A Financial Analysis of the Nokia Corporation

Tomáš Bárek

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L.S.

doc. Ing. Anežka Lengálová, Ph.D. *děkanka*	Mgr. Libor Marek, Ph.D. *ředitel ústavu*

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ABSTRAKT

Účelem této práce je analyzovat finanční ukazatele vybrané společnosti. Cíle bylo dosaženo pomocí finanční analýzy, skrze absolutní, rozdílové, poměrové ukazatele a ukazatele finančního zdraví.

Výsledky finanční analýzy byly porovnány s hodnotami doporučovanými odbornou literaturou. Dále byla vypracována analýza SWOT pro identifikaci silných a slabých stránek společnosti, příležitostí a hrozeb.

Nakonec byly v práci, na základě vypracovaných analýz, navrženy řešení, které firmě pomohou zlepšit její finanční zdraví, finanční výsledky, i postavení na trhu.

Klíčová slova: Nokia, korporace, finanční analýza, finanční zdraví, rentabilita, likvidita, aktivita, bankrotní modely

ABSTRACT

The purpose of this thesis is to analyze financial indicators of the selected company. The objective was achieved using financial analysis, through absolute, differential and proportional indicators and financial health measures.

The results of the financial analysis were compared with the values recommended by the literature. As the next step, SWOT analysis was created for identification strengths, weaknesses, opportunities and threats of the company.

At last, recommendations have been proposed, based on the analyses, to help the company improve its financial health, financial results and market position.

Keywords: Nokia, corporation, financial analysis, financial health, profitability, liquidity, activity, bankruptcy models

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Acknowledgements, motto and a declaration of honor saying that the print version of the Bachelor’s/Master’s thesis and the electronic version of the thesis deposited in the IS/STAG system are identical, worded as follows:

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CONTENTS

INTRODUCTION

The current situation in the telecommunication market becomes more and more demanding. It has become more difficult to achieve largest possible market value, even in the longer period of time, which is especially the case for companies producing mobile phones, smartphones, IoT devices and telecommunication devices or equipment, which is given by fierce competition in the field. Therefore, the financial analysis helps to achieve this goal and minimize some difficulties during the process of achieving higher market value.

The financial analysis is crucial for financial management of a company as well. Financial analysis outputs are used in evaluation of financial health of a company. In addition, it can facilitate the process of managing incomes and expenses in a company. The analysis is compiled from data obtained primarily from financial statements (the balance sheet, the income statement, the cash flow statement). The financial analysis focuses on the analysis of assets, liabilities, incomes and expenses, profits and losses.
To sum up, the financial analysis can also help to predict financial distress and can be used to determine whether an enterprise is going to bankruptcy.

The thesis is divided into two major chapters. The first chapter deals with theory. In this part, an analysis of a company performance according to the most common indicators, (especially liquidity, profitability, activity and solvency ratios), differential ratios (horizontal and vertical analysis), cash flow indicators, summary measures of financial health and SWOT analysis, is mentioned.
In the second chapter, the Nokia Corporation is introduced. It starts with basic information about the company, a brief history and its current situation and organizational structure. The following parts contain the analyses according to the above mentioned indicators (ratio indicators, vertical and horizontal analysis, summary measures of financial health and the SWOT analysis).

The main purpose of the thesis is to evaluate the financial situation of the Nokia Corporation and to propose recommendations. The financial analysis is based on the financial statements and annual reports available online and obtained from the main website of the Nokia Corporation.

I. THEORY

1 FINANCIAL ANALYSIS

The main purpose of financial analysis is to analyze the financial situation in a company. It provides information on the company's profitability, capital structure, effectiveness of using its assets, and ability to pay its liabilities. (Knápková, Pavelková, Remeš and Šteker 2017, 17) The received data comes from analyzing the company's income statement, balance sheet, and cash flow statement. (Kenton 2018)

The financial analysis is usually made before making a certain investment or financial decision. It examines a company's financial performance in the past until the current situation, which is therefore used to improve the situation in the company. (Vochozka 2011, 12)

Another reason for financial analysis is to examine the current financial situation in a company and afterwards to create a basis for a financial plan for the future. (Růčková 2019, 17)

1.1 Users of financial analysis

The aim is to provide information for the management of the company in order to ease decision-making. There are many users of financial statements, such as the owners or top company management team (internal users), but investors, trade partners, banks as well as governments or the general public (external users). (Vochozka 2011, 13)

1.1.1 Owners and investors

The investors require information to predict as accurately as possible the company's performance in view of profitability and being successful in its field. Similarly, owners of small businesses need this data to determine if the business is profitable enough. (Accountingverse, n.d.)

They also require the information for as much as possible precise evaluation of risk and profit rate. Investors are also interested in how effectively the company operates with its assets. (Vochozka 2011, 13)

1.1.2 Management

In small businesses managers are frequently the actual owners, in bigger organizations however there is usually a separate managerial team. The managers face economic questions such as how many goods to purchase, what the last year‘s profit was, if the set targets were met or if there are enough funds in the company. (Accountingverse, n.d.)

Therefore, they need the information provided in the financial analysis for financial and operative planning. The outputs are used in order to correctly set targets and plans for future. (Vochozka 2011, 13)

1.1.3 Lenders, trade creditors and suppliers

Lenders of financial funds (for example banks) are primarily interested in the company's solvency - the ability of the company to pay its liabilities or even debts.

Trade creditors and suppliers are also interested in the company's ability to pay its liabilities, but they are more interested in the company's liquidity – the ability to pay short-term liabilities. (Accountingverse, n.d.)

To sum up, trade partners are interested in the company's solvency, liquidity and activity ratios, which give a basic overview of the concern for the company by its customers and therefore its stability and potential profit in the future. (Vochozka 2011, 13)

1.1.4 Government

The tax authorities are mostly interested in the company's financial information – how much the company makes, for accurate taxation and regulation purposes. Such information can be afterwards used for various statistic purposes, distribution of financial subsidies and supervision of state-owned companies. The amount of taxes is based on specific tax bases and results of operations. (Vochozka 2011, 13)

1.1.5 Employees, Customers, General Public

The employees of the company are primarily interested in how much profit the company makes, the ability to pay salaries and provide benefits, and how stable the company is. (Vochozka 2011, 13)

Customers focus on how the company is expected to perform in future and how stable or unstable its operations are expected to be.

By the term general public is meant everyone outside the company. These subjects might be researchers, analysts, competition or students. They might be interested in the company's performance for various reasons. (Accountingverse, n.d.)

1.1.6 Competition

It is also worth mentioning that the data in the released financial analysis might be accessible to competitors as well. Such competition usually focuses on a similar field, industry or type of customer, offering similar products or services. (Wágner 2009, 54)

1.2 Source information for financial analysis

Making financial analysis requires obtaining certain data from the company's annual report. The accuracy and relevancy of the whole financial analysis depends on the input data. The information should be reliable and complex. The most essential information is found in an accounting statement. The accounting statement can be separated into two types such as financial account statement and internal account statement. (Knápková, Pavelková, Remeš and Šteker 2017, 18-19)

The account statement consists of data of the following:

- The Balance sheet – which gives a basic outline on the structure of assets and liabilities in the company to the day of its creation.
- The Income statement (also called Profit/Loss statement) – which informs on the amount of profit or loss received from operations for a certain time.
- The Cash flow statement – captures the creation and usage of financial assets, which is therefore represented as a flow of cash.
- The notes to the account statement (Vochozka 2011, 14)

The form and content is strictly given by the Accounting Act No. 563/1991 Coll. and the regulation No. 410/2009 Coll. of the Czech Republic.

"**The account statement**

Clause 18 Paragraph 1

The accounting entities prepare financial statements in the cases provided for by this Act. The financial statements are an integral part and form an integral part thereof

a) balance sheet,

b) profit and loss account,

c) notes explaining and supplementing the information contained in the parts referred to in points a) and b), in particular by implementing Clause 7 Paragraphs 3 to 5 and Clause 19 Paragraph 5…" (Máče 2013, 279), (Zákony pro lidi, n.d.)

The financial accounting statements are so called external, because the information obtained from them are mainly used by external subjects and furthermore because the company is obliged to reveal such data publicly, available for everyone, at least once a year. Such data contains information on the structure of the assets, what the company's sources for repaying the liabilities are and the company's creation and how it is going to use the profit and resolve loss.

The internal account statement is not regulated (in the Czech Republic) by the government or any legislation so each company can adjust the analysis to its needs. Such analyses are more frequent and can improve the accuracy of the financial analysis as a whole, which is important as they create more accurate timelines.
(Růčková 2019, 21-22)

1.3 Methods of financial analysis

A variety of methods are used to analyze financial situation in the company. However, such methods are selected according to the following criteria. The analysis should be purposeful – it must correspond to the needs specified beforehand, costliness – as the financial analysis requires some funds, the outcome should be adequate to the costs, reliable – using most reliable and trustworthy sources available. (Růčková 2019, 43-44)
In economics two methods are used: one of them is called the **Fundamental analysis**, which examines the two-way connection between economic and microeconomic processes. The purpose is to examine macroeconomic processes as well, analyze various branches of commerce or industry or the structure of a market (monopoly, oligopoly).
The second analysis is called the **Technical analysis**. As opposed to the Fundamental analysis, it relies more on mathematics and statistics. This leads to quantitative analysis of data by specialists in the field. (Synek 2011, 368)
However, both methods are in fact very similar to each other. The knowledge of Fundamental analysis is essential in order to make Technical analysis as understanding basic economic processes is required.
From this perspective financial analysis can be seen as a type of Technical analysis, given its reliance on mathematic procedures. (Růčková 2019, 43-44)
Most frequent methods in financial analysis are:

- The analysis of static (differential) indicators – the analysis of financial and property structure. In this case Vertical and Horizontal analyses are often used.
- The analysis of flow indicators – examines profits, costs, earnings and cash flow. It is possible to use Horizontal and Vertical analyses as well.
- The analysis of Working capital - is the difference between a company's current assets (cash, accounts receivable, inventories of raw materials and finished goods) and its current liabilities (accounts payable).

- The Ratio Analysis – is made up of indicators of liquidity, solvency ratio, profitability ratio, efficiency ratio, coverage ratio and market prospect ratio. (Knápková, Pavelková, Remeš and Šteker 2017, 65-66)

2 FINANCIAL STATEMENTS

The Financial statements show a general overview of the financial situation in a company. There are up to four financial statements which are prepared and published by companies: the balance sheet, income statement, cash flow statement and additionaly a statement of changes in equity. (Investopedia, n.d.)

Companies are obliged to compile their financial statements as part of their annual accounts, which is given by the legislation. According to several business criteria, companies are obliged to publish their financial statements in the Czech Commercial Register. Companies with a compulsory audit have to publish their financial statements automatically. The criteria for an obligatory audit are as follows (as long as a company exceeds at least two of them):

- Assets of CZK 40 mil. or more.
- Turnover of CZK 80 mil. or higher.
- 50 employees or more.

Companies are obliged to publish financial statements within 30 days of their accounts being verified by an auditor. (adminX 2017)

2.1 Balance sheet

The Balance sheet shows the company's assets and liabilities as of the moment it is created. It provides its users with information about the current situation in the company by showing values of assets and liabilities and shareholders' equity. (Růčková 2015, 22)

2.1.1 Assets

Total Assets = Non-current assets + Current assets + Other assets

Assets are basically the property of a company. Assets have a given property structure, where they are classified by economic sources, and differentiated by fields of operation. (Máče 2005, 24) The crucial factor is the ability to transform assets into economic growth. This can be done:

- Directly – immediately transforming securities into cash
- Indirectly – assets are put into production, which turns them into products, which are later sold and so transformed into cash.

Assets are sorted by their ability to transform into cash. This attribute is called liquidity, and assets are sorted from the most liquid ones to the least liquid ones (USA). In the Czech Republic it is the other way round, so from the least liquid to the most liquid assets.

Long-term assets or Non-current assets

The liquidity in Long-term assets is longer than one year and such assets are not used in production immediately but in the form of depreciation. They consist of: (Knápková, Pavelková, Remeš and Šteker 2017, 30)

- Fixed assets or Non-current assets (software, research,…)
- Tangible assets (lands, structures, machines, devices,…)
- Investments (securities) (Tudor and Stranding 1998, 34)

Short-term assets or Current assets

Short-term assets are expected to transform into cash in up to one year, but they are consumed in the process of transformation into final product. Short-term assets include: (Knápková, Pavelková, Remeš and Šteker 2017, 30)

- Inventory or Stock (inventories of raw materials, unfinished production, semi-finished products and finished goods)
- Receivables or Trade Debtors (Long-term/Short-term receivables)
- Prepayments and accrued income
- Financial assets and Cash (include: cash, bank accounts, stamps and vouchers) (Tudor and Stranding 1998, 34)

2.1.2 Liabilities and Shareholder‘s equity

Total Liabilities and Shareholder‘s equity = Total Equity + Other sources + other liabilities (Máče 2005, 25)

Liabilities represent the form of sources for funding the company and they also show the financial structure of a company and how the company funds its assets. Liabilities are sorted according to the funding source, therefore we differentiate among equity and other sources. (Knápková, Pavelková, Remeš and Šteker 2017, 38)

They also represent the financial obligations to the company’s employees, accounts receivable, financial institutions or insurance companies at a certain time. The values are sorted according to the payment time due, and whether they are owned by the company or loaned by an external source. (Máče 2005, 25)

Total Equity

Contains more values including:

- Common stock or Share capital, which represents the initial deposit of funds into the company in cash. (Růčková 2019, 28)
- Capital funds
- Cooperatives, and other retained earnings
- Profit / loss – current year and previous years
- Profit / loss of current accounting period (Máče 2005, 25-26)

Liabilities

Represents the debt of a company which is necessary to be settled. Such type of capital is usually cheaper compared to Equity, in addition short-term capital is cheaper than long-term capital. (Růčková 2019, 28)

- Reserves
- Long-term and Short-term payables
- Bank loans and financial accommodations (Máče 2005, 25-26)

Balance sheet for XYZ business on the 31st of December 2010		
	$	$
ASSETS		
Non-current assets		2,150,000
Land and buildings	2,000,000	
Furniture	12,000	
Machinery	18,000	
Investments	120,000	
Current assets		10,000
Inventory	1,000	
Debtors / receivables	3,200	
Bank and cash	5,800	
TOTAL ASSETS		2,160,000
EQUITY AND LIABILITIES		
Owner's equity		1,700,000
Capital	1,700,000	
Non-current liabilities		440,000
10% Loan	440,000	
Current liabilities		20,000
Creditors / payables	20,000	
TOTAL EQUITY AND LIABILITIES		2,160,000

Figure 1 A Balance sheet example (accounting-basics-for-students.com) (Accounting Basics for Students, n.d.)

Note that there is a difference between Total equity and Share capital (or Common stock), which is a confusing term, especially in the Czech environment. Total equity is usually loaned, which means the company has obligation to repay it in the future.

On the other hand, Share capital represents the initial deposit of funds into the company. It is possible to increase the amount of share capital by simply adding more funds to it, which can be useful for future development of the company. (Scholleová 2017, 14)

There are some rules for the Balance sheet, which are recommended to be respected and taken into consideration. Such rules are called *accounting equations*, which are created upon experience from real situations. They are not obligatory, as the overall results may vary depending on industry or the field a company operates in.

- **The Golden accounting equation:** The purpose is to back up non-current assets by shareholder‘s equity or non-current liabilities as well as to back up current assets by current liabilities.
- **The rule of risk balancing/equalization:** The task is to reach a proportion of shareholder‘s equity to total liabilities of 1:1. This can be done by analyzing the company's debt to equity ratio, which is useful in reducing indebtedness, which in turn is a good sign for creditors. On the other hand, it decreases the effect of leverage.
- **The Pari-passu rule:** It regulates the relation between non-current assets and shareholder‘s equity, where non-current assets are backed up by shareholder ‘s equity.
- **The Golden ratio rule:** This rule is for maintaining financial balance in the company by monitoring investments, which are not recommended to exceed the amount of sales. (Vochozka 2011, 21)

2.2 Income statement

The Income statement or also called the Profit and Loss statement tells us what the earnings and profitability of a business are or the amount of a loss in a company. The statement is created for a specific period of time, such as a month or a year. It is useful to determine the company's financial performance over certain periods of time, such as months or quarters. It is also frequently used to compare a company's outputs to those of its competitors. (Investopedia, n.d.)

The income statement has a given structure, which gives a good overview of how and from source the profit was gained. It measures how each earning affect the final income statement, which is therefore used for evaluating profitability. There are 3 crucial components making up the statement, which are:

- Operating profits earned from the company's activity (sales)
- Financial profits earned from financial investments (Růčková and Roubíčková 2012, 90)

There are however factors which should be taken into consideration when analyzing the income statement:

- Income tax – which is a form of redistribution of profit, which is regulated by the government.
- Interest expenses – which are given by the capital structure in the company.
- Depreciations

Based on the above, we differentiate among various categories of earnings:

- EBITDA – Earnings Before Interest, Taxes, Depreciations and Amortization
- EBIT – Earnings Before Interest and Taxes
- EBT – Earnings Before Taxes
- EAT – Earnings After Taxes (Wagner 2009, 164)

The Income statement, however, does not take into consideration the movement or flow of income and expenses. As it shows various revenues, costs or profits the statement does not take into consideration real profit (in terms of cash) or loss. Based on that, there is an incompatibility between costs and expenses, revenues and income, profits and cash. (Knápková, Pavelková, Remeš and Šteker 2017, 40-41)

Income statement for XYZ business for the period ending 31st of December 2010		
	$	$
INCOME		94,600
Services rendered	94,600	
EXPENSES		(60,366)
Salaries	25,000	
Telephone & internet	6,500	
Water & electricity	16,000	
Property rates and taxes	1,000	
Insurance	7,300	
Advertising costs	1,000	
Fuel	2,500	
Stationery	412	
Bank charges / interest paid	654	
Tax expense	3,414	
NET PROFIT		30,820

Figure 2 An Income statement example (accounting-basics-for-students.com)
(Accounting Basics for Students, n.d.)

2.3 Cash Flow statement

The Cash Flow statement is a statement that shows the values of bank accounts, commercial papers, Treasury bills, marketable securities, and short-term government bonds with a validity of three months or less. (Murphy 2019)

The statement explains changes in cash as of the particular moment it is created. Based on that, the Cash Flow statement is important in financial analysis and helps to maintain the company's proper liquidity. (Knápková, Pavelková, Remeš and Šteker 2017, 52)

In addition, the CF statement can be used in order to detect payment difficulties in the company and to evaluate the internal financial situation. (Růčková 2019, 35-36)

When compiling a Cash Flow statement, there are two different methods: the first one is called the **direct method**, the second one is the **indirect method**.

2.3.1 Direct method

The major advantage of this method is that it discloses takings and payments. When establishing cash flow using the direct method, we use items affecting the flow of cash, which include:

- Cash obtained from customers
- Cash paid to employees and suppliers
- Interests and dividends received
- Interests paid
- Income tax paid

(AccountingTools 2019)

2.3.2 Indirect method

The advantage of the indirect method is that it is easy to prepare through the chart of accounts. The chart of accounts includes both balance sheet accounts and income statement accounts, therefore it contains information on cash, liabilities, shareholder's equity, accounts for revenues and expenses. (AccountingTools 2018)

This method incorporates the adjustment of net income together with changes in values of balance sheet, which results in the final amount of cash acquired from operating activities.

Three major classifications are required in order to use the indirect cash flow method: (Scholleová 2017, 27-29)

- **Cash flows from operating activities**, which can be calculated by the following equation:

$$EBIT + Depreciation = Cash\ from\ operating\ activities$$

(AccountingTools 2017)

- **Cash flows from investing activities**, which include investments in or sales of fixed assets. The following values have an either positive (+) or negative (-) effect on cash flow: (Scholleová 2017 27-29)
  - Purchase of fixed assets (-)
  - Purchase of investment instruments, such as stocks and bonds (-)
  - Sale of fixed assets (+)
  - Sale of investment instruments, such as stocks and bonds (+)
  - Lending money (-)
  - Loans (+)
  - Proceeds of insurance settlements related to damaged fixed assets (+)

(AccountingTools 2018)

- **Cash flows from financing activities**, which is a very important one as it shows more significant offsets in either positive (+) or negative (-) effect on cash flow. It consists of the following values:
  - Sale of stock (+)
  - Purchase of stock (-)
  - Issuance of debt (+)
  - Repay of debt (-)
  - Repaying dividends (-)
  - Donor contributions limited for long-term use (+) (Scholleová 2017, 27-29)

Cash flow statement for XYZ business for the year ended 31st of December 2010	
	$
CASH FLOW FROM OPERATING ACTIVITIES	
Cash receipts from customers	83,000
Cash paid to suppliers and employees	(56,000)
Cash generated from operations	27,000
Dividends received *	250
Interest received	500
Interest paid	(500)
Tax paid	(2,450)
Net cash flow from operating activities	24,800
CASH FLOW FROM INVESTING ACTIVITIES	
Additions to equipment	(2,500)
Replacement of equipment	(7,000)
Proceeds** from sale of equipment	500
Net cash flow from investing activities	(9,000)
CASH FLOW FROM FINANCING ACTIVITIES	
Proceeds from capital contributed	3,400
Proceeds from loan	16,000
Payment of loan	(5,400)
Net cash flow from financing activities	13,000
NET INCREASE/DECREASE IN CASH	28,800
Cash at the beginning of the period	2,430
Cash at the end of the period	31,230

Figure 3 A Cash flow statement example (accounting-basics-for-students.com) (Accounting Basics for Students, n.d.)

2.4 Statement of Shareholders' equity

The statement shows changes in owner‘s equity and the company’s wealth over a certain period of time. The statement is useful in analyzing financial health as it contains information on changes of retained earnings and the net income (in the form of dividends) distributed to stockholders. It represents a movement in reserves by: (Kenton 2018)

- Changes caused by transactions made by owners, which may include deposits or withdrawals of capital.
- Changes, which are caused by other various operations such as movements of funds.

Accounting regulations require the company to analyze and release the information on changes in equity. In addition, it is necessary to clarify and explain the changes in each entry. The statement might be useful for external users who are interested in the performance of the company as it may show them some financial processes, which are not apparent immediately.

However, the statement does not demonstrate major changes in the values used in the financial analysis as a whole so its final effect on the financial analysis as a whole is negligible, because Shareholders ‘ equity is part of the balance sheet.

(Knápková, Pavelková, Remeš and Šteker 2017, 62)

2.5 The notes to Financial statement

Another partially useful information can be obtained in notes to financial statement. It contains additional information (such as layout, content, methods etc.) to annual accounts.

The statement might contain following values:

- Information on offsets and accounting methods used
- What values the receivables and liabilities are backed up by
- The total amount of revenues and expenses
- Average number of employees

(Knápková, Pavelková, Remeš and Šteker 2017, 63)

The notes to financial statement are not regulated by any law in the Czech Republic, however since 2016 minor regulations of the structure have been introduced. The information on values from the balance sheet and the income statement are now expected to be in the same order in which they were shown in the balance sheet and the income statement.

There are two ways of making up the notes to financial statement, which are specific for each company distinguished by its size:

- The short form – which is used by micro and small accounting entities (companies and businesses), which are not obliged having the financial statement verified by the auditor, as classified by the law.
- The full scale form – which includes all types of accounting entities (micro, small, medium and large), which are obliged by the law to release the notes to financial statement.

To sum up, all companies or businesses in the Czech Republic are obliged by law to publish the notes to financial statement. (Levová 2017)

3 INDICATORS OF FINANCIAL ANALYSIS

The values used in horizontal and vertical analyses are obtained from the financial statements. We obtain a general overview of the structure of property, financial performance and a basis for financial decision-making and financial management. (Máče 2005, 23)

3.1 Horizontal and Vertical analysis of Assets and Liabilities

The following indicators serve primarily for the studying of expected trends development. We use the **horizontal analysis** in order to compare each value in time, while in the **vertical analysis** we compare a selected value, marked as 100 %, to other individual values – for instance if we analyze the Balance sheet, we select some values and compare them with the main value like assets or liabilities, which in this case represent the 100 %. (Knápková, Pavelková, Remeš and Šteker 2017, 71)

Horizontal analysis

The horizontal analysis is used to determine changes of values in the balance sheet between specified years. This is done either by percentage change or by a concrete number in absolute terms. The equation is as follows:

$$HA = \frac{V(t) - V(t-1)}{V(t-1)}$$

Where:

V – stands for specific value in balance sheet or income statement

t – stands for current year

(t - 1) – means previous year

Vertical analysis

Vertical analysis is for comparing a selected entry from financial statements to a selected quantity. The result of the analysis is a proportion of the entries in relation to the quantity.

$$VA = \frac{V}{\Sigma V}$$

Where:

V – stands for specific value

ΣV – stands for summary indicator, a quantity
(Kislingerová 2008, 9-13)

3.2 Analysis of Ratio indicators

The ratio analysis is a quantitative method of obtaining information, part of the fundamental analysis. It compares current and previous operational results. It examines liquidity, operational efficiency, solvency and profitability through data obtained from the financial statements. The analysis examines the performance and financial health of the company. (Kenton 2019)

3.2.1 Liquidity ratio

The term liquidity in economics represents a feature of a given value to quickly change into cash without losing most of its value. Insufficient levels of liquidity in a company lead to the inability to effectively use its profitable opportunities in a given market. In addition, the company might not be able to repay its liabilities, which lead to insolvency and later even to bankruptcy. From such perspective, there is a close link between liquidity and solvency. In other words: Being solvent means being liquid. (Růčková 2019, 57-60)
We distinguish three ratios:
Current ratio
This ratio is the most common one to test the company's ability to pay its short-term liabilities with short-term assets. It shows how well or how many times short-term payables are covered by current assets. (Máče 2005, 34-35)

$$Current\ ratio = \frac{Current\ assets}{Current\ liabilities}$$

The recommended value is from 1.5 to 2.5 (Knápková, Pavelková, Remeš and Šteker 2017, 93-95)
If the value is below one it means the company has some liquidity issues leading to problems with repaying its debts. (Morningstar, n.d.)
If the ratio equals 1, it means the current assets should be able to cover the obligations in the near future. If the company has exceeding amounts of reserves, receivables and a low amount of cash it might indicate the company has trouble being solvent. (Máče 2005, 34-35)

Quick ratio/Acid Test ratio

The quick ratio is a stricter method of analyzing the company's liquidity performance. The point is to eliminate less liquid values like inventory and prepaid expenses, which are generally less prone to turn into cash. (Máče 2005, 34-35)

$$Quick\ ratio = \frac{(Current\ assets - inventory - prepaid\ expenses)}{Current\ liabilities}$$

or

$$Quick\ ratio = \frac{(Cash + Accounts\ receivable + Marketable\ securities)}{Current\ liabilities}$$

It is generally recommended for the value to oscillate between 1 and 1.5. (Knápková, Pavelková, Remeš and Šteker 2017, 93-95)

If the value of the quick ratio reaches 1 or higher, it is better for the company as it will have fewer problems repaying its debts in the near future. (Morningstar, n.d.)

Although having the value high is a good sign for creditors, it also points at ineffective use of resources in the company, which therefore negatively influences total profitability (Růčková 2019, 57-60)

On the other hand, having the quick ratio below 1 becomes quite dangerous as the company starts relying on repaying its liabilities by selling its inventory. (Knápková, Pavelková, Remeš and Šteker 2017, 93-95)

Cash position ratio

This measures the company's ability to immediately repay its short-term liabilities. It measures the most liquid values only, which are easily convertible to cash. (Máče 2005, 34-35)

$$Cash\ position\ ratio = \frac{(Cash\ +\ Short\ Term\ Securities\ or\ Marketable\ Securities)}{Current\ liabilities}$$

The recommended values vary, however values from 0.2 to 0.5 are considered to be optimal. Higher values might indicate problems with the effectivity of using financial assets. (Knápková, Pavelková, Remeš and Šteker 2017, 93-95)

3.2.2 Profitability ratio

This ratio measures the company's ability to achieve profit by utilization of invested assets. To measure the ratio, it is necessary to analyze two basic accounting statements – the balance sheet and the profit and loss statement – which is considered to be of higher importance especially when measuring profits. Furthermore, the profitability ratio is also useful in the evaluation of the total efficiency in the particular business. From such perspective it is obvious that the most interested people in the ratio are going to be mostly stockholders and investors. The ratio is generally represented as a ratio between profit and invested assets. (Růčková 2019, 60-65)

Return on Assets

The ROA indicator compares the company's total earnings to its total assets over a specified period of time. The result is how much value (in cash) was brought by the invested capital.

$$ROA = \frac{EBIT}{Total\ assets}$$

The higher the number, the better as the company earns more with less investment. (Máče 2005, 34)

Return on Equity

Stockholders are interested in values of ROE indicator as it shows them the rate of return of their invested assets.

$$ROE = \frac{EAT}{Total\ Equity}$$

(Máče 2005, 34)

Return on Capital Employed

The ROCE indicator measures how effectively a company uses its capital to turn it into profit.

$$ROCE = \frac{EBIT}{Capital\ Employed}$$

(Kenton 2019)

The capital employed is a combination of equity and other sources. Instead of using EBIT, it is possible to use cash flows from operating activities. The advantage of such method is that the result is not affected by depreciations. (Knápková, Pavelková, Remeš and Šteker 2017, 100-105)

Return on Sales

The ROS indicator measures proportion of profit on revenues, which is useful in the evaluation of a business. EBIT is used especially if it is necessary to eliminate offsets caused by different capital structures. It is than recommended to compare the results to those of competition. (Knápková, Pavelková, Remeš and Šteker 2017, 100-105)

$$ROS = \frac{EBIT}{Revenues}$$

The results tell the management how much of EBIT was acquired from 1 unit of currency in revenues. (Máče 2005, 35)

3.2.3 Solvency ratio

To back its assets, the company uses its liabilities - debts in other words. This happens especially in larger companies, because using own capital only reduces the effectivity of invested total capital. On the other hand, if the company uses loan capital only, it will significantly impede gaining more loan capital in the future. (Růčková 2019, 67-69)

Debt ratio

This shows, as a percentage, the coverage of total assets by total liabilities. (Máče 2005, 37)

$$Debt\ ratio = \frac{Total\ liabilities}{Total\ assets}$$

An optimum value is mostly recommended to be in between 30 % and 60 %, which may vary depending on the type of business. (Knápková, Pavelková, Remeš and Šteker 2017, 88-90)

Equity ratio

The ratio shows how much leverage the company uses, which is calculated by comparing total assets to total equity.

$$Equity\ ratio = \frac{Total\ equity}{Total\ assets}$$

When the value is low, it means there was a lot of debt used to cover the assets. It may also signal the company has problems repaying its debts in time. (AccountingTools 2018)

If the value reaches 1, the company prefers to cover its short-term assets with equity, which means it prioritizes financial stability over profitability. (Knápková, Pavelková, Remeš and Šteker 2017, 88-90)

Debt to Equity ratio

An additional indicator to the Debt ratio, it shows the proportion of total equity to total liabilities. (Máče 2005, 37)

$$Debt\ to\ Equity\ ratio = \frac{Total\ liabilities}{Total\ equity}$$

The indicator possesses a great importance for a bank. The bank decides whether to give out a loan to the company or not, which in turn shows the potential risk for creditors. (Knápková, Pavelková, Remeš and Šteker 2017, 88-90)

3.2.4 Efficiency ratio

We use the Efficiency ratio to determine how effectively the company manages its assets and how is it related to profit and liquidity. The following ratios show how much turnover there is in each form of sources or assets and the length of turnover in time. (Růčková 2019, 70)

If the company has more assets than necessary, it may have problems with expenses exceeding appropriate limit. If the company has, on the other hand, fewer assets, it may lose some potential profits. (Máče 2005, 35-36)

Total assets turnover ratio

The following ratio is closely related to those of measuring solvency. It measures the utilization of assets in a company. The higher the ratio, the more efficient a company is. (Máče 2005, 35-36)

$$Asset\ turnover\ ratio = \frac{Net\ sales}{Total\ Assets}$$

Inventory turnover ratio

The ratio shows how long the current assets are in the form of inventory. Usually the shorter the turnover ratio in days, the better.

$$Inventory\ turnover\ ratio = \frac{Average\ Inventory}{Cost\ of\ goods\ sold} \times 360$$

It represents an average time in days between goods bought and the sale of a specific product. It is recommended to decrease the ratio in the oncoming periods. (Růčková 2019, 70)

Accounts receivable turnover ratio

It is a ratio of Average accounts receivable to the cost of goods sold, which provides an idea of how long it takes in days to repay the receivables. (Růčková 2019, 70)

$$\text{Accounts receivable turnover ratio} = \frac{Average\ accounts\ receivable}{Cost\ of\ goods\ sold} \times 360$$

The ratio represents the time in days from the day the invoice was made. The recommended value is as that of the invoice, because for each product an invoice is made out. (Máče 2005, 35-36)

3.3 Summary indicators of financial health

3.3.1 Altman Z-score

The Altman Z-score measures the likelihood of a company's bankruptcy. It is based on five ratios: profitability, liquidity, leverage, activity and solvency in order to predict if the company is in danger of going bankrupt.

$$Z - Score = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$$

(Hayes 2019)

The letters in the equation stand for:

A = working capital / total assets

B = retained earnings / total assets

C = EBIT / total assets

D = equity / total liabilities

E = sales / total assets

(AccountingTools 2018)

If the value of the Z-score reaches 2.9 or higher, it means the company is quite safe from bankruptcy. When the score is between 2.9 and 1.8, the company should be aware of some potential problems. The result of 1.8 or below means there is a high risk for the company going into bankruptcy.

One of the major advantages of such ratio is that it is better when compared to a single ratio, because it already contains many values like assets and profits. (AccountingTools 2018)

3.3.2 Indicator IN (CZ)

The indicator was established especially for the Czech economic environment. The equation is composed of 24 various mathematical and statistical models, which were made up of financial analyses of more than a 1,000 companies and their performances. (Vochozka 2011, 96)

$$IN05 = 0.13 \times \frac{A}{CZ} + 0.04 \times \frac{EBIT}{Ú} + 3.97 \times \frac{EBIT}{A} + 0.21 \times \frac{VÝN}{A} + 0.09 \times \frac{OA}{KZ + KBÚ}$$

Where each letter stands for:

A – Total assets

OA – Current assets

EBIT – Earnings before interest and taxes

VÝN – Revenue

CZ – Total Equity

KZ – Short-term payables

Ú – Interest expenses

KBÚ – Short-term bank loans and financial accommodations

If the indicator equals 1.6 or higher the company is likely to make a profit. If the value oscillates between 1.6 and 0.9, the company is in a so-called grey zone. Value below 0.9 means the company's value is low. (Růčková 2019, 138-139)

4 SWOT ANALYSIS

The purpose of the analysis is to summarize previous analyses or forecasts, which gives the owners a general idea of how a company performs, which is useful in strategical planning for the future. (Cimbálníková, Bilíková and Taraba 2013, 63-67)

It is an analytical type of analysis which can be created by a company, or it can even be also applied to several individual projects for the future. (Shewan 2018)

The analysis can be created upon a part of other analyses, however, it is also possible to use it separately as a stand-alone method. (Blažková 2007)

4.1 Strengths, Weaknesses, Opportunities and Threats

SWOT is an acronym for the first letters of the following words: Strengths, Weaknesses, Opportunities and Threats, therefore the analysis examines 4 major circumstances of the company, its strengths, weaknesses, opportunities and threats on the market.

SWOT Analysis example	
Strengths	**Weaknesses**
• Strong and established brand • The brand is well-known among customers • Price advantage • Access to natural resources • Strong level of research and development	• Lack of marketing skills • Inappropriate company placement • Negative reputation among customers • Insufficient access to distribution channels • High costs
Opportunities	**Threats**
• New technologies appear in the field • Unfulfilled needs of customers • Removal of international barriers • Development of new markets • Acquisitions	• Competition • Competition with lower costs or better product • New regulations introduced • Changes in customer ‘s needs • Trade regulations introduced

Table 1 SWOT Analysis example

The chart above represents a possible structure of the SWOT analysis and some possible entries in each quadrant for a specific company.

Strengths and opportunities are also part of internal factors, which influence a company, while weaknesses and threats are part of external factors. (Blažková 2007)

Strengths

Strengths in the SWOT analysis are categorized as internal and positive factors for a company, which are considered to gain the company superiority against its competitors. (Cimbálníková, Bilíková and Taraba 2013, 63-67)

It also shows each company's advantages on the market, what the company is really good at. It can be used as a basis for establishing competitive advantage strategy, abilities and the overall potential. (Blažková 2007)

Weaknesses

They are considered to be internal factors, which are seen as negative because they might mean the company performs poorly when compared to its competition, either due to disadvantages in the market or due to some vulnerabilities. (Cimbálníková, Bilíková and Taraba 2013, 63-67)

Basically, weaknesses are a direct opposite to strengths, which means a lack of strength in a field may lead to weakness. This may also lead to lower productivity of the company. (Blažková 2007)

Opportunities

They represent either current or future possible conditions in the market. Opportunities are therefore considered to be external factors in the analysis. They analyze the possibilities such as new technologies, new markets or potential growth of demand. (Cimbálníková, Bilíková and Taraba 2013, 63-67)

The analysis of opportunities is useful as a proper detection can give the company an advantage over its competitors. It may also include realization of specific goals or improving the effectivity of implementing resources. (Blažková 2007)

Threats

Threats are another external factor for a company. They represent current or possible future dangers. Some of the possible factors are an economic recession, restrictions or regulations. (Cimbálníková, Bilíková and Taraba 2013, 63-67)

Threats may pose problems in the market for the company to effectively operate. It may even signal a potential failure. The company's main task is to get rid of threats as much as possible, avoid them or prepare for them. (Blažková 2007)

4.2 Strategy formulation

When the factors are identified it is time to create a strategic plan for the future by the organization. Based on the strengths, weaknesses - as mentioned above and the environment, we differentiate the following strategies:

S – O strategy

It is a so-called offensive strategy by which the company tries to effectively use strengths and opportunities.

W – O strategy

Such strategy is used in order to minimalize internal factors weakening the company, which may include strengthening the position on the market or strategic partnership.

S – T strategy

This strategy is used to minimalize the potential dangers of threats by utilization of strengths. This can be done through strategic partnership as well.

W – T strategy

It is used to reduce the impact of threats on weaknesses of the company by, for instance, eliminating weaknesses in the company.

(Cimbálníková, Bilíková and Taraba 2013, 63-67)

5 SUMMARY

The main purpose of financial analysis is to analyze the financial situation in a company.

There are many users of financial statements, such as the owners or top company management team (internal users), but investors, trade partners, banks as well as governments or the general public (external users).

The most essential information are found in **The Financial statements** (show a general overview of the financial situation in a company).

- **The Balance sheet** shows the company's assets and liabilities as of the moment it is created. It provides its users with information about the current situation in the company.
- **The Income statement** or also called the Profit and Loss statement tells us what the earnings and profitability of a business are or the amount of a loss in a company.
- **The Cash Flow statement** explains changes in cash as of the particular moment it is created. Based on that, the Cash Flow statement is important in financial analysis and helps to maintain the company's proper liquidity.

Indicators of financial analysis the values are obtained from the financial statements. The users obtain a general overview of the structure of property, financial performance and a basis for financial decision-making and financial management.

- **Horizontal and Vertical analysis of Assets and Liabilities**, which serve primarily for the studying of expected trends development.
- **The ratio analysis** is a quantitative method of obtaining information. It examines liquidity, operational efficiency, solvency and profitability.
- **Summary indicators of financial health**

SWOT analysis

- The purpose of the analysis is to summarize previous analyses or forecasts, which gives the owners a general idea of how a company performs, which is useful in strategical planning for the future.

II. ANALYSIS

6 INTRODUCTION OF THE NOKIA CORPORATION

Nokia Corporation is a Finnish company operating in the field of network communications. Its main current rivals are Swedish Ericsson, Chinese Huawei and American Cisco. In the past, Nokia was also very famous for its mobile division, it was a leader in mobile phone and smartphone market. Nokia also contributed to Finland's GDP. After a serious financial crisis in the company in 2010, Nokia and its mobile division was completely sold to Microsoft in 2014. At the moment, Nokia has two subsidiaries, Nokia Technologies - which focuses on research and development and Nokia Networks – which focuses on developing and maintaining network infrastructure. The company does not produce its legendary cell phones called Nokia. Foxconn is now producing such devices and a Finnish company called HMD – a company established by Nokia's former employees.

6.1 Quick overview of the current economic situation in the company:

- Share capital: 246 million EURO (2018)
- Total equity: 15.371 billion EURO (2018)
- Revenue/Net sales: 22.563 billion EURO (2018)
- Operating profit/loss: - 59 million EURO (2018)
- Total assets: 39.517 billion EURO (2018)
- Loss for the year: - 335 million EURO (2018)
- Number of employees: 102,761 (2018)

Subsidiaries: Alcatel-Lucent, Nokia Bell Labs (innovation and research division), Nokia Networks and Nokia Technologies. (Nokia, n.d.)

6.2 History of the company

Nokia was established in 1865 by Frederik Idestam in a city called Nokia in Finland. The company started as a paper mill. It was successful, so the company diversified and started producing cables, telegraph cables and telephone cables. Later Nokia also produced tires, raincoats, toys and rubber bands. In 1966, Nokia entered the electrical engineering market. (Barney 2000)

In 1982, Nokia opened the first digital telephone central in Finland and introduced the first telephone designed for using in a car. The development of GSM networks enabled the use of a broader spectrum of radio frequencies around the world and also improved the quality of calls over the mobile network. In 1991, the first call over GSM network built by Nokia took place. However, in the early 1990s the GSM networks covered mainly urban areas. In

1998 Nokia became the world leader in making mobile phones and later, in 2007, cooperation between Nokia and Siemens started. (Nokia, n.d.)

The majority of the problems can be traced right to the year of 2007 when Nokia had a massive product recalls because of faulty batteries in their devices. (Monaghan 2013)

In 2007 Apple also released its brand new smartphone iPhone and later the operating system for smartphones Android was introduced. This was one of the main causes of Nokia‘s financial problems. The crucial thing that Nokia lacked most was probably some kind of practical marketing. The company always excelled at making, in terms of design and quality, superior new phones and making phones as fashion accessories. Nokia engineers were true experts at creating physical devices, but they were not so successful in the area of programming applications, writing programs, designing operating systems and other software. This difference was crucial when compared to Apple, because the philosophy in Apple was that software quality and intuitiveness is equally important to hardware and build quality. (Surowiecki 2013)

Speaking of the hardware the iPhone smartphone was significantly different from those on the market at the time. It featured greater display without physical keyboard, there was only one button in the front screen and yet the phone still remained in ergonomic and small size. It was supposed for the phone to fail and the competition was not afraid of Apple at all. It was however, a big mistake for all phone manufacturers as Apple was slowly pathing the way of smartphone development for the next years. (Silver 2018)

Another major problem was that Nokia was too confident in its brand hegemony, which can be exemplified in the statement of Anssi Vanjoki, Nokia‘s chief strategist, from 30 November 2009 commenting on the iPhone: “The development of mobile phones will be similar to PCs. Even with the Mac, Apple attracted much attention at first, but they have still remained a niche manufacturer. That will be in mobile phones as well.” (Diaz 2009)

In the next years Nokia is first experiencing a downfall in sales by 30 % and smartphone sales also declined by 3.1 %, then the company cut 1,700 jobs worldwide and the company admits it reacted to the Apple threat too late. Nokia tries to fight back, but in 2010 the competition is even more fierce as more and more Android and Apple devices are being sold. This leads to another 1,700 jobs being cut. (Monaghan 2013)

In 2011, Stephen Elop becomes CEO of Nokia and cooperation between Nokia and Microsoft was announced. This year Samsung and Apple are also overtaking Nokia in smartphone sales. In 2012, the company moves smartphone manufacturing to Asia and closes its last factory in Finland. Two years later in 2014, most of Nokia‘s products and services were bought by and transferred to Microsoft. The upcoming financial crisis in the company resulted in selling its entire mobile division to Microsoft in 2014. (Nokia, n.d.)

Therefore, Nokia released some unsuccessful devices with its unintuitive and sometimes even unstable operating system, which after a few years resulted in an outflow of customers to other companies. The Nokia Company was expected to persist in the role of the leader in the market of mobile phones, but time together with unstoppable technological development and behavior of customers showed that companies today are not as resilient as they were in the past, and that nowadays everything depends on the innovations each company is able to offer its customers. (Surowiecki 2013)

Despite the fact that Nokia has lost its smartphone division, the company is still a very important developer and commercial supplier of 5G networks, cloud services and Internet of Things. (Nokia, n.d.)

However, in 2016 the Nokia Corporation acquired the French smartphone and cell phone maker Alcatel-Lucent for 16 billion Euro. At the moment, it is considered to be a great strategic move, because it helped Nokia to get to the second place on the telecommunication market, behind Swedish Ericsson. (Sedlák 2015)

Alcatel smartphones are produced by a Chinese company called TCL communications, which will license the name Alcatel for Nokia Corporation up to year 2024. (Novák 2017)

6.3 HMD Global

In the late 2016, former Nokia employees announced that they would like to sell smartphones again. The brand Nokia was bought by former Nokia employees’ company. The Company is called HMD Global Oy, registered in Finland, and it was originally lead by one of the best managers in Nokia - Arto Nummela. (ВЕСТИ 2016)

HMD was set up in Espoo in Finland in 2016 and aims to resurrect the Nokia brand and is led by former Nokia’s staff, such as CEO Florian Seiche who was responsible sales and marketing department of the company in Europe during Nokia’s cooperation with Microsoft. (Arici 2018)

The company will produce new Nokia phones together with Foxconn, an iPhone manufacturer from Taiwan. (Hern 2016)

In the early 2017 HMD Global announced it would release at least three devices based on Android operating system, carrying the famous name Nokia. (ВЕСТИ 2016)

The brand name is also being licensed by the original Finnish Nokia (Nokia Corporation), which also gets some money from the sales. (Novák 2017)

6.4 Summary

To sum up, it is worth mentioning that Nokia Corporation does not produce its legendary smartphones called Nokia anymore. As mentioned before, the division and the brand was bought by Microsoft Corporation in 2014 after years of sales and financial crisis in the company. Two years later Nokia Corporation acquired French Alcatel-Lucent in the late 2016.

However, the brand Nokia was bought back from Microsoft to Finland in 2016 by the company called HMD Global Oy, which was established by Nokia‘s former employees, who were dismissed during the crisis in the company.

Therefore, the Nokia Corporation sells smartphones called Alcatel, which are being produced by a Chinese company called TCL Communications. While HMD Global sells smartphones under the brand Nokia, which is licensed by the Nokia Corporation and produced by a Taiwanese company called Foxconn.

7 HORIZONTAL AND VERTICAL ANALYSIS OF ASSETS, LIABILITIES AND INCOME STATEMENT

The following part is focused on the analysis of the Balance sheet (more accurately the assets and liabilities) and the Income statement. The values are obtained from the annual report of the Nokia Corporation. Please note that percentage values for 2015 in horizontal analysis are calculated from the year 2014, which is not mentioned in the chart. Only percentage changes in each entry of the statement are shown.

7.1 Vertical analysis of assets

Vertical analysis of assets	2018	2017	2016	2015
Total assets	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**
Total non-current assets	**53.76 %**	**51.58 %**	**53.86 %**	**24.38 %**
Intangible assets	22.28 %	22.47 %	24.41 %	2.68 %
Property, plant and equipment	4.53 %	4.52 %	4.41 %	3.32 %
Non-current financial investments	1.75 %	1.99 %	2.32 %	4.80 %
Total current assets	**46.22 %**	**48.36 %**	**46.05 %**	**75.62 %**
Inventories	8.02 %	6.45 %	5.58 %	4.85 %
Trade receivables	12.29 %	16.77 %	15.53 %	18.70 %
Prepaid expenses and accrued income	2.59 %	3.07 %	2.89 %	3.58 %
Cash and cash equivalents	15.84 %	17.96 %	16.70 %	33.43 %

Table 2 Vertical analysis of assets

From the chart it is clear that most assets in the Nokia Corporation are in a form non-current assets, which is around half each year with the exception of 2015. Such significant difference is due to the fact that the Nokia Corporation acquired Alcatel-Lucent in 2016 which affected values in the whole Balance sheet.

A similar situation happened with intangible assets (being part of non-current assets), of which they held approximately from 22 % to 24 %. However, there is only 3 % of intangible assets making up non-current assets in 2015.

When it comes to property, plant and equipment we can observe only minor percentage growth since 2015, but decrease in non-current financial investments from 2015 to 2016, which in the next years remained consistent.

7.2 Vertical analysis of liabilities

Vertical analysis of liabilities	2018	2017	2016	2015
Total shareholder 's equity and liabilities	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**
Total equity	**38.90 %**	**39.53 %**	**46.71 %**	**50.29 %**
Share capital	0.62 %	0.60 %	0.55 %	1.18 %
Reserve for invested non-restricted equity	39.49 %	38.07 %	35.03 %	18.25 %
Retained earnings	-2.69 %	2.80 %	7.99 %	30.01 %
Total liabilities	**61.10 %**	**60.47 %**	**53.29 %**	**49.71 %**
Long-term interest bearing liabilities	7.16 %	8.43 %	8.14 %	9.67 %
Short-term interest bearing liabilities	2.52 %	0.75 %	0.82 %	0.24 %
Accrued expenses, deferred revenue and other liabilities	9.97 %	16.25 %	14.28 %	16.22 %

Table 3 Vertical analysis of liabilities

In 2015 the company exemplary manages to cover its liabilities to total equity in a ratio of 1:1, which is a good sign for creditors, however it decreases the leverage. Since 2016, the company increased the amount of liabilities, which increased the effect of leverage. The values are still, according to most sources, appropriate and safe.

The Total equity makes around 50 % from the whole Total shareholder‘s equity and Liabilities in 2015 and 2016, but in 2017 and 2018 it decreased by 10 % down to approximately 40 % (39 % in 2018).

It is also possible to observe major increase in Reserve for invested non-restricted equity since 2015 from 18 % up to 39 % in 2018. The most significant “jump” is also visible between 2015 and 2016.

Another major change occurred in Retained earnings. In 2015 the value held around 30 % of the Total Shareholder‘s equity, however in the upcoming years the values dropped down up to – 3 %. The most significant change appeared between 2015 and 2016, where the value fell from 30 % down to 8 %.

The Share capital remains perfectly consistent in all years; the value has not changed at all.

7.3 Vertical analysis of income statement

Vertical analysis of income statement	2018	2017	2016	2015
Net sales	**100.00 %**	**100.00 %**	**100.00 %**	**100.00 %**
Cost of sales	62.57 %	60.52 %	63.94 %	55.44 %
Gross profit	**37.43 %**	**39.48 %**	**36.06 %**	**44.56 %**
Research and development expenses	20.48 %	21.24 %	21.14 %	16.56 %
Selling, general and administrative expenses	15.35 %	15.62 %	15.93 %	29.99 %
Other income	1.29 %	1.57 %	0.49 %	1.88 %
Other expenses	3.16 %	4.13 %	4.13 %	2.26 %
Operating loss/profit	**-0.26 %**	**0.07 %**	**-4.65 %**	**13.51 %**
Loss before tax	1.60 %	2.20 %	5.79 %	12.26 %
Income tax expense/benefit	-0.84 %	-4.00 %	1.93 %	-2.75 %
Loss/profit for the year	**-1.48 %**	**-6.30 %**	**-3.92 %**	**19.65 %**

Table 4 Vertical analysis of income statement

As for the values in the income statement, we can observe that around 55 % in 2015 up to 64 % in 2016 from the Net sales is made up by Cost of sales.

Therefore, the Gross profit makes approximately 45 % in 2015 when compared with Net sales. In the next years the value decreases down to 36 % in 2016. Increases in 2017 up to 40 % and later in 2018 decreases again to 37 %.

Another piece of information in the statement is that Nokia Corporation invests approximately from 17 % in 2015 up to 21 % in 2017 in Research and development, which has been consistently around 20 % since 2016.

Selling, general and administrative expenses were around 30 % in 2015. Since 2016, the values dropped insignificantly from 16 % in 2016 and 2015 to 15 % in 2018.

In recent years, the Nokia Corporation experiences low Operating profit. The highest entry is from the year of 2015, making up of 14 % of the net sales. In the next years the values decreased down to a loss of -5 % in 2016, a negligible profit of 0,1 % in 2017 and negligible loss of -0,3 % in 2018 when compared to Net sales.

Nokia Corporation achieved highest profits in 2015 before the acquisition of Alcatel-Lucent. However, since 2016 the company has constantly experienced losses after the acquisition, where the highest lost was -6 % approximately.

7.4 Horizontal analysis of assets

Horizontal analysis of assets	2018	2017	2016	2015
Total assets	**-3.67 %**	**-8.63 %**	**114.57 %**	**-0.65 %**
Total non-current assets	**0.41 %**	**-12.50 %**	**373.97 %**	**-30.48 %**
Intangible assets	-4.49 %	-15.89 %	1857.14 %	-80.78 %
Property, plant and equipment	-3.40 %	-6.46 %	185.04 %	-2.93 %
Non-current financial investments	-15.44 %	-21.54 %	3.59 %	21.26 %
Total current assets	**-7.94 %**	**-4.03 %**	**30.66 %**	**15.30 %**
Inventories	19.73 %	5.59 %	147.14 %	-20.47 %
Trade receivables	-29.42 %	-1.32 %	78.18 %	14.08 %
Prepaid expenses and accrued income	-18.67 %	-2.85 %	73.03 %	-17.96 %
Cash and cash equivalents	-15.04 %	-1.71 %	7.18 %	35.30 %

Table 5 Horizontal analysis of assets

When looking at the most significant changes, it is clear the most important years will be 2015 and 2016, because most values changed between these two years. The reason behind that is the acquisition of Alcatel-Lucent in 2016, which had a tremendous effect on the internal structure of the company.

When it comes to Total assets, there was a minor decrease in the value from 2014 to 2015, but a huge increase in 2016 after the acquisition. Since 2016, Nokia Corporation experienced decrease in Total assets by 9 % in 2017 and 4 % in 2018.

A similar situation happened with Non-current assets, which decreased by 30 % in 2015, but dramatically increased after the acquisition by 374 % in 2016. In 2017, there was a 13 % increase and in 2018 the company managed a standstill.

As part of non-current assets, the intangible assets were on a decrease in 2015 by 81 % when compared to 2014, however in 2016 there was a massive increase in intangible assets by 1857 %, which means that the intangible assets increased roughly 19 times, when compared to 2015, which is a direct effect of the acquisition. Since 2016 there has been a decrease in the values.

Similar to the previous analyses, the plant equipment and property also increased significantly in 2016 by 185 %, but since 2016 there was a decrease.

The non-current financial investments grew by 21 % in 2015, decreased by 4 % in 2016 and kept decreasing by 22 % and 15 % in 2017 and 2018.

7.5 Horizontal analysis of liabilities

Horizontal analysis of liabilities	2018	2017	2016	2015
Total shareholder 's equity and liabilities	**-3.67 %**	**-8.63 %**	**114.57 %**	**-0.65 %**
Total equity	**-5.22 %**	**-22.68 %**	**99.31 %**	**21.40 %**
Share capital	0.00 %	0.00 %	0.00 %	0.00 %
Reserve for invested non-restricted equity	-0.06 %	-0.73 %	311.81 %	23.91 %
Retained earnings	-192.59 %	-68.03 %	-42.86 %	33.31 %
Total liabilities	**-2.66 %**	**3.68 %**	**130.01 %**	**-16.07 %**
Long-term interest bearing liabilities	-18.19 %	-5.47 %	80.77 %	-21.47 %
Short-term interest bearing liabilities	221.68 %	-16.49 %	625.49 %	-56.03 %
Accrued expenses, deferred revenue and other liabilities	-40.89 %	3.96 %	88.87 %	-6.53 %

Table 6 Horizontal analysis of liabilities

The Nokia Corporation experienced massive increase Total shareholder‘s equity and Liabilities in 2016 by 115 %, compared to -1 % decrease in 2015. In the next years the values were decreasing by -9 % in 2017 and by -4 % in 2018.

The Total equity grew in 2015 by 21 % and by 99 % in 2016. Since 2016, there was significant decrease in Total equity by 23 % in 2017 and by 5 % 2018.

Share capital remained unchanged in all years of the analysis.

When analyzing retained earnings, it is possible to observe an increase in the value of 33 % in 2015. Since 2015, all values decreased to negative by -43 % in 2016, -68 % in 2017 and a significant -193 % in 2018.

Total liabilities values decreased by 16 % in 2015, however in 2016 they increased by 130 %, which was caused by the purchase of Alcatel-Lucent, which affected many financial statements. The Total liabilities grew a little bit again in 2017 by approximately 4 %, but decreased in 2018 by -3 %.

Long-term interest bearing liabilities, which are part of Total liabilities, decreased by 22 % in 2015, but increased significantly in 2016 by 81 %. In the next years, they were decreasing by 6 % and 18 %.

Short-term interest bearing liabilities, part of Total liabilities, decreased by 56 % in 2015, but increased massively in 2016 by 626 % in 2016. In 2017, the value dropped down to a decrease of approximately 17 %. However, in 2018 it increased by 222 %.

Accrued expenses, deferred revenue and other liabilities decreased by 7 %, dramatically increased in 2016 by roughly 89 % being a consequence of the acquisition. In 2017, the value increased when compared to 2016 by additional 4 %, but dropped by -41 % in 2018.

7.6 Horizontal analysis of income statement

Horizontal analysis of income statement	2018	2017	2016	2015
Net sales	**-2.52 %**	**-2.09 %**	**88.22 %**	**6.78 %**
Cost of sales	0.78 %	-7.34 %	117.10 %	2.79 %
Gross profit	**-7.58 %**	**7.21 %**	**52.30 %**	**12.21 %**
Research and development expenses	-6.02 %	-1.62 %	140.24 %	9.24 %
Selling, general and administrative expenses	-4.20 %	-4.04 %	112.58 %	13.66 %
Other income	-20.11 %	210.26 %	-50.42 %	100.00 %
Other expenses	-25.45 %	-2.25 %	244.01 %	24.02 %
Operating loss/profit	**-468.75 %**	**-101.45 %**	**-164.82 %**	**20.01 %**
Loss before tax	**-29.41 %**	**-62.75 %**	**-11.10 %**	**54.15 %**
Income tax expense/benefit	-79.61 %	-302.84 %	-232.08 %	-120.13 %
Loss/profit for the year	**-77.02 %**	**57.28 %**	**-137.56 %**	**-29.00 %**

Table 7 Horizontal analysis of income statement

In 2015, Net sales increased when compared to 2014 by approximately 7 %. They continued rising in 2016 by 88 %, which was a result of Nokia Corporation acquiring Alcatel-Lucent in 2016. In the next years the value decreased by 2 % and 3 %.

Similar situation occurred in the entry of Cost of sales, which increased in 2015 by 3 % and rose by 117 % in 2016. There was a decrease in 2017 by roughly -7 % and minor increase in 2018 by 1 %.

Gross profit for the Nokia Corporation was in the black until 2018. In 2015, the Gross profit increased by 12 %, continued to grow in 2016 by 52 %, in 2017 by 7 %, but declined down to -8 % in 2018.

Research and development expenses, which is part of Gross profit, increased by 9 % in 2015 and by 140 % in 2016, however since 2016 the value kept decreasing by 2 % and 6 % in 2017 and 2018.

Operating loss/profit value increased in 2015 by 20 %, however other values in the next years remained in the red. In 2016, Nokia Corporation experienced a decrease of -165 % when compared to 2015. In the next year of 2017, there was a decrease of 101 % and in 2018 even -469 %.

The change in values of Loss/profit for the year were mostly in the red. In 2015, there was a change of -29 % when compared to 2014. In 2016, there was another decrease of -138 %. The 2017 reported an increase of 57 % compared to 2016 and later in 2018 there was a decrease compared to 2017 of -77 %.

8 ANALYSIS OF RATIO INDICATORS

8.1 Liquidity ratio analysis

Liquidity ratios consist of three ratios, which determine the effectiveness of a company to turn its assets into cash. The analysis consist of: Current ratio, Quick/Acid test ratio and Cash position ratio.

Current ratio

Current ratio	2018	2017	2016	2015
	1.29	1.56	1.64	2.48

Table 8 Current ratio

The company managed to hold recommended values for current ratio in 2015, 2016 and 2017, which is a very good sign of turning assets into cash. The value in 2015 was right at the top of the recommended value, which means the company had more cash at its disposal. Such ratio is great for repaying liabilities, but decreases the effectivity of using cash and assets.

On the contrary, in 2018, the value was slightly below the recommended value of 1.5, which was 1.29. Such ratio is not recommended; however, it does not possess any significant risks for the company. It means the company puts more assets into production, which reduces the ability to repay liabilities.

Quick ratio/Acid Test ratio

Quick ratio / Acid test ratio	2018	2017	2016	2015
	0.99	1.25	1.34	2.80

Table 9 Quick ratio/Acid Test ratio

In 2015 the value for quick ratio was really high and out of the recommendations. It means the company performed not effectively in turning assets into cash. In the next years, however, the company managed to fix such issues and performs according to the recommended values of 1 to 1.5.

Cash position ratio

Cash position ratio	2018	2017	2016	2015
	0.51	0.60	0.62	1.10

Table 10 Cash position ratio

Cash position ratio was noticeably higher and exceeded recommended values of 0.3 to 0.5. The value was high especially in 2015. On the other hand, the values decreased to 0.6 in 2016, remaining almost the same in 2017 and reaching the top recommended value in 2018. This means that in 2015 the company had a lot of money at its disposal to cover short-term debts, which is great for the repayment, but t decreases the overall performance of the company using its assets. On the other hand, in the next years the values stabilized near to the recommendations.

8.2 Profitability ratio analysis

Profitability ratio analysis consist of four indicators: ROA, ROE, ROCE and ROS.

ROA

ROA	2018	2017	2016	2015
	-0.15 %	0.04 %	-2.45 %	8.11 %

Table 11 ROA

The highest ROA rate was achieved in 2015, being nearly 8 %, which is a good value for a company operating in a field of telecommunications as well as for companies making consumer electronics. In the next years the value decreased down to -2.45 %. In 2017 there was an increase up to 0 % compared to 2016. However, in 2018 the value was negative again, being -0,15 %. Low values in the indicator were caused by the acquisition of Alcatel-Lucent.

ROE

ROE	2018	2017	2016	2015
	-2.18 %	-8.99 %	-4.42 %	23.45 %

Table 12 ROE

The highest ROE ratio was achieved in 2015, reaching almost 24 %. In the next the values declined. In 2016 the return on equity was around -4 % %, in 2017 approximately -9 % and in 2018 the value increased up, but remained in the red by -2 %.

ROCE

ROCE	2018	2017	2016	2015
	-0.23 %	-0.57 %	-3.40 %	61.30 %

Table 13 ROCE

Since 2015, the return on capital employed ratio is in the red. In 2018, the value for ROCE was -0.23 %, in 2017 – 0.06 %, in 2016 -3.41 %. In 2015 on the other hand, ROCE was 61.3 %. The decrease since 2015 could be probably caused by the acquisition of Alcatel-Lucent in 2016, along with decreasing sales and negative operating profit.

ROS

ROS	2018	2017	2016	2015
	-0.26 %	0.07 %	-0.47 %	13.58 %

Table 14 ROS

The Return on Sales ratio was 13.58 % in 2015. However, since 2015 the values were decreasing by reaching negative -4.66 % in 2016. There was a minor positive value of 0.07 % in 2017. In 2018, the value was in the red again by -0.26 %.

8.3 Solvency ratio analysis

The analysis consist of Debt ratio, Equity ratio and Debt to Equity ratio.

Debt ratio

Debt ratio	2018	2017	2016	2015
	61.10 %	60.47 %	53.29 %	49.70 %

Table 15 Debt ratio

Nokia Corporation had lowest debt ratio in 2015 by 49.7 %. In the next years the debt was increasing, up to 53.29 % in 2016, 60.47 % in 2017 and around 61.1 % in 2018. Such debt ratio is at the top recommended value, which is around 60 %, which may vary depending on the industry and the field a company operates in.

Equity ratio

Equity ratio	2018	2017	2016	2015
	38.89 %	39.53 %	46.71 %	50.29 %

Table 16 Equity ratio

The highest equity ratio the company achieved was in 2015 at 50.29 %. In the next years the values decreased down to 46.71 % in 2016. In 2017 the value dropped down to 39.53 % and later in 2018 the equity ratio was 38.89 %.

Debt to Equity ratio

Debt to Equity ratio	2018	2017	2016	2015
	1.57	1.53	1.14	0.99

Table 17 Debt to Equity ratio

The values for D/E ratio were increasing since 2015. In 2015, the ratio was 0.98, which is very close to the recommended values. In 2016 the value increased to 1,14 which is also close to the recommended proportion. However, in the next the ratio increased up to 1.53 in 2017 and 1.57 in 2018. This proportion of debt to equity can be interpreted as dangerous

8.4 Efficiency ratio analysis

Efficiency ratio analysis consist: of Asset turnover ratio, Inventory turnover ratio and Accounts receivable turnover ratio.

Asset turnover ratio

Asset turnover ratio	2018	2017	2016	2015
	0.57	0.56	0.53	0.60

Table 18 Asset turnover ratio

The Asset turnover ratio shows that the company operated with highest efficiency in 2015, being 59 %. In the next years the value dropped, in 2016 to approximately 53 %, in 2016, however, improved to 56 % and in 2018 again improved a little by 1 % to 57 % approximately.

Inventory turnover ratio

Inventory turnover ratio (in days)	2018	2017	2016	2015
	80.79	68.00	59.52	54.42

Table 19 Inventory turnover ratio

The shortest turnover of inventory was in 2015, being 54 days approximately. In 2016 the value increased up to almost 60 days. In 2017 the turnover ratio was 68 days and in 2018 the number increased again up to 81 days.

Accounts receivable turnover ratio

Accounts receivable turnover ratio (in days)	2018	2017	2016	2015
	123.83	176.81	165.58	202.31

Table 20 Accounts receivable turnover ratio

It took the Nokia Corporation approximately 202 days to turn over its accounts receivable. In 2016 the rate dropped down to approximately 166 days, in 2017 it took almost 177 days and in 2018 it was the shortest of the mentioned, being around 124 days.

9 ANALYSIS OF SUMMARY MEASURES OF FINANCIAL HEALTH

9.1 Altman Z-score analysis

Altman Z-score	2018	2017	2016	2015
	0.94	1.13	1.23	2.39

Table 21 Altman Z-score

Based on the results, the company performed acceptably in 2015, although with some potential risks. However, in the next year the Z-score for the Nokia Corporation decreased to a low level. In 2016, the value was 1.23, in 2017 decreased down to 1.13 and in 2018 to 0.94. Based on the mentioned above, the Nokia Corporation is currently at potential risk of going bankrupt according to the Z-score.

9.2 Indicator IN05 analysis

Index IN05	2018	2017	2016	2015
	0.75	0.86	0.88	1.44

Table 22 Index IN05

Similarly, to the Z-score, the Nokia Corporation is below the recommended value of 1.6 from the perspective of IN05 indicator. The highest value was in 2015 at 1.44, which is close to the recommended value. Most of the time, however, the company remained in a so-called "grey zone". However, in 2018 the value dropped to 0.75, which indicates the value of the company is low. This is caused by the purchase of Alcatel-Lucent, which decreased the performance of the company.

10 SWOT ANALYSIS

When breaking down the Nokia's strengths, weaknesses, threats and opportunities, it is possible to come across many of them. This is caused by the company's difficult situation in recent years:

SWOT Analysis for the Nokia Corporation	
Strengths	**Weaknesses**
• Strong and established brand name • The brand is well-known among customers • Price – wide range from low end to high end devices • Long-lasting experience base • Acquisition of Alcatel-Lucent	• The company lost its mobile phone division and the market share • Slow reaction on the competition • Poor after-sale service • The company entered the smartphone market too late • Slower reaction on industrial changes
Opportunities	**Threats**
• New type of network – 5G • Making High-end Android devices • New markets in developing countries • Embrace Virtual reality • Producing smart wearables	• Aggressive Chinese competition • Samsung, Huawei and Apple dominance on the market • Difficult expansion • Low revenues • Smartphone demand declined

Table 23 SWOT Analysis for the Nokia Corporation

(Pierce 2013), (Haseeb 2016), (PESTLEanalysis Contributor 2014), (faizul 2017)

Strengths:

A major advantage is the Nokia brand name itself, it is a well-recognized name for strong and reliable mobile devices, numerous breakthroughs in the industry of telecommunication. This leads to a fact the company is still well-known all over the world. (Bhasin, n.d.)

The company has also acquired French smartphone and cell phone maker Alcatel-Lucent in 2016, which may help the company to produce smartphones again. (Nokia, n.d.)

In addition to that, the Nokia brand is really famous among customers and general public, so it makes easier for the company to enter new markets. The strong position of the brand is caused either by the past – successful, durable and famous phones, but also by the company developing 5G networks and via HMD Global selling Nokia phones again, which they have shipped 68 million in 2017. (Stipe 2018)

Weaknesses:

First, to note is the fact the company does not possess its previous mobile and smartphone division, and therefore the market share, is what leads to difficult situation for the company at the moment. (Pierce 2013)

Another negative fact is that Nokia was fined for its poor after-sale services, which does not look good in the eyes of its customers. (PTI 2011)

Opportunities:

Nokia and some other companies (including Huawei) are working on 5G networks, which are supposed to replace the current 4G network, which will improve speed and reliability of mobile networks. (Nokia, n.d.)

In 2017, Nokia started a strategic partnership with Xiaomi, which include patent exchange procedures and cooperation in business. This may be beneficial for both companies in the future. (Nokia 2017)

In order to even more strengthen its positon, Nokia could rethink producing smart wearables, such as watches or even embrace virtual reality. Such thing becomes quite popular when compared to competition like Samsung, Apple or Huawei. (Wiggers 2017)

Threats:

Cheap Chinese manufactures pose greater threat to all companies every upcoming year, which is a fact that will not help Nokia as well. Chinese manufacturers such as Lenovo, OnePlus, Oppo, ZTE,or Xiaomi are now completely transforming the smartphone market, starting by a lower sale price of their products, great price to performance ratio and dramatically improving build quality and reliability of their devices every year. In addition, many of such companies have introduced high-end devices, which are currently being more and more popular. (Green, n.d.)

Despite the fact, Chinese smartphones are becoming every year dramatically more popular, it is still Samsung and Apple, who still have the biggest market share of sold devices as of year 2018. (Mourdoukoutas 2018)

It is not expected, that the smartphone market will grow significantly in the future, which threatens HMD Global smartphone sales.

RECOMMENDATIONS

After the analysis was done, it is possible to see some flaws in the company. The first one to mention is the operation loss of 59 million EURO, which is caused partially because of low sales by Alcatel-Lucent division. In order to improve the situation, the company should focus as much as possible on improving the sales of their new, recently bought smartphone division, providing 5G networks for mobile operators and produce virtual reality devices.

The company should maintain its **current ratio**, **quick ratio** and **cash position ratio** as is. Most of the values are appropriate, sometimes even higher, which indicates the company has more funds to cover its liabilities.

ROA, **ROE**, **ROCE** and **ROS** values dropped since 2015, which was caused by the acquisition and low amount of profit and sales of the Alcatel-Lucent division. Most of the indicators were even negative since 2015. It is recommended to increase the indicators by improving sales of the Alcatel-Lucent division and to focus on providing 5G networks for mobile operators.

Debt ratio was mostly in the recommended values. In 2018, there was a minor increase above the recommended value by 1 %, which is close to negligible. However, the debt should not be increasing significantly in the next year.
Both values of the **Z-score** and **IN05** indicators were low, so the company should be aware of some potential financial dangers.

SWOT analysis revealed that there is a huge opportunity for the Nokia Corporation to provide mobile operators with 5G networks, which are currently being discussed as a future of telecommunication. It is also recommended to produce Android smartphones (Alcatel and Nokia) not only as a test platform for the new network, but also for customers. This could be achieved by new markets, which may appear in developing countries.
The company should also consider producing and enlarging smart wearables, virtual reality devices and IoT devices supply, which are becoming more and more popular.

At last, it is recommended to be cautious of the fierce competition from Asia, which pose imminent threat in all fields, which the Nokia Corporation operates in.

CONCLUSION

The purpose of the thesis was to provide a financial analysis of the Nokia Corporation and to evaluate effectiveness of the company. The task was to propose recommendations to improve the current situation in the company based on the results of the analyses.

In the first major chapter, the theoretical part, it was defined what financial analysis is, who are its users and what major sources of information for financial analysis consist of. As the next step, more detailed methods of the selected financial methods (the horizontal and vertical analysis, ratio indicators, summary measures of financial health and SWOT analysis) were defined.

The theoretical part is followed by a practical part of the thesis. In the second chapter, basic information about the Nokia Corporation, including a brief history of the company, its current financial situation, situation on the market and internal organizational structure are mentioned. The chapter continues with the horizontal and vertical analysis, ratio indicators, summary measures of financial health (or bankruptcy models) and SWOT analysis.

The results and the identified state of financial health were evaluated. Recommendations were proposed to the company. Some values do not meet the recommended optimal values and it is suggested to improve them as much as possible.

The data used in the practical part were obtained from annual reports of the Nokia Corporation, available online on the main website (nokia.com). The annual reports contain financial statements (the balance sheet, the income statement, the cash flow statement and much more) of the years 2014 - 2018.

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LIST OF ABBREVIATIONS

CEO	Chief Executive Officer
CF	Cash Flow
EBITDA	Earnings Before Interest Taxes Depreciations and Amortization
EBIT	Earnings Before Interest and Taxes
EBT	Earnings Before Taxes
GDP	Gross Domestic Product
GSM	Global System for Mobile (Communications)
IoT	Internet of Things
Oy	Osakeyhtiö (Finnish name for a limited company)
ROA	Return on Assets
ROCE	Return on Capital Employed
ROE	Return on Equity
ROS	Return on Sales

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Consolidated income statement

For the year ended December 31	Notes	2015 EURm	2014 EURm	2013 EURm
Net sales	2, 5	**12 499**	**11 762**	**11 795**
Cost of sales	6	(7 046)	(6 855)	(7 157)
Gross profit		**5 453**	**4 907**	**4 638**
Research and development expenses	6	(2 126)	(1 948)	(1 970)
Selling, general and administrative expenses	6	(1 652)	(1 453)	(1 483)
Other income	11	236	135	272
Other expenses	11	(223)	(229)	(785)
Operating profit		**1 688**	**1 412**	**672**
Share of results of associated companies and joint ventures	18	29	(12)	4
Financial income and expenses	12	(177)	(401)	(277)
Profit before tax		**1 540**	**999**	**399**
Income tax (expense)/benefit	13	(346)	1 719	(271)
Profit for the year from Continuing operations		**1 194**	**2 718**	**128**
Attributable to:				
Equity holders of the parent		1 192	2 710	273
Non-controlling interests		2	8	(145)
Profit for the year from Continuing operations		**1 194**	**2 718**	**128**
Profit/(loss) for the year from Discontinued operations attributable to:				
Equity holders of the parent		1 274	752	(888)
Non-controlling interests		–	6	21
Profit/(loss) for the year from Discontinued operations	3	**1 274**	**758**	**(867)**
Profit/(loss) for the year attributable to:				
Equity holders of the parent		2 466	3 462	(615)
Non-controlling interests		2	14	(124)
Profit/(loss) for the year		**2 468**	**3 476**	**(739)**

Earnings per share attributable to equity holders of the parent	15	EUR	EUR	EUR
Basic earnings per share				
Continuing operations		0.32	0.73	0.07
Discontinued operations		0.35	0.20	(0.24)
Profit/(loss) for the year		0.67	0.94	(0.17)
Diluted earnings per share				
Continuing operations		0.31	0.67	0.07
Discontinued operations		0.32	0.18	(0.24)
Profit/(loss) for the year		0.63	0.85	(0.17)
Average number of shares		000s shares	000s shares	000s shares
Basic				
Continuing operations		3 670 934	3 698 723	3 712 079
Discontinued operations		3 670 934	3 698 723	3 712 079
Profit/(loss) for the year		3 670 934	3 698 723	3 712 079
Diluted				
Continuing operations		3 949 312	4 131 602	3 733 364
Discontinued operations		3 949 312	4 131 602	3 712 079
Profit/(loss) for the year		3 949 312	4 131 602	3 712 079

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of comprehensive income

For the year ended December 31	Notes	2015 EURm	2014 EURm	2013 EURm
Profit/(loss) for the year		**2 468**	**3 476**	**(739)**
Other comprehensive income				
Items that will not be reclassified to profit or loss:				
Remeasurements on defined benefit plans	8	112	(275)	83
Income tax related to items that will not be reclassified to profit or loss		(28)	96	(3)
Items that may be reclassified subsequently to profit or loss:				
Translation differences	26	(1 054)	820	(496)
Net investment hedges	26	322	(167)	114
Cash flow hedges	27	(5)	(30)	3
Available-for-sale investments	27	113	106	49
Other increase, net		2	40	5
Income tax related to items that may be reclassified subsequently to profit or loss	26, 27	(88)	16	1
Other comprehensive (expense)/income, net of tax		**(626)**	**606**	**(244)**
Total comprehensive income/(expense) for the year		**1 842**	**4 082**	**(983)**
Attributable to:				
Equity holders of the parent		1 837	4 061	(863)
Non-controlling interests		5	21	(120)
Total comprehensive income/(expense) for the year		**1 842**	**4 082**	**(983)**
Attributable to equity holders of the parent:				
Continuing operations		1 513	2 350	55
Discontinued operations		324	1 711	(918)
Total attributable to equity holders of the parent		**1 837**	**4 061**	**(863)**
Attributable to non-controlling interests:				
Continuing operations		5	16	(139)
Discontinued operations		–	5	19
Total attributable to non-controlling interests		**5**	**21**	**(120)**

The notes are an integral part of these consolidated financial statements.

Consolidated statement of financial position

At December 31	Notes	2015 EURm	2014 EURm
ASSETS			
Non-current assets			
Goodwill	10, 16	237	2 563
Other intangible assets	16	323	350
Property, plant and equipment	17	695	716
Investments in associated companies and joint ventures	18	84	51
Available-for-sale investments	19	1 004	828
Deferred tax assets	14	2 634	2 720
Long-term loans receivable	19, 35	49	34
Prepaid pension costs	8	25	30
Other non-current assets		51	47
		5 102	7 339
Current assets			
Inventories	21	1 014	1 275
Accounts receivable, net of allowances for doubtful accounts	19, 22, 35	3 913	3 430
Prepaid expenses and accrued income	23	749	913
Current income tax assets		171	124
Current portion of long-term loans receivable	19, 35	21	1
Other financial assets	19, 20, 35	107	266
Investments at fair value through profit and loss, liquid assets	19, 35	687	418
Available-for-sale investments, liquid assets	19, 35	2 167	2 127
Cash and cash equivalents	19, 35	6 995	5 170
		15 824	13 724
Total assets		**20 926**	**21 063**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Capital and reserves attributable to equity holders of the parent			
Share capital	24	246	246
Share issue premium		380	439
Treasury shares at cost		(718)	(988)
Translation differences	26	292	1 099
Fair value and other reserves	27	204	22
Reserve for invested non-restricted equity		3 820	3 083
Retained earnings		6 279	4 710
		10 503	8 611
Non-controlling interests		21	58
Total equity		**10 524**	**8 669**
Non-current liabilities			
Long-term interest-bearing liabilities	19, 35	2 023	2 576
Deferred tax liabilities	14	61	32
Defined benefit pension liabilities	8	423	530
Deferred revenue and other long-term liabilities	19, 29	1 254	1 667
Provisions	28	250	301
		4 011	5 106
Current liabilities			
Current portion of long-term interest-bearing liabilities	19, 35	1	1
Short-term borrowings	19, 35	50	115
Other financial liabilities	19, 20, 35	114	174
Current income tax liabilities		446	481
Accounts payable	19, 35	1 910	2 313
Accrued expenses, deferred revenue and other liabilities	29	3 395	3 632
Provisions	28	475	572
		6 391	7 288
Total liabilities		**10 402**	**12 394**
Total shareholders' equity and liabilities		**20 926**	**21 063**

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of cash flows

For the year ended December 31	Notes	2015 EURm	2014 EURm	2013 EURm
Cash flow from operating activities				
Profit/(loss) for the year		2 468	3 476	(739)
Adjustments, total	32	(261)	(2 262)	1 913
Change in net working capital	32	(998)	1 153	(945)
Cash from operations		1 209	2 367	229
Interest received		62	45	92
Interest paid		(99)	(336)	(208)
Other financial income and expenses, net (paid)/received		(375)	(165)	345
Income taxes, net paid		(290)	(636)	(386)
Net cash from operating activities		**507**	**1 275**	**72**
Cash flow from investing activities				
Acquisition of businesses, net of acquired cash		(98)	(175)	–
Purchase of current available-for-sale investments, liquid assets		(3 133)	(2 977)	(1 021)
Purchase of investments at fair value through profit and loss, liquid assets		(311)	–	–
Purchase of non-current available-for-sale investments		(88)	(73)	(53)
(Payment of)/proceeds from other long-term loans receivable		(2)	7	(1)
(Payment of)/proceeds from short-term loans receivable		(17)	20	4
Purchases of property, plant and equipment, and intangible assets		(314)	(311)	(407)
Proceeds from/(payment for) disposal of businesses, net of disposed cash[1]		2 586	2 508	(63)
Proceeds from disposal/(purchase) of shares in associated companies		–	7	(8)
Proceeds from maturities and sale of investments, liquid assets		3 074	1 774	586
Proceeds from maturities and sale of investments at fair value through profit and loss, liquid assets		48	–	–
Proceeds from sale of non-current available-for-sale investments		149	62	129
Proceeds from sale of property, plant and equipment and intangible assets		–	44	138
Dividends received		2	–	5
Net cash from/(used in) investing activities		**1 896**	**886**	**(691)**
Cash flow from financing activities				
Purchase of treasury shares		(173)	(427)	–
Purchase of a subsidiary's equity instruments		(52)	(45)	(1 707)
Proceeds from long-term borrowings		232	79	2 291
Repayment of long-term borrowings		(24)	(2 749)	(862)
Repayment of short-term borrowings		(55)	(42)	(128)
Dividends paid and other contributions to shareholders		(512)	(1 392)	(71)
Net cash used in financing activities		**(584)**	**(4 576)**	**(477)**
Foreign exchange adjustment		6	(48)	(223)
Net increase/(decrease) in cash and cash equivalents		**1 825**	**(2 463)**	**(1 319)**
Cash and cash equivalents at beginning of year		5 170	7 633	8 952
Cash and cash equivalents at end of year		**6 995**	**5 170**	**7 633**

(1) In 2014, proceeds from the Sale of the D&S Business are presented net of the amount of principal and accrued interest on the repaid convertible bonds.

The consolidated statement of cash flows combines cash flows from both the Continuing and the Discontinued operations. Refer to Note 3, Disposals treated as Discontinued operations.

The amounts in the consolidated statement of cash flows cannot be directly traced from the statement of financial position without additional information on the acquisitions and disposals of subsidiaries and the net foreign exchange differences arising on consolidation.

The notes are an integral part of these consolidated financial statements.

Consolidated income statement

For the year ended December 31	Notes	2017 EURm	2016[1] EURm	2015[1] EURm
Net sales	4, 7	**23 147**	**23 641**	**12 560**
Cost of sales	8	(14 008)	(15 117)	(6 963)
Gross profit		**9 139**	**8 524**	**5 597**
Research and development expenses	8	(4 916)	(4 997)	(2 080)
Selling, general and administrative expenses	8	(3 615)	(3 767)	(1 772)
Other income	10	363	117	236
Other expenses	8, 10	(955)	(977)	(284)
Operating profit/(loss)		**16**	**(1 100)**	**1 697**
Share of results of associated companies and joint ventures	34	11	18	29
Financial income and expenses	11	(537)	(287)	(186)
(Loss)/profit before tax		**(510)**	**(1 369)**	**1 540**
Income tax (expense)/benefit	12	(927)	457	(346)
(Loss)/profit for the year from Continuing operations		**(1 437)**	**(912)**	**1 194**
(Loss)/profit for the year from Continuing operations attributable to:				
Equity holders of the parent		(1 473)	(751)	1 192
Non-controlling interests		36	(161)	2
(Loss)/profit for the year from Continuing operations		**(1 437)**	**(912)**	**1 194**
(Loss)/profit for the year from Discontinued operations attributable to:				
Equity holders of the parent		(21)	(15)	1 274
Non-controlling interests		–	–	–
(Loss)/profit for the year from Discontinued operations	6	**(21)**	**(15)**	**1 274**
(Loss)/profit for the year attributable to:				
Equity holders of the parent		(1 494)	(766)	2 466
Non-controlling interests		36	(161)	2
(Loss)/profit for the year		**(1 458)**	**(927)**	**2 468**

Earnings per share attributable to equity holders of the parent	13	EUR	EUR	EUR
Basic earnings per share				
Continuing operations		(0.26)	(0.13)	0.32
Discontinued operations		0.00	0.00	0.35
(Loss)/profit for the year		(0.26)	(0.13)	0.67
Diluted earnings per share				
Continuing operations		(0.26)	(0.13)	0.31
Discontinued operations		0.00	0.00	0.32
(Loss)/profit for the year		(0.26)	(0.13)	0.63

Average number of shares	13	000s shares	000s shares	000s shares
Basic		5 651 814	5 732 371	3 670 934
Diluted		5 651 814	5 741 117	3 949 312

(1) In 2017, the Group adopted a more activity-based allocation method which resulted in changes to allocation and presentation principles of certain costs. In addition, it changed the presentation of certain hedging gains and losses. Comparatives for 2016 and 2015 have been recast to reflect these changes.

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of comprehensive income

For the year ended December 31	Notes	2017 EURm	2016 EURm	2015 EURm
(Loss)/profit for the year		**(1 458)**	**(927)**	**2 468**
Other comprehensive income				
Items that will not be reclassified to profit or loss:				
Remeasurements on defined benefit plans		723	613	112
Income tax related to items that will not be reclassified to profit or loss		(58)	(269)	(28)
Items that may be reclassified subsequently to profit or loss:				
Translation differences		(1 819)	251	(1 054)
Net investment hedges		440	(103)	322
Cash flow hedges		35	14	(5)
Available-for-sale investments		(88)	(75)	113
Other (decrease)/increase, net		(1)	(6)	2
Income tax related to items that may be reclassified subsequently to profit or loss		(92)	20	(88)
Other comprehensive (loss)/income, net of tax	22	**(860)**	**445**	**(626)**
Total comprehensive (loss)/income for the year		**(2 318)**	**(482)**	**1 842**
Attributable to:				
Equity holders of the parent		(2 304)	(277)	1 837
Non-controlling interests		(14)	(205)	5
Total comprehensive (loss)/income for the year		**(2 318)**	**(482)**	**1 842**
Attributable to equity holders of the parent:				
Continuing operations		(2 283)	(262)	1 513
Discontinued operations		(21)	(15)	324
Total attributable to equity holders of the parent		**(2 304)**	**(277)**	**1 837**
Attributable to non-controlling interests:				
Continuing operations		(14)	(205)	5
Discontinued operations		–	–	–
Total attributable to non-controlling interests		**(14)**	**(205)**	**5**

The notes are an integral part of these consolidated financial statements.

Consolidated statement of financial position

As of December 31	Notes	2017 EURm	2016 EURm
ASSETS			
Non-current assets			
Intangible assets	14, 16	9 219	10 960
Property, plant and equipment	15	1 853	1 981
Investments in associated companies and joint ventures	34	128	116
Available-for-sale investments	24	816	1 040
Deferred tax assets	12	4 582	5 701
Other non-current financial assets	24, 36	215	254
Defined benefit pension assets	27	3 979	3 802
Other non-current assets	19	368	328
Total non-current assets		**21 160**	**24 182**
Current assets			
Inventories	17	2 646	2 506
Accounts receivable, net of allowances for doubtful accounts	18, 24, 36	6 880	6 972
Prepaid expenses and accrued income	19	1 259	1 296
Current income tax assets		474	279
Other financial assets	24, 25, 36	302	296
Investments at fair value through profit and loss, liquid assets	24, 36	–	327
Available-for-sale investments, liquid assets	24, 36	911	1 502
Cash and cash equivalents	24, 36	7 369	7 497
Total current assets		**19 841**	**20 675**
Assets held for sale		23	44
Total assets		**41 024**	**44 901**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Capital and reserves attributable to equity holders of the parent			
Share capital	20	246	246
Share issue premium		447	439
Treasury shares		(1 480)	(881)
Translation differences	21	(932)	483
Fair value and other reserves	21	1 094	488
Reserve for invested non-restricted equity		15 616	15 731
Retained earnings		1 147	3 588
Total capital and reserves attributable to equity holders of the parent		**16 138**	**20 094**
Non-controlling interests		80	881
Total equity		**16 218**	**20 975**
Non-current liabilities			
Long-term interest-bearing liabilities	23, 24, 36	3 457	3 657
Deferred tax liabilities	12	413	403
Defined benefit pension and post-retirement liabilities	27	4 440	5 000
Deferred revenue and other long-term liabilities	24, 28	2 986	1 453
Provisions	29	766	808
Total non-current liabilities		**12 062**	**11 321**
Current liabilities			
Short-term interest-bearing liabilities	23, 24, 36	309	370
Other financial liabilities	24, 25, 36	268	236
Current income tax liabilities		383	536
Accounts payable	24, 36	3 996	3 781
Accrued expenses, deferred revenue and other liabilities	28	6 666	6 412
Provisions	29	1 122	1 270
Total current liabilities		**12 744**	**12 605**
Total liabilities		**24 806**	**23 926**
Total shareholders' equity and liabilities		**41 024**	**44 901**

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of cash flows

For the year ended December 31	Notes	2017 EURm	2016 EURm	2015 EURm
Cash flow from operating activities				
(Loss)/profit for the year		(1 458)	(927)	2 468
Adjustments, total	31	3 583	2 407	(261)
Change in net working capital	31	597	(2 207)	(1 377)
Cash from/(used in) operations		2 722	(727)	830
Interest received		53	85	62
Interest paid		(409)	(309)	(99)
Income taxes paid, net		(555)	(503)	(290)
Net cash from/(used in) operating activities		**1 811**	**(1 454)**	**503**
Cash flow from investing activities				
Acquisition of businesses, net of acquired cash		(394)	5 819	(98)
Purchase of current available-for-sale investments, liquid assets[(1)]		(2 729)	(4 131)	(3 133)
Purchase of investments at fair value through profit and loss, liquid assets		–	–	(311)
Purchase of non-current available-for-sale investments		(104)	(73)	(88)
Purchase of shares in associated companies		(10)	–	–
(Payment of)/proceeds from other long-term loans receivable		(2)	11	(2)
Proceeds from/(payment of) short-term loans receivable		2	19	(17)
Purchases of property, plant and equipment, and intangible assets		(601)	(477)	(314)
Proceeds from disposal of businesses, net of disposed cash		(16)	6	2 586
Proceeds from disposal of shares in associated companies		–	10	–
Proceeds from maturities and sale of current available-for-sale investments, liquid assets[(1)]		3 265	5 121	3 074
Proceeds from maturities and sale of investments at fair value through profit and loss, liquid assets		324	368	48
Proceeds from sale of non-current available-for-sale investments		207	134	149
Proceeds from sale of property, plant and equipment and other intangible assets		67	28	–
Dividends received		1	1	2
Net cash from investing activities		**10**	**6 836**	**1 896**
Cash flow from financing activities				
Proceeds from stock option exercises		1	6	4
Purchase of treasury shares		(785)	(216)	(173)
Purchase of equity instruments of subsidiaries[(1)]		(38)	(724)	(52)
Proceeds from long-term borrowings		2 129	225	232
Repayment of long-term borrowings[(1)]		(2 044)	(2 599)	(24)
Repayment of short-term borrowings		(42)	(100)	(55)
Dividends paid and other contributions to shareholders		(970)	(1 515)	(512)
Net cash used in financing activities		**(1 749)**	**(4 923)**	**(580)**
Translation differences		(200)	43	6
Net (decrease)/increase in cash and cash equivalents		**(128)**	**502**	**1 825**
Cash and cash equivalents as of January 1		7 497	6 995	5 170
Cash and cash equivalents as of December 31		**7 369**	**7 497**	**6 995**

(1) In 2016, Alcatel Lucent ordinary shares and ADSs and OCEANEs acquired in cash by the Group subsequent to the closing of the reopened exchange offer are presented within cash flow from financing activities as purchase of equity instruments of subsidiaries and repayment of long-term borrowings, respectively. In relation to the Public Buy-Out offer/Squeeze-Out, the Group's pledged cash asset of EUR 724 million to cover the purchase of the remaining Alcatel Lucent securities was recorded within cash flow from investing activities as purchase of current available-for-sale investments, liquid assets. The amount of pledged cash released upon acquisition of Alcatel Lucent securities of EUR 724 million was recorded within cash flow from investing activities as proceeds from maturities and sale of current available-for-sale investments, liquid assets.

The consolidated statement of cash flows combines cash flows from both the Continuing and the Discontinued operations. Refer to Note 6, Disposals treated as Discontinued operations.

The amounts in the consolidated statement of cash flows cannot be directly traced from the consolidated statement of financial position without additional information on the acquisitions and disposals of subsidiaries and the net foreign exchange differences arising on consolidation.

The notes are an integral part of these consolidated financial statements.

Consolidated income statement

For the year ended December 31	Notes	2018 EURm	2017 EURm	2016 EURm
Net sales	5, 8	**22 563**	**23 147**	**23 641**
Cost of sales	9	(14 117)	(14 008)	(15 117)
Gross profit		**8 446**	**9 139**	**8 524**
Research and development expenses	9	(4 620)	(4 916)	(4 997)
Selling, general and administrative expenses	9	(3 463)	(3 615)	(3 767)
Other income	11	290	363	117
Other expenses	9, 11	(712)	(955)	(977)
Operating (loss)/profit		**(59)**	**16**	**(1 100)**
Share of results of associated companies and joint ventures	34	12	11	18
Financial income and expenses	12	(313)	(537)	(287)
Loss before tax		**(360)**	**(510)**	**(1 369)**
Income tax (expense)/benefit	13	(189)	(927)	457
Loss for the year from Continuing operations		**(549)**	**(1 437)**	**(912)**
Loss for the year from Continuing operations attributable to:				
Equity holders of the parent		(554)	(1 473)	(751)
Non-controlling interests		5	36	(161)
Loss for the year from Continuing operations		**(549)**	**(1 437)**	**(912)**
Profit/(loss) for the year from Discontinued operations attributable to:				
Equity holders of the parent		214	(21)	(15)
Non-controlling interests		–	–	–
Profit/(loss) for the year from Discontinued operations	7	**214**	**(21)**	**(15)**
Loss for the year attributable to:				
Equity holders of the parent		(340)	(1 494)	(766)
Non-controlling interests		5	36	(161)
Loss for the year		**(335)**	**(1 458)**	**(927)**

Earnings per share attributable to equity holders of the parent	14	EUR	EUR	EUR
Basic earnings per share				
Continuing operations		(0.10)	(0.26)	(0.13)
Discontinued operations		0.04	0.00	0.00
Loss for the year		(0.06)	(0.26)	(0.13)
Diluted earnings per share				
Continuing operations		(0.10)	(0.26)	(0.13)
Discontinued operations		0.04	0.00	0.00
Loss for the year		(0.06)	(0.26)	(0.13)

Average number of shares	14	000s shares	000s shares	000s shares
Basic				
Continuing operations		5 588 020	5 651 814	5 732 371
Discontinued operations		5 588 020	5 651 814	5 732 371
Loss for the year		5 588 020	5 651 814	5 732 371
Diluted				
Continuing operations		5 588 020	5 651 814	5 741 117
Discontinued operations		5 612 477	5 651 814	5 741 117
Loss for the year		5 588 020	5 651 814	5 741 117

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of comprehensive income

For the year ended December 31	Notes	2018 EURm	2017 EURm	2016 EURm
Loss for the year		**(335)**	**(1 458)**	**(927)**
Other comprehensive income				
Items that will not be reclassified to profit or loss:				
Remeasurements of defined benefit plans		388	723	613
Income tax related to items that will not be reclassified to profit or loss		(90)	(58)	(269)
Items that may be reclassified subsequently to profit or loss:				
Translation differences		401	(1 819)	251
Net investment hedges		(73)	440	(103)
Cash flow and other hedges		(53)	35	14
Financial assets at fair value through other comprehensive income		(45)	–	–
Available-for-sale investments		–	(88)	(75)
Other increase/(decrease), net		1	(1)	(6)
Income tax related to items that may be reclassified subsequently to profit or loss		33	(92)	20
Other comprehensive income/(loss), net of tax	22	**562**	**(860)**	**445**
Total comprehensive income/(loss) for the year		**227**	**(2 318)**	**(482)**
Attributable to:				
Equity holders of the parent		221	(2 304)	(277)
Non-controlling interests		6	(14)	(205)
Total comprehensive income/(loss) for the year		**227**	**(2 318)**	**(482)**
Attributable to equity holders of the parent:				
Continuing operations		7	(2 283)	(262)
Discontinued operations		214	(21)	(15)
Total attributable to equity holders of the parent		**221**	**(2 304)**	**(277)**
Attributable to non-controlling interests:				
Continuing operations		6	(14)	(205)
Discontinued operations		–	–	–
Total attributable to non-controlling interests		**6**	**(14)**	**(205)**

The notes are an integral part of these consolidated financial statements.

Consolidated statement of financial position

As of December 31	Notes	2018 EURm	2017 EURm
ASSETS			
Non-current assets			
Intangible assets	15, 17	8 805	9 219
Property, plant and equipment	16, 17	1 790	1 853
Investments in associated companies and joint ventures	34	145	128
Non-current financial investments(1)	24	690	816
Deferred tax assets	13	4 911	4 582
Other non-current financial assets	24, 36	373	215
Defined benefit pension assets	27	4 224	3 979
Other non-current assets	19	308	368
Total non-current assets		**21 246**	**21 160**
Current assets			
Inventories	18	3 168	2 646
Trade receivables	24, 36	4 856	6 880
Contract assets	8, 36	1 875	–
Prepaid expenses and accrued income	19	1 024	1 259
Current income tax assets		227	474
Other financial assets	24, 25, 36	243	302
Current financial investments(1)	24, 36	612	911
Cash and cash equivalents	24, 36	6 261	7 369
Total current assets		**18 266**	**19 841**
Assets held for sale		5	23
Total assets		**39 517**	**41 024**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Capital and reserves attributable to equity holders of the parent			
Share capital	20	246	246
Share issue premium		436	447
Treasury shares		(408)	(1 480)
Translation differences	21	(592)	(932)
Fair value and other reserves	21	1 063	1 094
Reserve for invested unrestricted equity		15 606	15 616
(Accumulated deficit)/retained earnings		(1 062)	1 147
Total capital and reserves attributable to equity holders of the parent		**15 289**	**16 138**
Non-controlling interests		82	80
Total equity		**15 371**	**16 218**
Non-current liabilities			
Long-term interest-bearing liabilities	23, 24, 36	2 828	3 457
Deferred tax liabilities	13	350	413
Defined benefit pension and post-retirement liabilities	27	4 327	4 440
Contract liabilities	8	1 113	–
Deferred revenue and other long-term liabilities	24, 28	852	2 986
Provisions	29	572	766
Total non-current liabilities		**10 042**	**12 062**
Current liabilities			
Short-term interest-bearing liabilities	23, 24, 36	994	309
Other financial liabilities	24, 25, 36	891	268
Current income tax liabilities		268	383
Trade payables	24, 36	4 773	3 996
Contract liabilities	8	2 383	–
Accrued expenses, deferred revenue and other liabilities	28	3 940	6 666
Provisions	29	855	1 122
Total current liabilities		**14 104**	**12 744**
Total liabilities		**24 146**	**24 806**
Total shareholders' equity and liabilities		**39 517**	**41 024**

(1) Related to the adoption of IFRS 9, Financial Instruments on January 1, 2018, financial instruments previously presented within "Available for sale investments" are now presented within "Non-current financial investments", and financial instruments previously presented within "Available for sale investments, liquid assets" and "Investments at fair value though profit and loss, liquid assets" are now presented within "Current financial investments". Despite the changes in the presentation of comparatives, IFRS 9 has not been adopted retrospectively.

The notes are an integral part of these consolidated financial statements.

Financial statements

Consolidated statement of cash flows

For the year ended December 31	Notes	2018 EURm	2017[2] EURm	2016[2] EURm
Cash flow from operating activities				
Loss for the year		(335)	(1 458)	(927)
Adjustments, total	31	2 093	3 676	2 387
Change in net working capital[1]				
Decrease/(increase) in receivables		246	(421)	18
(Increase)/decrease in inventories		(544)	(296)	533
(Decrease)/increase in non-interest bearing liabilities		(645)	1 221	(2 738)
Cash from/(used in) operations		815	2 722	(727)
Interest received		68	53	85
Interest paid		(159)	(409)	(309)
Income taxes paid, net		(364)	(555)	(503)
Net cash from/(used in) operating activities		**360**	**1 811**	**(1 454)**
Cash flow from investing activities				
Purchase of property, plant and equipment and intangible assets		(672)	(601)	(477)
Proceeds from sale of property, plant and equipment and intangible assets		88	67	28
Acquisition of businesses, net of acquired cash		(31)	(394)	5 819
Proceeds from disposal of businesses, net of disposed cash		(18)	(16)	6
Purchase of current financial investments[3]		(2 104)	(2 729)	(4 131)
Proceeds from maturities and sale of current financial investments[3]		2 397	3 589	5 489
Purchase of non-current financial investments		(145)	(104)	(73)
Proceeds from sale of non-current financial investments		170	207	134
Other		–	(9)	41
Net cash (used in)/from investing activities		**(315)**	**10**	**6 836**
Cash flow from financing activities				
Proceeds from stock option exercises		1	1	6
Purchase of treasury shares		–	(785)	(216)
Purchase of equity instruments of subsidiaries[3]		1	(38)	(724)
Proceeds from long-term borrowings		139	2 129	225
Repayment of long-term borrowings[3]		(31)	(2 044)	(2 599)
Proceeds from/(repayment) of short-term borrowings		2	(42)	(100)
Dividends paid		(1 081)	(970)	(1 515)
Net cash used in financing activities		**(969)**	**(1 749)**	**(4 923)**
Translation differences		(184)	(200)	43
Net (decrease)/increase in cash and cash equivalents		**(1 108)**	**(128)**	**502**
Cash and cash equivalents as of January 1		7 369	7 497	6 995
Cash and cash equivalents as of December 31		**6 261**	**7 369**	**7 497**

(1) Net working capital includes both short-term and long-term items.
(2) Comparatives for 2017 and 2016 have been recasted to reflect the change in the presentation of operating and investing cash flows in 2018. The change was made to simplify the presentation and did not have an impact on net cash used in operating or net cash used in investing activities.
(3) In 2016, Alcatel Lucent ordinary shares and ADSs and OCEANEs acquired in cash by the Group subsequent to the closing of the reopened exchange offer are presented within cash flow from financing activities as purchase of equity instruments of subsidiaries and repayment of long-term borrowings, respectively. In relation to the Public Buy-Out offer/Squeeze-Out, the Group's pledged cash asset of EUR 724 million to cover the purchase of the remaining Alcatel Lucent securities was recorded within cash flow from investing activities as purchase of current financial investments. The amount of pledged cash released upon acquisition of Alcatel Lucent securities of EUR 724 million was recorded within cash flow from investing activities as proceeds from maturities and sale of current financial investments.

The consolidated statement of cash flows combines cash flows from both the Continuing and the Discontinued operations. Refer to Note 7, Discontinued operations.

The amounts in the consolidated statement of cash flows cannot be directly traced from the consolidated statement of financial position without additional information on the acquisitions and disposals of subsidiaries and the net foreign exchange differences arising on consolidation.

The notes are an integral part of these consolidated financial statements.