology Committee was officially established.
- (2) Until May 30, 2018.
- (3) From May 30, 2018.

Additionally, many of the directors attended, as non-voting observers, meetings of a committee of which they were not a member.

Directors meet without management in connection with each regularly scheduled meeting. According to Board practices, meetings without management present would only be attended by non-executive directors and be chaired by the non-executive Chair of the Board. If the non-executive Chair of the Board is unable to chair these meetings, the non-executive Vice Chair of the Board chairs the meeting. Additionally, the independent directors would meet separately at least once annually. In 2018 all members of the Board were non-executive and determined to be independent under the Finnish corporate governance standards and the rules of the NYSE.

All the directors, excluding Jean Monty, who served on the Board for the term until the close of the Annual General Meeting in 2018 attended Nokia's Annual General Meeting held on May 30, 2018.

Committees of the Board of Directors

The Board has four committees: the Audit Committee, Corporate Governance and Nomination Committee, Personnel Committee and Technology 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. Any director who so wishes may attend, as a non-voting observer, meetings of committees of which they are not members.

The Audit Committee

The Committee consists of a minimum of three members of the Board who meet all applicable independence, financial literacy and other requirements as stipulated by Finnish law and the rules of Nasdaq Helsinki and the NYSE. From May 30, 2018, the Audit Committee has consisted of the following five members of the Board: Carla Smits-Nusteling (Chair), Jeanette Horan, Louis R. Hughes, Edward Kozel and Elizabeth Nelson.

The Audit Committee is established by the Board primarily for the purpose of oversight of the accounting and financial reporting processes of Nokia and the audits of its financial statements. The Committee is responsible for assisting the Board in the oversight of:

- the quality and integrity of the company's financial statements and related disclosures;
- the statutory audit of the company's financial statements;

- the external auditor's qualifications and independence;
- the performance of the external auditor subject to the requirements of Finnish law;
- the performance of the company's internal controls and risk management and assurance function;
- the performance of the internal audit function; and
- the company's compliance with legal and regulatory requirements, including the performance of its ethics and compliance program.

In discharging its oversight role, the Audit Committee has full access to all company books, records, facilities and personnel. Audit 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 our employees of concerns relating to accounting or auditing matters. Nokia's disclosure controls and procedures, which are reviewed by the Audit Committee and approved by the President and CEO and the Chief Financial Officer, as well as the 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. For further information on internal control over financial reporting, refer to "-Risk management, internal control and internal audit functions at Nokia-Description of internal control procedures in relation to the financial reporting process" below.

Under Finnish law, an external auditor is elected by a simple majority vote of the shareholders at the Annual General Meeting for one year at a time. The Audit Committee prepares the proposal to the shareholders, upon its evaluation of the qualifications and independence of the external auditor, of the nominee for election or re-election. Under Finnish law, the fees of the external auditor are also approved by the shareholders by a simple majority vote at the Annual General Meeting. The Committee prepares the 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 Nokia's external auditor, PricewaterhouseCoopers Oy, during 2018, refer to "-Auditor fees and services" below.

The Board has determined that all members of the Audit Committee, including its Chair, Carla Smits-Nusteling, are "audit committee financial experts" as defined in the requirements of Item 16A of the annual report on Form 20-F filed with the U.S. Securities and Exchange Commission (SEC). Ms. Smits-Nusteling and each of the other members of the Audit Committee are "independent directors" as defined by Finnish law and Finnish Corporate Governance Code and in Section 303A.02 of the NYSE Listed Company Manual.

The Audit Committee meets a minimum of four times a year based on 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, direct access to the Audit Committee, without the involvement of management. Additionally, any director who so wishes may attend meetings of the Audit Committee as a non-voting observer.

Audit Committee pre-approval policies and procedures

The Audit Committee of the Board is responsible, among other matters, for oversight of the external auditor's independence, subject to the requirements of applicable legislation. The Audit Committee has adopted a policy regarding an approval procedure of audit services performed by the external auditors of Nokia Group and permissible non-audit services performed by the principal external auditor of the Nokia Group (the "Pre-approval Policy").

Under the Pre-approval Policy, proposed services either: (i) may be pre-approved by the Audit Committee in accordance with certain service categories described in the Pre-approval Policy (general pre-approval); or (ii) require the specific pre-approval of the Audit Committee (specific pre-approval). The Pre-approval Policy sets 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 mergers and acquisitions projects), tax and other services are subject to specific pre-approval by the Audit Committee. All service requests concerning generally pre-approved services will be submitted to an appointed Audit Committee delegate within management, who will determine whether the services are within the services generally pre-approved. The Pre-approval Policy is subject to annual review by the Audit Committee.

The Audit Committee establishes budgeted fee levels annually for each of the categories of audit and non-audit services that are pre-approved under the Pre-approval Policy, namely, audit, audit-related, tax and other services. At each regular meeting of the Audit Committee, the auditor provides a report in order for the Audit Committee to review the services that the auditor is providing, as well as the cost of those services.

The Corporate Governance and Nomination Committee

The Committee consists of three to five members of the Board who meet all applicable independence requirements as stipulated by Finnish law and the rules of Nasdaq Helsinki and the NYSE. From May 30, 2018 the Corporate Governance and Nomination Committee has consisted of the following five members of the Board: Risto Siilasmaa (Chair), Sari Baldauf, Bruce Brown, Carla Smits-Nusteling and Kari Stadigh.

The Corporate Governance and Nomination Committee's purpose is 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 to monitor issues and practices related to corporate governance and to propose necessary actions in respect thereof.

The Committee fulfills its responsibilities by:

- actively identifying individuals qualified to be elected members of the Board as well as considering and evaluating the appropriate level and structure of director remuneration;
- preparing proposal to the shareholders on the director nominees for election at the general meetings as well as director remuneration;
- monitoring significant developments in the law and practice of corporate governance and of the duties and responsibilities of directors of public companies;
- assisting the Board and each Committee
 of the Board in its annual performance
 evaluations, including establishing
 criteria to be applied in connection with
 such evaluations;
- developing and recommending to the Board and administering Nokia's Corporate Governance Guidelines; and
- reviewing Nokia's disclosure in the corporate governance statement.

The Committee has the power and practice to appoint a recruitment firm to identify appropriate new director candidates.

The Personnel Committee

The Committee consists of a minimum of three members of the Board who meet all applicable independence requirements as stipulated by Finnish law and the rules of Nasdaq Helsinki and the NYSE. From May 30, 2018 the Personnel Committee has consisted of the following five members of the Board: Bruce Brown (Chair), Sari Baldauf, Elizabeth Nelson, Olivier Piou and Kari Stadigh.

The primary purpose of the Personnel Committee is to oversee the personnel-related policies and practices at Nokia, as described in the Committee charter. It assists the Board in discharging its responsibilities in relation 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:

- compensation of the company's top executives and their terms of employment;
- all equity-based plans;
- incentive compensation plans, policies and programs of the company affecting executives; and
- other significant incentive plans.

The Committee is responsible for overseeing compensation philosophy and principles and ensuring the above compensation programs are performance-based, and designed to contribute to long-term shareholder value creation and alignment to shareholders' interests, properly motivate management, and support overall corporate strategies.

The Technology Committee

The Committee was established as of May 30, 2018 and consists of a minimum of three members of the Board who meet applicable independence requirements as stipulated by Finnish law and the rules of Nasdaq Helsinki and the NYSE and have such skills in innovation, technology and science matters as the Board determines adequate from time to time. From May 30, 2018 the Technology Committee has consisted of the following six members of the Board: Edward Kozel (Chair), Bruce Brown, Jeanette Horan, Louis R. Hughes, Olivier Piou and Risto Siilasmaa.

The primary purpose of the Technology Committee is to engage in a dialogue with and provide opinions and advice to management with respect to significant innovation and technology strategies of the Company which are formulated and executed by the management of the Company, as described in the Committee charter.

In its dialogue with and provision of opinions and advice to the management, the Committee will periodically review:

- the Company's approach to major technological innovations;
- key technology trends that may result in disruptive threats or opportunities;
- high-level risks and opportunities associated with the Company's Research and Development Programs; and
- the Company's technologic competitiveness and new strategic technology initiatives.

Group Leadership Team and the President and CEO

We have a Group Leadership Team that is responsible for the operative management of Nokia. The Group Leadership Team is chaired by the President and CEO. The President and CEO's rights and responsibilities include those allotted to the President under Finnish law.

Members of the Nokia Group Leadership Team

Set forth below are the current members of the Group Leadership Team and their biographical details.

During 2018 and thereafter, the following new appointments were made to the Group Leadership Team:

- Sanjay Goel was appointed President of Global Services and member of the Group Leadership Team as of April 1, 2018;
- Sri Reddy was appointed Co-president of IP/Optical Networks and member of the Group Leadership Team as of May 15, 2018;
- Ricky Corker was appointed President of Customer Operations, Americas and member of the Group Leadership Team as of January 1, 2019;
- Tommi Uitto was appointed President of Mobile Networks on November 22, 2018 and joined Group Leadership Team as of January 31, 2019; and
- Sandra Motley was appointed President of Fixed Networks on January 1, 2019 and joined Group Leadership Team as of January 31, 2019.

During 2018, the following members of the Group Leadership Team resigned:

- Igor Leprince, President of Global Services, stepped down from the Group Leadership Team as of March 31, 2018;
- Gregory Lee, President of Nokia Technologies, stepped down from the Group Leadership Team as of May 31, 2018;
- Marc Rouanne, President of Mobile Networks, stepped down from the Group Leadership Team as of November 22, 2018; and
- Ashish Chowdhary, Chief Customer
 Operations Officer, stepped down from the
 Group Leadership Team as of December
 31, 2018.

Furthermore, during 2018 and thereafter, the following changes took place within the Group Leadership Team:

- Maria Varsellona, Chief Legal Officer and member of the Group Leadership Team was in addition to her role as Chief Legal Officer appointed President of Nokia Technologies as of May 31, 2018;
- Kathrin Buvac, Chief Strategy Officer and member of the Group Leadership Team was in addition to her role as Chief Strategy Officer appointed President of Nokia Enterprise as of January 1, 2019; and
- Federico Guillén, President of Fixed Networks and member of the Group Leadership Team was appointed President of Customer Operations, EMEA & APAC as of January 1, 2019.

Rajeev Suri

b. 1967

President and Chief Executive Officer of Nokia Corporation. Chair of the Group Leadership Team since 2014. Joined Nokia in 1995.

Bachelor of Engineering (Electronics and Communications), Manipal Institute of Technology, Karnataka, India.

CEO, Nokia Solutions and Networks 2009-2014. Head of Services, Nokia Siemens Networks 2007-2009. Head of Asia Pacific, Nokia Siemens Networks April 2007. Senior Vice President, Nokia Networks Asia Pacific 2005-2007. Vice President. **Hutchison Customer Business** Team, Nokia Networks 2004-2005. General Manager, Business Development, Nokia Networks Asia Pacific 2003. Sales Director-BT, O2 and Hutchison Global Customers, Nokia Networks 2002. Director, Technology and Applications, BT Global Customer, Nokia Networks 2000-2001. Head of Global Competitive Intelligence, Nokia Networks 1999-2000. Head of Product Competence Center, Nokia Networks South Asia 1997–1999. System Marketing Manager, Cellular Transmission, Nokia Networks India 1995–1997. Head of Group Procurement, imports and special projects, Churchgate Group, Nigeria 1993-1995. National Account Manager-Transmission/Manager-Strategic Planning, ICL India (ICIM) 1990-1993. Production Engineer. Calcom Electronics 1989.

Member of the Board of Directors of Stryker Corporation.

Basil Alwan

b. 1962

Co-president of IP/Optical Networks. Group Leadership Team member since 2016. Joined Nokia in 2016.

Bachelor in Computer Engineering, University of Illinois at Urbana-Champaign, the United States.

Previously President of IP Routing and Transport, Alcatel Lucent 2012–2016. President of IP Division, Alcatel Lucent 2003–2012. Founder, President and CEO, TiMetra Networks 2000–2003. Vice President and General Manager, Bay Networks (acquired by Nortel) Enterprise Products Division (EPD) 1997–2000. Vice President of Product Management and Marketing, Rapid City Communications 1996–1997.

Hans-Jürgen Bill b. 1960

Chief Human Resources Officer. Group Leadership Team member since 2016. Joined Nokia Siemens Networks in 2007.

Diploma in Telecommunications from the University of Deutsche Bundespost, Dieburg/Darmstadt, Germany. Diploma in Economics from the University of Applied Sciences, Pforzheim, Germany.

Executive Vice President, Human Resources, Nokia 2014-2016. Head of Human Resources, NSN 2009-2014. Head of West South Europe region, NSN 2007-2009. Head of Asia Pacific for Mobile Networks, Siemens 2003-2007. Head of Operations for Mobile Networks, Siemens 2001-2003. Head of Region Central-East and North Europe for Mobile Networks, Siemens 1998-2001. Head of Mobile Networks in Indonesia, Siemens 1994-1998. Various management positions, Siemens 1983-1994.

Kathrin Buvac

b. 1980

President of Nokia Enterprise and Chief Strategy Officer. Group Leadership Team member since 2016. Joined Nokia Siemens Networks in 2007.

Degree in Business Information Systems from University of Cooperative Education, Germany. Bachelor Degree in Business Administration from Open University, London, the United Kingdom.

Vice President, Corporate Strategy, Nokia Networks 2014-2016. Chief of staff to the CEO, Nokia Solutions and Networks 2011-2013. Head of Strategic Projects, Business Solutions, Nokia Siemens Networks 2009-2011. General Manager, Integration Programme, Nokia Siemens Networks 2007-2009. General Manager, Corporate Audit, Siemens Holding S.p.A. 2006–2007. Head of Controlling International Businesses, Siemens Communications 2003-2006. Head of Performance Controlling USA, Siemens Communications 2002-2003. Business Process Manager Global IT Strategy, Siemens Communications 2001-2002. Business Analyst, EADS Aerospace and Defence 1999-2000.

Rajeev Suri



Basil Alwan



Hans-Jürgen Bill



Kathrin Buvac



Ricky Corker

b. 1967

President of Customer Operations, Americas. Group Leadership Team member since 2019. Joined Nokia in 1993.

Bachelor in Communications and Electronic Engineering from the Royal Melbourne Institute of Technology, Australia.

Executive Vice President and President of North America, Nokia 2011-2018. Head of APAC, Nokia Siemens Networks 2009-2011. Head of Sales, APAC, Nokia Siemens Networks 2009. Head of Asia North Region, Nokia Siemens Networks 2008-2009. Head of Hutchison Global Customer Business Team, Nokia Siemens Networks 2007-2008. Vice President APAC, Nokia Networks 2005-2007. Lead Sales Director APAC, Nokia Networks 2004-2005. Account Director Telstra, Nokia Networks 2002-2003. Account Director Vodafone Australia and New Zealand, Sales Director Vodafone APAC Customer Business Team, Nokia Networks 2001-2002. Commercial Director Global Accounts British Telecom, Nokia Networks 2001. Held senior sales and marketing positions at Nokia 1993-2001.

Joerg Erlemeier

b. 1965

Chief Operating Officer. Group Leadership Team member since 2017. Joined Nokia in 1994.

Bachelor of Engineering (Electronics and Telecommunications), Fachhochschule, Aachen, Germany.

Senior Vice President, Integration, Nokia, 2015. Vice President, Global Services, Europe, Nokia, 2015. Head of Delivery, North America market, Nokia, 2013–2014. Head of Program Management Office, Nokia Siemens Networks, 2012. Head of Middle East & Africa, Nokia Siemens Networks, 2009–2011. Held several executive level positions in Nokia/Nokia Siemens Networks, 1994–2009.

Barry French

b. 1963

Chief Marketing Officer. Group Leadership Team member since 2016. Joined Nokia in 2006.

Master's Degree in International Affairs from Columbia University's School of International and Public Affairs, New York, the United States. Bachelor of Arts degree in Political Science, Bates Colleges, Lewiston, Maine, the United States.

Chief Marketing Officer and Executive Vice President, Marketing and Corporate Affairs, Nokia 2014-2016. Head of Marketing and Corporate Affairs, Nokia Siemens Networks 2010-2014. Head of Communications, Nokia Siemens Networks 2006-2010. Vice President, Corporate Communications, United Airlines 2004-2006. Director, Corporate Communications. Dell 2000-2004. Additional roles included communications, government relations and management positions, Engineering Animation, Raytheon, KRC Research and the Sawyer/ Miller Group.

Sanjay Goel

b. 1967

President of Global Services. Group Leadership Team member since 2018. Joined Nokia Networks in 2001.

Bachelor's Degree in Engineering in Electronics and Communications from Manipal Institute of Technology, Karnataka, India.

Senior Vice President, Global Services Sales, Global Services 2015-2018. Senior Vice President, Services Portfolio Sales, Global Services, Nokia since 2015. Vice President, Services, Customer Operations, Asia, Middle East & Africa, Nokia Networks 2012-2015. Head of Global Services, Asia Pacific & Japan, Nokia Siemens Networks 2009–2012. Head of Managed Services, Asia Pacific (including India & Japan), Nokia Siemens Networks 2007-2009. Several director and manager level positions in Nokia Networks 2001-2007. Manager in IBM India 1996-2001. Several engineer positions in Asea Brown Boveri Ltd 1990-1996.

Ricky Corker



Joerg Erlemeier



Barry French



Sanjay Goel



Bhaskar Gorti



Federico Guillén



Sandra Motley



Kristian Pullola



Bhaskar Gorti

b. 1966

President of Nokia Software. Group Leadership Team member since 2016. Joined Nokia in 2016.

Master's degree in Electrical Engineering from Virginia Polytechnic Institute and State University, Blacksburg, the United States. Bachelor's degree in Technology and Electrical Engineering from National Institute of Technology, Warangal, India.

Previously President of IP Platforms, Alcatel Lucent 2015–2016. Senior Vice President and General Manager, Communications Global Business Unit, Oracle 2006–2015. Senior Vice President, Portal Software 2002–2006.

Federico Guillén

b. 1963

President of Customer Operations, EMEA & APAC. Group Leadership Team member since 2016. Joined Nokia in 2016.

Degree in Telecommunications Engineering, ETSIT at Universidad Politécnica de Madrid, Spain. Master's degree in Switching & Communication Architectures, ETSIT at Universidad Politécnica de Madrid, Spain. Master's Degree in International Management, ESC Lyon and Alcatel, France.

President of Fixed Networks, Nokia 2016-2018 President of Fixed Networks, Alcatel Lucent 2013–2016. President and CEO of Alcatel Lucent Spain & Global Account Manager Telefonica, Alcatel Lucent 2009-2013. Vice President Sales of Vertical Market Sales in Western Europe, Alcatel Lucent 2009. Head of Regional Support Centre within Alcatel Lucent's Fixed Access Division for South Europe, MEA, India and CALA 2007-2009. CEO, Alcatel Mexico & Global Account Manager, Telmex 2003–2007. Various R&D, Portfolio and Sales Management Positions, Telettra and then Alcatel in Spain, Belgium and the United States. 1989-2003.

Sandra Motley

b. 1959

President of Fixed Networks. Group Leadership Team member since 2019. Joined Nokia in 2016.

Master of Business Administration (Finance), Farleigh Dickinson University, New Jersey, the United States. Executive Business Program graduate, Smith College, Massachusetts, the United States. Post-Masters Mechanical Engineering studies at Columbia University, New York. Degree in Mechanical Engineering from State University of New York at Buffalo.

Chief Operating Officer, Fixed Networks, Nokia 2017–2018.
Chief Operating Officer, Wireless Business, Alcatel-Lucent 2011–2013. Vice President Sales, U.S. Wireless Accounts,
Alcatel-Lucent 2009–2011. Vice President and General Manager of the CDMA Product Unit,
Alcatel-Lucent 2007–2009.
Various roles in North America & CALA in pre- and post-sales and business operations for Alcatel-Lucent's Wireless business.

Member of the Board of Advisors for Light Reading's Women in Communications.

Kristian Pullola

b. 1973

Chief Financial Officer. Group Leadership Team member since 2017. Joined Nokia in 1999.

Master of Science (Economics), the Hanken School of Economics, Helsinki, Finland. Finance diploma, the Stockholm School of Economics, Stockholm, Sweden.

Senior Vice President, Corporate Controller, Nokia 2011–2016. Vice President, Treasury & Investor Relations, Nokia 2009–2011. Vice President, Corporate Treasurer, Nokia 2006–2008. Director, Treasury Finance & Control, Nokia 2003–2006. Various roles in Nokia Treasury 1999–2003. Associate, Citibank International 1998–1999.

Member of the Board of Directors of Ilmarinen Mutual Pension Insurance Company.

Sri Reddy

b. 1964

Co-president of IP/Optical Networks. Group Leadership Team member since 2018. Joined Nokia in 2016.

Bachelor of Electrical Engineering, Jawaharlal Nehru Technological University, India. Masters of Electrical Engineering and Computer Science, Oregon State University, the United States. Master of Business Administration from Santa Clara University, the United States.

Senior Vice President and General Manager, IP Routing and Packet Core Business Unit, Nokia, 2016–2018. Vice President, Engineering, IP Routing, Alcatel-Lucent, 2003–2016. Vice President, Engineering, Timetra, 2000–2003. Vice President, Engineering, Bay Networks, 1991–1999.

Tommi Uitto

b. 1969

President of Mobile Networks. Group Leadership Team member since 2019. Joined Nokia in 1996.

Master's degree in industrial management, Helsinki University of Technology, Finland.
Master's degree in operations management, Michigan Technological University, the United States.

Senior Vice President, Global Product Sales, Mobile Networks, Nokia 2016 - 2018. Senior Vice President, Global MBB Sales, Customer Operations, Nokia Networks, 2015 - 2016. Senior Vice President, West Europe. Customer Operations, Nokia Networks, 2013-2015. Head of Radio Cluster (SVP), Mobile Broadband, Nokia Siemens Networks, 2012 - 2013. Head of Global LTE Radio Access Business Line (VP), Mobile Broadband, Nokia Siemens Networks, 2011-2012. Head of Quality, Mobile Broadband, 2012. Head of Product Management, Network Systems, Nokia Siemens Networks, 2010. Head of Product Management, Radio Access, Nokia Siemens Networks, 2009. Head of WCDMA/HSPA and Radio Platforms Product Management, Nokia Siemens Networks, 2008. Head of WCDMA/HSPA Product Line Management, Nokia Siemens Networks, 2007. General Manager, Radio Controller Product Management, Nokia Networks 2005–2007. Director, Sales & Marketing (Lead Sales Director), France Telecom/ Orangse Nokia Networks, 2002-2005. Operations Director, Northeast Europe, Central & Eastern Europe and Middle East, Nokia Networks, 1999 - 2002.

Maria Varsellona

b. 1970

President of Nokia Technologies and Chief Legal Officer. Group Leadership Team member since 2016. Joined Nokia Siemens Networks in 2013.

Law Degree from University of Palermo (Juris Doctor), Italy.

Executive Vice President and Chief Legal Officer, Nokia 2014-2016. General Counsel, NSN 2013-2014. Tetra Pak Group General Counsel, Tetra Laval Group 2011-2013. Sidel Group General Counsel, Tetra Laval Group 2009-2011. Senior Counsel Commercial Operations and Global Services. GE Oil & Gas 2006-2009. Senior Counsel Europe, Hertz Europe 2005-2006. Senior Counsel Global Services, GE Oil & Gas 2001-2005. Lawyer, Pini Birmingham & Partners 1998–2001. Lawyer, Greco Law Firm 1994-1998.

Member of the Board of Directors of Nordea Bank AB (publ).

Marcus Weldon b. 1968

Corporate Chief Technology Officer and President of Nokia Bell Labs. Group Leadership Team member since 2017. Joined Nokia

Ph.D (Physical Chemistry) degree, Harvard University, Cambridge, Massachusetts, United States. Bachelor of Science (Computer Science and Chemistry) joint degree, King's College, London, United Kingdom.

Corporate Chief Technology Officer and President of Bell Labs, Alcatel Lucent (then Nokia) 2013–2016. Corporate Chief Technology Officer, Alcatel Lucent 2009–2013. Chief Technology Officer, Broadband Networks & Solutions, Alcatel Lucent 2006–2009. Member of Technical Staff, Bell Labs, Lucent Technologies 1997–2006.

Network Partner to Keen Venture Partners. Advisor to Mundi Ventures.

Sri Reddy



Tommi Uitto



Maria Varsellona



Marcus Weldon



Risk management, internal control and internal audit functions at Nokia

Main features of risk management systems

We have a systematic and structured approach to risk management. Key risks and opportunities are primarily identified against business targets either in business operations or as an integral part of strategy and financial planning. Risk management covers strategic, operational, financial and hazard risks. Key risks and opportunities are analyzed, managed and monitored as part of business performance management with the support of risk management personnel and the centralized Enterprise Risk Management function.

The principles documented in the Nokia Enterprise Risk Management Policy, which is approved by the Audit Committee of the Board, require risk management and its elements to be integrated into key processes. One of the core principles is that the business or function head is also the risk owner, although all employees are responsible for identifying, analyzing and managing risks, as appropriate, given their roles and duties. Our overall risk management concept is based on managing the key risks that would prevent us from meeting our objectives, rather than solely focusing on eliminating risks. In addition to the principles defined in the Nokia Enterprise Risk Management Policy, other key policies reflect implementation of specific aspects of risk management.

Key risks and opportunities are reviewed by the Group Leadership Team and the Board in order to create visibility on business risks as well as to enable prioritization of risk management activities. Overseeing risk is an integral part of the Board's deliberations. The Board's 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. The Board's role in overseeing risk includes risk analysis and assessment in connection with financial, strategy and business reviews, updates and decision-making proposals.

Description of internal control procedures in relation to the financial reporting process

The management is responsible for establishing and maintaining adequate internal control over financial reporting for Nokia. Our internal control over financial reporting is designed to provide reasonable assurance to the management and the Board regarding the reliability of financial reporting and the preparation and fair presentation of published financial statements.

The management conducts a yearly assessment of Nokia's internal controls over financial reporting in accordance with the Committee of Sponsoring Organizations framework (the "COSO framework", 2013) and the Control Objectives for Information and related technology of internal controls. The assessment is performed based on a top-down risk assessment of our financial statements covering significant accounts, processes and locations, corporate-level controls and information systems' general controls.

As part of its assessment the management has documented:

- the corporate-level controls, which create the "tone from the top" containing the Nokia values and Code of Conduct and which provide discipline and structure to decision-making processes and ways of working. Selected items from our operational mode and governance principles are separately documented as corporate-level controls;
- the significant processes, structured under so-called financial cycles. Financial cycles have been designed to: (i) give a complete end-to-end view of all financial processes; (ii) identify key control points; (iii) identify involved organizations; (iv) ensure coverage for important accounts and financial statement assertions; and (v) enable internal control management within Nokia;
- the control activities, which consist of policies and procedures to ensure the management's directives are carried out and the related documentation is stored according to our document retention practices and local statutory requirements; and
- the information systems' general controls to ensure that sufficient IT general controls, including change management, system development and computer operations, as well as access and authorizations, are in place.

Further, the management has also:

- assessed the design of the controls in place aimed at mitigating the financial reporting risks;
- tested operating effectiveness of all key controls; and
- evaluated all noted deficiencies in internal controls over financial reporting in the interim and as of year-end.

In 2018, Nokia has followed the procedures as described above and has reported on the progress and assessments to the management and to the Audit Committee of the Board on a quarterly basis.

Description of the organization of the internal audit function

We also have an internal audit function that acts as an independent appraisal function by examining and evaluating the adequacy and effectiveness of our system of internal control. Internal audit reports to the Audit Committee of the Board. The head of the internal audit function has direct access to the Audit Committee, without involvement of the management. The internal audit staffing levels and annual budget are approved by the Audit Committee. All authority of the internal audit function is derived from the Board. The internal audit aligns to the business regionally and by business and function.

Annually, an internal audit plan is developed with input from the management, including key business risks and external factors. This plan is approved by the Audit Committee. Audits are completed across the business focused on country level, customer level, IT system implementation, IT security, operations activities or at a Group function level. The results of each audit are reported to the management identifying issues, financial impact, if any, and the correcting actions to be completed. Quarterly, the internal audit function communicates the progress of the internal audit plan completion, including the results of the closed audits, to the Audit Committee.

The internal audit also works closely with our Ethics and Compliance office to review any financial concerns brought to light from various channels and, where relevant, works with Enterprise Risk Management to ensure priority risk areas are reviewed through audits.

In 2018, the internal audit plan was completed and all results of these reviews were reported to the management and to the Audit Committee.

Main procedures relating to insider administration

Our insider administration is organized according to the applicable European Union and Finnish laws and regulations. In addition, the Board of Directors has approved Nokia Insider Policy which sets out Nokia-wide rules and practices to ensure full compliance with applicable rules and the inside information is recognized and treated in an appropriate manner and with the highest integrity. The policy is applicable to all Nokia employees.

Persons discharging managerial responsibilities

Nokia has identified members of the Board of Directors and the Group Leadership Team as persons discharging managerial responsibilities who, along with persons closely associated with them, are required to notify Nokia and the Finnish Financial Supervisory Authority of their transactions with Nokia's financial instruments. Nokia publishes the transaction notifications.

In addition, under the Nokia Insider Policy, persons discharging managerial responsibilities are obligated to clear with the Vice President, Corporate Legal, a planned transaction in Nokia's financial instruments in advance. It is also recommended that trading and other transactions in Nokia's financial instruments are carried out in times when the information available to the market is as complete as possible.

Closed Window

Persons discharging managerial responsibilities are subject to a closed window period of 30 calendar days preceding the disclosure of Nokia's quarterly or annual result announcements, as well as the day of the disclosure. During the closed window period, persons discharging managerial responsibilities are prohibited from dealing in Nokia's financial instruments.

Nokia has imposed this closed window period also on separately designated financial reporting persons who are recurrently involved with the preparation of Nokia's quarterly and annual results announcements. These persons are separately notified of their status as designated financial reporting persons.

Insider Registers

Nokia does not maintain a permanent insider register. Insiders are identified on a case-by-case basis for specific projects and are notified of their insider status. Persons included in a project-specific insider register are prohibited from dealing in Nokia's financial instruments until the project ends or is made public.

Supervision

Our insider administration's responsibilities include internal communications related to insider matters and trading restrictions, setting up and maintaining our insider registers, arranging related trainings as well as organizing and overseeing compliance with the insider rules.

Violations of the Nokia Insider Policy must be reported to the Vice President, Corporate Legal. Nokia employees may also use channels stated in the Nokia Code of Conduct for reporting incidents involving alleged violations of the Nokia Insider Policy.

Share ownership of the Board of Directors and the Nokia Group Leadership Team

The following table sets forth the number of shares and ADSs held by the members of the Board at December 31, 2018 when they held a total of 2 384 135 shares and ADSs in Nokia, which represented approximately 0.04% of our outstanding shares and total voting rights excluding shares held by Nokia Group.

Name	Shares ⁽¹⁾	ADSs ⁽¹⁾
Risto Siilasmaa	1 347 954	
Olivier Piou	280 193	
Sari Baldauf	98 436	
Bruce Brown		128 135
Jeanette Horan	25 949	
Louis R. Hughes	67 776	
Edward Kozel	27 529	20 525
Elizabeth Nelson		72 857
Carla Smits-Nusteling	41 055	
Kari Stadigh	273 726	

(1) The number of shares or ADSs includes shares and ADSs received as director compensation as well as shares and ADSs acquired through 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, refer to section "—Compensation" and Note 35, Related party transactions, of our consolidated financial statements included in this annual report.

The following table sets forth the number of shares and ADSs held by the President and CEO and the other members of the Group Leadership Team in office at December 31, 2018 when they held a total of 4 838 873 shares and ADSs in Nokia, which represented approximately 0.09% of our outstanding shares and total voting rights excluding shares held by Nokia Group.

Name	Position in 2018	Shares ⁽¹⁾	Beneficially owned shares ADSs ⁽¹
Rajeev Suri	President and CEO	2 473 450	
Basil Alwan	Co-president of IP/Optical Networks	193 355	81 000
Hans-Jürgen Bill	Chief Human Resources Officer	216 869	
Kathrin Buvac	Chief Strategy Officer	125 502	
Ashish Chowdhary	Chief Customer Operations Officer	46 469	
Joerg Erlemeier	Chief Operating Officer	119 604	
Barry French	Chief Marketing Officer	254 889	
Sanjay Goel	President of Global Services	159 512	
Bhaskar Gorti	President of Nokia Software	171 493	
Federico Guillén	President of Fixed Networks	132 817	
Kristian Pullola	Chief Financial Officer	333 598	
Sri Reddy	Co-president of IP/Optical Networks		100 000
Maria Varsellona	President of Nokia Technologies and Chief Legal Officer	364 179	
Marcus Weldon	Chief Technology Officer and President of Bell Labs	66 136	

⁽¹⁾ The number of shares or ADSs includes shares received as executive compensation as well as shares and ADSs acquired through other means. Stock options or other equity awards that are deemed as being beneficially owned under the applicable SEC rules are not included. For further information on compensation refer to section "-Compensation"

Auditor fees and services

PricewaterhouseCoopers Oy has served as our auditor for each of the fiscal years in the three-year period ended December 31, 2018. The auditor is elected annually by our shareholders at the Annual General Meeting for the fiscal year in question. The Audit Committee of the Board prepares the 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 presents fees by type paid to PricewaterhouseCoopers' network of firms for the years ended December 31:

EURm	2018	2017
Audit fees ⁽¹⁾	24.9	25.3
Audit-related fees ⁽²⁾	2.1	1.8
Tax fees(3)	1.8	1.2
All other fees ⁽⁴⁾	0.2	0.1
Total	29.0	28.4

- (1) Audit fees consist of fees incurred for the annual audit of the Group's consolidated financial statements and the statutory financial statements of the Group'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 Group's financial statements or that are traditionally performed by the independent auditor, and include consultations concerning financial accounting and reporting standards; advice and assistance in connection with local statutory accounting requirements; due diligence related to mergers and acquisitions; and audit procedures in connection with investigations in the pre-litigation phase and compliance programs. They also include fees billed for other audit services, which are those services that only the independent auditor can reasonably 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) services related to tax 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; compliance reviews, advice and assistance on other indirect taxes; and transaction cost analysis; (ii) services related to tax audits; (iii) services related to individual compliance (preparation of individual tax returns and registrations for employees (non-executives), assistance with applying visa, residency, work permits and tax status for expatriates); (iv) services related to technical guidance on tax matters; (v) services related to transfer pricing advice and assistance with tax clearances; and (vi) tax 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) Other fees include fees billed for company establishments; liquidations; forensic accounting, data security, other consulting services and reference materials and services.