

Interim Report for Q1 2019

Particularly weak Q1, consistent with our outlook; Full year 2019 guidance maintained due to expected 5G ramp up

Rajeev Suri, President and CEO, on Q1 2019 results

Q1 was a weak quarter for Nokia. We expected that it would be, and the outcome has not changed our perspective on the full year. We are confident that those issues that drove weakness in our results will ease over the remainder of the year. While overall risks have increased slightly, we continue to see positive developments and are maintaining our guidance for the full year.

As the year progresses, we expect meaningful topline and margin improvements. 5G revenues are expected to grow sharply, particularly in the second half of the year, driven by our 36 commercial wins to date. Global services profitability should improve as we recover in a handful of large rollout projects, IP routing is now firmly back to growth given our product leadership, and optical networks continues its long run of growth. We are also seeing good underlying momentum in our strategic focus areas of software and enterprise, and we are moving steadily forward on our path to build a strong licensing business that is sustainable for the long-term.

In terms of risks, one factor is our slow start to the year. In addition, competitive intensity has slightly increased in certain accounts as some competitors seek to be more commercially aggressive in the early stages of 5G and as some customers reassess their vendors in light of security concerns, creating near-term pressure but longer-term opportunity. We will continue to take a balanced view, and are prepared to invest prudently in cases where there is the right longer-term profitability profile. We are also progressing well with our previously announced EUR 700 million cost savings program.

In short, an expectedly weak Q1, but continued reason for optimism as the year progresses.

Q1 2019 reported and non-IFRS results. Refer to note 1, "Basis of Preparation", note 2, "Non-IFRS to reported reconciliation" and note 13, "Performance measures", in the "Financial statement information" section for details.

EUR million (except for EPS in EUR)	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	5 032	4 924	2%	(2)%
Operating profit/(loss)	(524)	(336)	56%	
Operating margin %	(10.4)%	(6.8)%	(360)bps	
EPS, diluted	(0.08)	(0.06)		
<i>Operating profit/(loss) (non-IFRS)</i>	(59)	239		
<i>Operating margin % (non-IFRS)</i>	(1.2)%	4.8%	(600)bps	
<i>EPS, diluted (non-IFRS)</i>	(0.02)	0.02		
Net cash and current financial investments ¹	1 991	4 179	(52)%	

¹Net cash and current financial investments does not include lease liabilities.

- Non-IFRS net sales in Q1 2019 were EUR 5.1bn, compared to EUR 4.9bn in Q1 2018. Reported net sales in Q1 2019 were EUR 5.0bn, compared to EUR 4.9bn in Q1 2018. On a constant currency basis, non-IFRS net sales decreased 1% and reported net sales decreased 2%. Our solid topline reflects the competitiveness of our offerings, as well as an improving industry environment. We continue to see positive momentum building for our end-to-end strategy, with strong customer engagement in all key markets and across our portfolio. Due to the evolving readiness of the 5G ecosystem, in Q1 2019, we were unable to recognize approximately EUR 200 million of net sales related to 5G deliveries mainly in North America, which we expect to recognize in full before the end of 2019.
- Non-IFRS diluted EPS in Q1 2019 was negative EUR 0.02, compared to EUR 0.02 in Q1 2018, primarily driven by lower gross profit, partially offset by income tax benefits compared to income tax expenses in the year-ago quarter.
- Reported diluted EPS in Q1 2019 was negative EUR 0.08, compared to negative EUR 0.06 in Q1 2018, primarily driven by lower gross profit, partially offset by a net positive fluctuation in financial income and expenses, higher income tax benefits and lower operating expenses.
- In Q1 2019, net cash and current financial investments decreased sequentially by approximately EUR 1.1bn, primarily due to weak seasonality and changes in net working capital.
- Full year 2019 guidance maintained. Nokia's cash performance in the second quarter of 2019 is expected to include the payment of 2018 performance-related incentives to employees and a quarterly dividend. We expect substantially stronger financial performance in the second half of 2019 as large scale 5G deployments accelerate meaningfully.

New financial reporting structure beginning Q1 2019

Nokia announced organizational changes to accelerate its strategy execution during the fourth quarter of 2018. In line with financial regulations, Nokia revised its financial reporting structure to better reflect its strategy, organizational structure and the way it evaluates operational performance and allocates resources. As of the first quarter 2019, Nokia has three reportable segments: (i) Networks, (ii) Nokia Software and (iii) Nokia Technologies. In addition, Nokia discloses segment-level data for Group Common and Other.

For each reportable segment, Nokia provides detailed financial disclosure, including net sales and operating profit. Additionally, Nokia provides adjusted financial disclosure for its Networks and Nokia Software reportable segments, with amounts related to licensing and Nokia Bell Labs allocated 85% to Networks and 15% to Nokia Software.

In addition, Nokia provides net sales disclosure for the following businesses: (i) Mobile Access, (ii) Fixed Access, (iii) IP Routing and (iv) Optical Networks, which together comprise the new Networks reportable segment. Nokia also provides separate net sales disclosure for its different customer types: (i) Communication Service Providers, (ii) Enterprises and (iii) Licensees. Net sales by region are provided at the Nokia level.

To provide a basis for comparison, Nokia published a recasting of financial results on an unaudited basis for all four quarters of 2018 separately, as well as for the full year 2018, on April 18, 2019.

Licensees

After the end of Q1 2019, Nokia Technologies agreed to financial terms with a new licensee, further validating our global licensing program. The final agreement is expected to be signed during the coming weeks. Including this new licensee, Nokia Technologies' annualized net sales run-rate would be approximately EUR 1.4 billion.

Over more than 20 years, we have cumulatively invested over EUR 125 billion in advanced telecommunications technologies R&D and defined many of the fundamental technologies used in virtually all mobile devices. We have taken a leadership role in standards setting, and we have secured a leading share of essential patents for GSM, 3G, 4G and 5G technologies.

Outlook

Metric	Full Year 2019	Full Year 2020
Non-IFRS diluted earnings per share	EUR 0.25 - 0.29	EUR 0.37 - 0.42
Non-IFRS operating margin	9 - 12%	12 - 16%
Recurring free cash flow ¹	Slightly positive	Clearly positive
Annual distribution to shareholders	Over the long term, Nokia targets to deliver an earnings-based growing dividend by distributing approximately 40% to 70% of non-IFRS diluted EPS, taking into account Nokia's cash position and expected cash flow generation. The annual distribution would be paid as quarterly dividends.	

¹Free cash flow = net cash from operating activities - capital expenditures + proceeds from sale of property, plant and equipment and intangible assets - purchase of non-current financial investments + proceeds from sale of non-current financial investments.

Key drivers of Nokia's outlook

Net sales and operating margin for Networks and Nokia Software are expected to be influenced by factors including:

- Our expectation that we will outperform our primary addressable market in full year 2019 and over the longer-term, driven by our strategy, which includes competing in 5G more effectively due to our strong end-to-end portfolio, focusing on targeted growth opportunities in attractive adjacent markets and building a strong network agnostic software business. On a constant currency basis, we expect our primary addressable market to be flattish in full year 2019 and to grow in full year 2020;
- The slow start to 2019 and expected weak overall first half puts significant pressure on execution in the second half. Due to the evolving readiness of the 5G ecosystem, in Q1 2019, we were unable to recognize approximately EUR 200 million of net sales related to 5G deliveries mainly in North America, which we expect to recognize in full before the end of 2019. ([new commentary](#));
- The timing of completions and acceptances of certain projects, particularly related to 5G. Based on the evolving readiness of the 5G ecosystem and the staggered nature of 5G rollouts in lead countries, we expect full year 2019 to follow a similar pattern as full year 2018: a soft first half followed by a robust second half, with a particularly weak Q1;
- Competitive intensity could increase in some accounts as some competitors seek to take share in the early phases of 5G ([new commentary](#));
- Some customers are reassessing their vendors in light of security concerns, creating near-term pressure to invest in order to secure long-term benefits ([new commentary](#));
- Our expectation that we will improve our R&D productivity and reduce support function costs through the successful execution of our cost savings program;
- Potential mergers or acquisitions by our customers;
- Our product and regional mix; and
- Macroeconomic, industry and competitive dynamics.

Net sales and operating margin for Nokia Technologies is expected to be influenced by factors including:

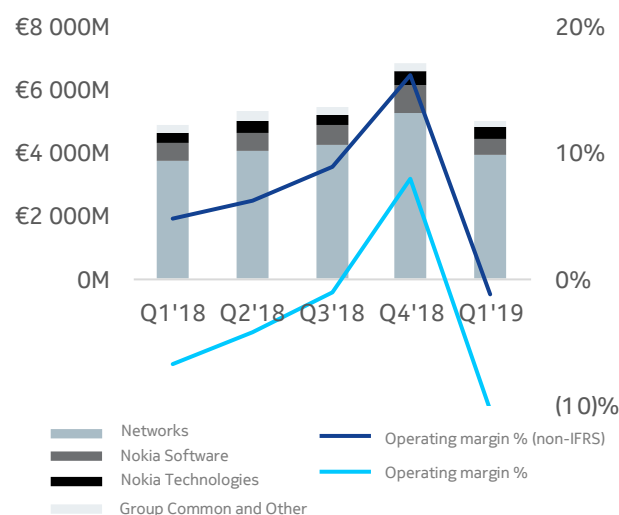
- The timing and value of new and existing patent licensing agreements with smartphone vendors, automotive companies and consumer electronics companies;
- Results in brand and technology licensing;
- Costs to protect and enforce our intellectual property rights; and
- The regulatory landscape.

Additionally, our outlook is based on the following assumptions:

- Nokia's recurring free cash flow is expected to improve over the longer-term due to lower cash outflows related to restructuring and network equipment swaps and improved operational results over time;
- Non-IFRS financial income and expenses to be an expense of approximately EUR 300 million in full year 2019 and over the longer-term;
- Non-IFRS income taxes at a rate of approximately 28% in full year 2019 and approximately 25% over the longer-term, subject to the absolute level of profits, regional profit mix and changes to our operating model;
- Cash outflows related to income taxes of approximately EUR 450 million in full year 2019 and over the longer term until our US or Finnish deferred tax assets are fully utilized; and
- Capital expenditures of approximately EUR 700 million in full year 2019 and approximately EUR 600 million over the longer-term.

Nokia financial results

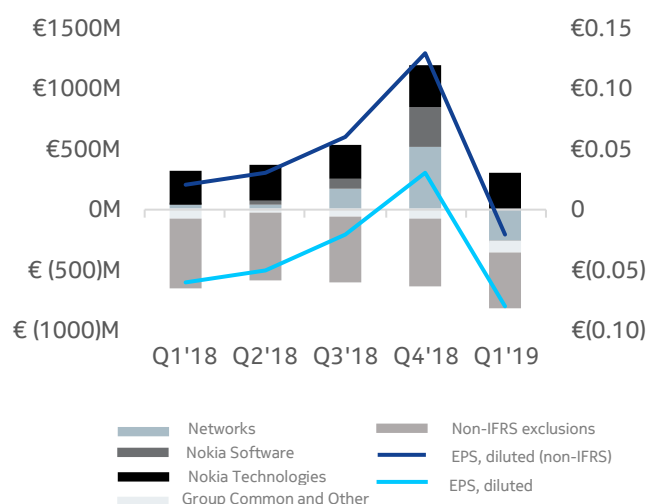
Net sales



Operating margin

Components of operating profit

EPS



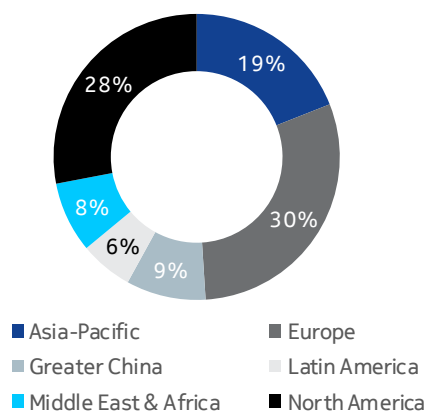
EUR million (except for EPS in EUR)	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	5 032	4 924	2%	(2)%
Networks	3 944	3 783	4%	0%
Nokia Software	543	541	0%	(4)%
Nokia Technologies	370	365	1%	0%
Group Common and Other	220	252	(13)%	(12)%
Non-IFRS exclusions	(25)	(5)	400%	
Gross profit	1 580	1 805	(12)%	
Operating profit/(loss)	(524)	(336)		
Networks	(254)	46		
Nokia Software	(7)	1		
Nokia Technologies	302	274	10%	
Group Common and Other	(100)	(83)		
Non-IFRS exclusions	(464)	(575)		
Operating margin %	(10.4)%	(6.8)%	(360)bps	
Gross profit (non-IFRS)	1 641	1 941	(15)%	
Operating profit/(loss) (non-IFRS)	(59)	239		
Operating margin % (non-IFRS)	(1.2)%	4.8%	(600)bps	
Financial income and expenses	(55)	(108)	(49)%	
Income taxes	142	94	51%	
Profit/(loss) for the period	(442)	(354)		
EPS, diluted	(0.08)	(0.06)		
Financial income and expenses (non-IFRS)	(93)	(116)	(20)%	
Income taxes (non-IFRS)	41	(36)		
Profit/(loss) for the period (non-IFRS)	(116)	83		
EPS, diluted (non-IFRS)	(0.02)	0.02		

Results are as reported and relate to continuing operations unless otherwise specified. The financial information in this report is unaudited. Non-IFRS results exclude costs related to the acquisition of Alcatel-Lucent and related integration, goodwill impairment charges, intangible asset amortization and other purchase price fair value adjustments, restructuring and associated charges and certain other items that may not be indicative of Nokia's underlying business performance. For details, please refer to note 2, "Non-IFRS to reported reconciliation", in the notes to the Financial statement information in this report. Change in net sales at constant currency excludes the effect of changes in exchange rates in comparison to euro, our reporting currency. For more information on currency exposures, please refer to note 1, "Basis of Preparation", in the "Financial statement information" section in this report.

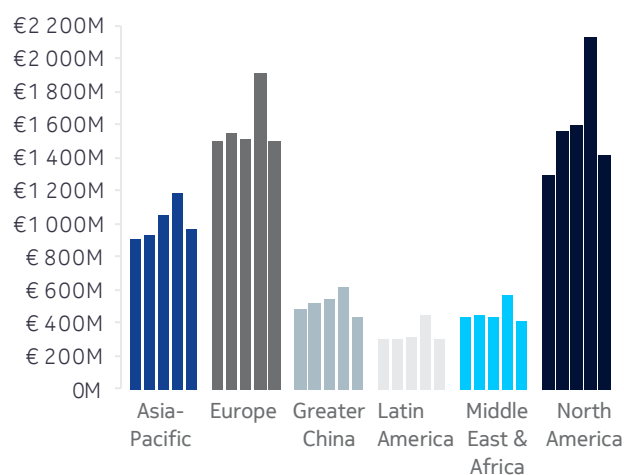
Amounts related to licensing and Nokia Bell Labs allocated 85% to Networks and 15% to Nokia Software

	Q1'19 Before allocations	Allocations		Q1'19 After allocations	Q1'18 After allocations
		Licensing	Nokia Bell Labs		
Net sales (EUR million)					
Networks	3 944	315	1	4 259	4 081
Nokia Software	543	56		598	594
Nokia Technologies	370	(370)		0	16
Group Common and Other	220		(1)	219	251
Eliminations	(20)			(20)	(12)
Non-IFRS total	5 057	0	0	5 057	4 929
Operating Profit (EUR million)					
Networks	(254)	257	(44)	(42)	255
Nokia Software	(7)	45	(8)	30	38
Nokia Technologies	302	(302)		0	(23)
Group Common and Other	(100)		52	(48)	(32)
Non-IFRS total	(59)	0	0	(59)	239
Operating Margin %					
Networks	(6.4)%			(1.0)%	6.2%
Nokia Software	(1.3)%			5.0%	6.4%
Nokia Technologies	81.6%			0.0%	(143.8)%
Group Common and Other	(45.5)%			(21.9)%	(12.7)%
Non-IFRS total	(1.2)%			(1.2)%	4.8%

Net sales by region – Q1'19



Net sales by region – Q1'18-Q1'19



Net sales by region

EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Asia-Pacific	963	910	6%	2%
Europe	1 500	1 506	(0)%	(1)%
Greater China	434	480	(10)%	(12)%
Latin America	305	297	3%	0%
Middle East & Africa	413	431	(4)%	(7)%
North America	1 418	1 301	9%	1%
Total	5 032	4 924	2%	(2)%

Net sales by customer type

EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Communication service providers	4 207	4 080	3%	(1)%
Enterprise	260	244	7%	3%
Licensees	370	349	6%	5%
Other ¹	195	251	(22)%	(21)%
Total	5 032	4 924	2%	(2)%

¹Includes net sales of Alcatel Submarine Networks (ASN) and Radio Frequency Systems (RFS), both of which are being managed as separate entities, and certain other items, such as eliminations of inter-segment revenues and certain items related to purchase price allocation. ASN and RFS net sales include also revenue from communications service providers and enterprise customers.

Our new Nokia Enterprise business is performing well. Net sales to enterprise customers, excluding the third party integration business that we are exiting, grew 8% on a reported basis, and 5% on a constant currency basis.

Nokia, Q1 2019 compared to Q1 2018

EUR million	Net sales	% change	% change in constant currency	Gross profit	(R&D)	(SG&A)	Other income and (expenses)	Operating profit/(loss)	Financial income and expenses	Income taxes	Profit/(loss)
Networks	161	4%	0%	(256)	(12)	14	(45)	(300)			
Nokia Software	2	0%	(4)%	(14)	10	10	(15)	(8)			
Nokia Technologies	5	1%	0%	2	13	14	0	28			
Group Common and Other	(32)	(13)%	(12)%	(32)	(9)	(12)	36	(17)			
Eliminations	(8)			0	0	0	0	0			
Nokia non-IFRS	128	3%	(1)%	(300)	2	24	(24)	(298)	23	77	(199)
Non-IFRS exclusions	(20)	400%		74	9	1	27	111	30	(29)	111
Nokia reported	108	2%	(2)%	(225)	11	23	3	(188)	53	48	(88)

Nokia reported net sales grew approximately 2%. Nokia non-IFRS net sales grew approximately 3%, due to the exclusion of EUR 22 million of restructuring and associated charges. On a constant currency basis, Nokia reported net sales decreased approximately 2% and Nokia non-IFRS net sales decreased approximately 1%.

Nokia non-IFRS and reported net sales, excluding approximately EUR 40 million (EUR 10 million in Q1 2018) of one-time licensing net sales in Q1 2019, both grew by approximately 2%, as our customers added network capacity in preparation for the continued rise in broadband traffic driven by 5G. Our solid topline in Q1 2019 reflected the competitiveness of our end-to-end portfolio, with particular strength in IP routing, as well as an improving industry environment.

Due to the evolving readiness of the 5G ecosystem, in Q1 2019, we were unable to recognize approximately EUR 200 million of net sales related to 5G deliveries mainly in North America, which we expect to recognize in full before the end of 2019.

Networks and Nokia Software continued to see strong customer engagement related to 5G across multiple parts of our portfolio, including radio, cloud core, transport, IP routing and network agnostic software. In Q1 2019, we continued to make progress with our strategy to diversify and grow, with solid results in Nokia Software and with enterprise customers.

In Nokia Technologies, the growth in net sales was primarily due to one-time licensing net sales in Q1 2019. On a recurring basis, net sales declined by 4%.

The growth in net sales to enterprise customers was primarily due to strong demand for our market-leading IP routing portfolio and, to a lesser extent, particularly strong percentage growth in private LTE and 5G wireless networks for industrial applications. We see strong momentum in industries like utilities, oil, gas, mines, manufacturing and logistics, as well as the public sector. Excluding the third party integration business that we are exiting, net sales to enterprise customers grew 8% on a reported basis, and 5% on a constant currency basis.

The decline in Nokia gross profit was primarily attributable to Networks, which was negatively affected by broad-based gross margin erosion in Mobile Access.

Nokia non-IFRS diluted EPS decreased by EUR 0.04, primarily due to lower gross profit, partially offset by income tax benefits compared to income tax expenses in the year-ago quarter.

Nokia reported diluted EPS decreased by EUR 0.02, primarily driven by lower gross profit, partially offset by a net positive fluctuation in financial income and expenses, higher income tax benefits and lower operating expenses.

Cash and cash flow in Q1 2019

During the first quarter of 2019 Nokia's free cash flow was negative EUR 913 million driven by:

- continued cash outflows related to restructuring and network equipment swaps;
- seasonally weak profitability in the first quarter;
- seasonally lower cash collection following significantly higher sale of receivables in the fourth quarter of 2018 and certain unexpected and unusual overdues at end of the first quarter by a limited number of customers; and
- seasonally higher inventory levels, as well as higher than normal inventory levels due to: a) our decision to ensure sufficient flexibility to deliver higher levels of equipment sales, particularly related to 5G and b) the deferral of revenue recognition, mainly in North America. In Q1 2019, we were unable to recognize approximately EUR 200 million of net sales, which we expect to recognize in full before the end of 2019.

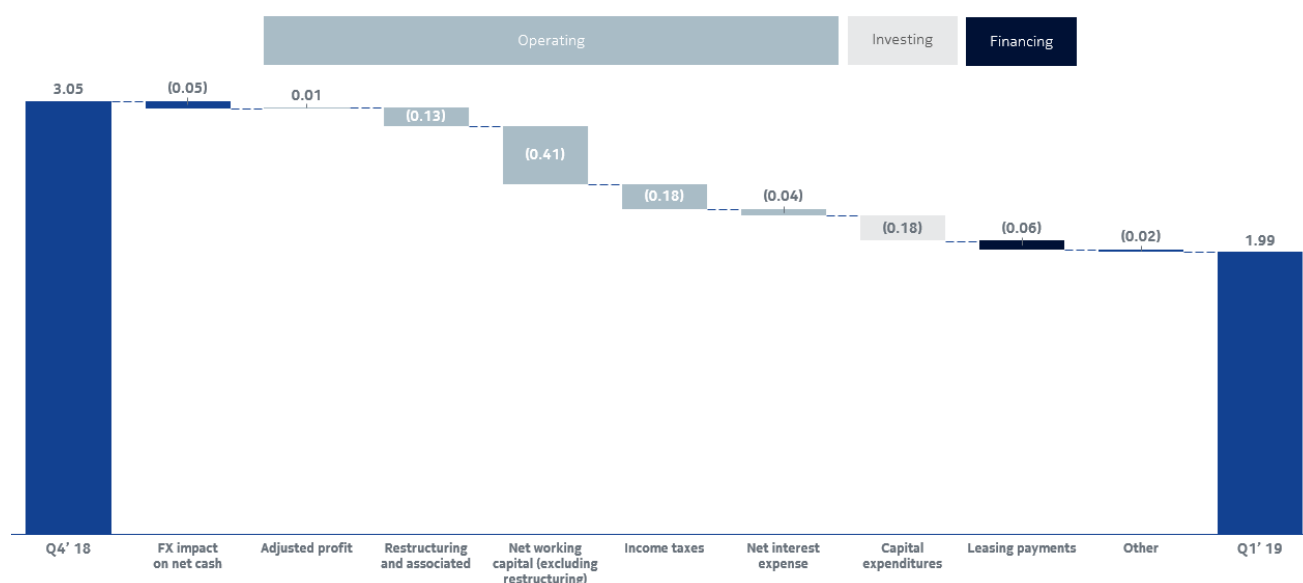
In the second quarter 2019 Nokia expects inventories to remain at elevated levels, followed by significantly improved inventory levels in second half of 2019 as large scale 5G deployments accelerate meaningfully.

Nokia has established a free cash flow program to ensure company-wide focus on free cash flow and release of working capital, including project asset optimization, review of contract terms & conditions as well supply chain and inventory optimization. Senior leaders of Nokia have significant part of their incentives tied to free cash flow improvement targets in 2019 and beyond.

EUR million, at end of period	Q1'19	Q4'18	QoQ change
Total cash and current financial investments ¹	6 394	6 873	(7)%
Net cash and current financial investments ¹	1 991	3 053	(35)%

¹ Net cash and current financial investments does not include lease liabilities. For details, please refer to note 7, "Net cash and current financial investments", and note 13, "Performance measures", in the "Financial statement information" section in this report.

EUR billion



During the first quarter 2019, Nokia's total cash and current financial investments decreased by EUR 479 million and Nokia's net cash and current financial investments ("net cash") decreased by EUR 1 062 million.

Foreign exchange rates had an approximately EUR 50 million negative impact on net cash, primarily related to liabilities.

In the first quarter 2019, net cash used in operating activities was EUR 747 million:

- Nokia's adjusted profit before changes in net working capital was EUR 7 million in the first quarter 2019.
- In the first quarter 2019, Nokia generated a decrease in net cash related to net working capital of approximately EUR 530 million. Excluding approximately EUR 130 million of restructuring and associated cash outflows, Nokia generated an

approximately EUR 410 million decrease in net cash related to net working capital, primarily due to a decrease in liabilities and an increase in inventories, partially offset by a decrease in receivables.

- The decrease in receivables was approximately EUR 380 million, primarily due to a seasonal decrease. The seasonal decrease was less than normal, due to the high level of receivables sold in Q4 2018.
- The increase in inventories was approximately EUR 280 million, primarily due to our decision to ensure sufficient flexibility to deliver higher levels of equipment sales, particularly related to 5G, and a seasonal increase in inventories. In Q1 2019, we were unable to recognize approximately EUR 200 million of net sales related to 5G deliveries mainly in North America, which we expect to recognize in full before the end of 2019.
- The decrease in liabilities was approximately EUR 510 million, primarily due to the seasonal decrease in accounts payable.
- In addition, cash taxes amounted to an outflow of approximately EUR 180 million. In Q1 2019, cash taxes were at an elevated level primarily due to the timing of tax payments. Also, net interest amounted to an outflow of approximately EUR 40 million.
- The implementation of IFRS 16 positively impacted our net cash used in operating activities and negatively impacted our net cash from financing activities, both by approximately EUR 60 million.

In the first quarter 2019, net cash used in investing activities primarily related to capital expenditures of approximately EUR 180 million.

In the first quarter 2019, net cash used in financing activities primarily related to leasing payments of approximately EUR 60 million following the implementation of IFRS 16.

Cost savings program

We expect our most recent cost savings program to result in a net EUR 700 million reduction of non-IFRS operating expenses and production overheads in full year 2020 compared to full year 2018, of which EUR 500 million is expected to come from operating expenses and EUR 200 million is expected to come from cost of sales. The related restructuring charges are expected to total EUR 900 million.

Balances related to previous restructuring and cost savings programs have been included as part of this cost savings program. At the beginning of Q1 2019, the balance of restructuring and associated liabilities related to prior cost savings programs was approximately EUR 630 million. This amount is included in the total expected restructuring and associated cash outflows of EUR 1 550 million, rounded to the nearest EUR 50 million, in addition to the approximately EUR 900 million of expected cash outflows related to our most recent cost savings program.

The following table summarizes the financial information related to our cost savings program as of the end of the first quarter 2019.

In EUR million, approximately	Q1'19
Balance of restructuring and associated liabilities for prior programs	630
+ Charges in the quarter	160
- Cash outflows in the quarter	130
= Ending balance of restructuring and associated liabilities	660
<i>of which restructuring provisions</i>	470
<i>of which other associated liabilities</i>	190
Total expected restructuring and associated charges	900
- Cumulative recorded	160
= Charges remaining to be recorded	740
Total expected restructuring and associated cash outflows	1 550
- Cumulative recorded	130
= Cash outflows remaining to be recorded	1 420

The below table includes future expectations related to our most recent cost savings program, as well as the remaining cash outflows related to our previous programs and network equipment swaps.

In EUR million, approximately rounded to the nearest EUR 50 million	Expected amounts for		
	FY 2019	FY 2020 and beyond	Total
Recurring annual cost savings	200	500	700
<i>- operating expenses</i>	150	350	500
<i>- cost of sales</i>	50	150	200
Restructuring and associated charges	550	350	900
Restructuring and associated cash outflows	700	850	1 550
Charges related to network equipment swaps	150	0	150
Cash outflows related to network equipment swaps	150	0	150

Operational highlights

Nokia has begun the year by strengthening its position across key markets and industries and punctuating the period with a number of important 5G commercial deals.

In the first pillar of our strategy, leading in high-performance, end-to-end networks with communication service providers:

During the period Nokia signed significant deals with major providers across the globe, reaching 30 commercial 5G deals during the quarter. These included: a MoU with **Telecom Egypt** to introduce a 5G network and test cases in the Egyptian market; the launch of South Africa's first commercial-ready 5G network in Cape Town with South African Operator **rain**; a deal with **Saudi Telecom Company** to deploy Nokia's end-to-end 5G solutions in western and southern Saudi Arabia; and a five-year deal with **U.S. Cellular** to provide end-to-end 5G technology, software and services solutions.

In Europe, **A1** in Austria announced they selected Nokia to expand next-generation 5G mobile communications in that country. Switzerland's **Salt** selected Nokia's radio and mobile core network in order to prepare for the roll-out of 5G, and **Ice Group** will deploy Nokia's AirScale Radio Access technology in urban areas across Norway to build a 5G-ready mobile network. After the quarter ended, Nokia announced the first 5G call on a commercial network in Latin America with **ANTEL Uruguay**.

In other markets, Nokia, in partnership with **Sprint**, is field testing standards-based 5G in Los Angeles. **Telenor Pakistan** announced it is deploying the country's first 5G-ready cloud-based RAN platform and controllers, and **Vodafone Idea** in India announced it will roll out its future ready LTE network across multiple service areas, based on Nokia's Single RAN, massive MIMO and small cells portfolio.

In optical, **Bharti Airtel** in India announced it will trial Nokia's fronthaul solution. **M-net** in Bavaria has become the first carrier to trial Nokia's PSE-3 coherent digital signal processing technology. **PTCL** in Pakistan is also deploying the Nokia PSE-3 chipset to build a 100G optical network, and Nokia announced that it was selected by **Liquid Telecom Kenya** to upgrade its existing fiber network.

In IP routing, the Nokia 7750 SR-s, powered by the FP4 network processor, was chosen by multiple operators. **Indosat Ooredoo** selected the router to upgrade its IP/MPLS network, ensuring the scale, security and functionality needed for the 100GE network. **DE-CIX** announced it is the first Internet Exchange in the world to offer 400-GE access technology with the Nokia 7750 SR-s which is deployed in DE-CIX Frankfurt, the Internet Exchange with the highest peak traffic in the world. After the quarter ended, **Proximus** announced it will deliver a tenfold capacity increase to its IP transport network with the 7750 SR-s, and **BT** also announced it had selected the platform to dramatically boost its backbone network capacity to meet growing traffic demand from FTTP and 5G.

Nokia also announced USD\$750,000 support for **IETF**, the premier Internet standards development organization, and will host the 106th IETF meeting in November.

In fixed access, Nokia introduced a new **FastMile 5G Gateway** that allows operators upgrading their LTE network to capture new Fixed Wireless Access (FWA) revenue and accelerate 5G rollouts. In Australia, Nokia partnered with **Optus** to provide the 5G RAN and Fastmile 5G CPEs for their home broadband. **Telia** will introduce Nokia FastMile 5G gateway for 4G-5G FWA to the Finnish market. The FWA 5G gateway is also part of the rain launch of its 5G network in Cape Town. **KDDI** in Japan is deploying Nokia's G.fast solution while **Chorus** in New Zealand will trial Nokia's market leading XGS-PON solution to bring 10 gigabit per second (Gbps) services to residential and SME customers in selected areas of Auckland and Wellington.

Nokia's Nuage Networks SD-WAN 2.0 solution was chosen by managed service provider **SDNbucks** to provide fully managed connectivity for SciSports cloud-based data analytics service. Nuage Networks was also selected by **Airtel** for datacenter automation in a first-of-its-kind initiative in India.

Telecom Egypt and Nokia announced plans to build the first cloud infrastructure in Egypt exclusively for IoT services. Telecom Egypt will use Nokia's Worldwide IoT Network Grid (WING) as a service to launch IoT services to its enterprise customers. In addition, under a MOU, **Zain Saudi Arabia** will leverage Nokia's WING to launch IoT services in the country.

Multiple additions to the portfolio were announced at Mobile World Congress. Nokia announced a raft of enhancements to its **Anyhaul** transport portfolio that help operators prepare their networks for 5G by delivering throughput speeds of up to 25 Gbps to base stations. New additions to the **small cell portfolio** included: a new mmWave small cell for extreme-traffic outdoor areas and a small cell mid-band radio to seamlessly upgrade indoor coverage to 5G. Nokia introduced a 5G Maturity Index to guide operators on how to align technology investments with business objectives to succeed with 5G-enabled services. And Nokia launched **Cognitive Collaboration** Hubs to help operators design 5G networks and create AI-enabled use cases.

Other notable news announced at Mobile World Congress includes: a collaboration with **Vodafone** on active antennas to boost 5G radio capacity and reduce costs, and a partnership and demonstration with **CMCC** for 5G AI powered QoE solution for an immersive VR gaming application. Nokia announced adoption of the fronthaul specifications of the Open Radio Access Network Alliance (O-RAN) and is now part of the **AT&T Innovation Program**.

In the second pillar of our strategy, expanding network sales to select vertical markets needing high-performing, secure networks:

Nokia partnered with Qualcomm and Deutsche Messe to showcase 10 industrial applications/use cases in the **5G Arena** at the world's largest industrial trade show Hannover Messe 2019.

Nokia signed a five-year cooperation agreement with **Oulu Port Ltd** to provide a private wireless service with Ukkoverkot. Norway's **MIRIS** has chosen Nokia's AirFrame Open Edge data center technology to support delivery of Smart City services in business parks and residential areas.

In other geographies, Nokia partnered with **Dawiyat** Integrated Telecommunications and Information Technology Company, part of Saudi Electricity Corporation (SEC), to collaborate on multiple projects to develop the ecosystem for Industry 4.0 in the country.

Room40, a company specializing in security monitoring analytics solutions, selected Nokia's Scene Analytics to flag emergencies and crime at sites in Belgium.

Nokia, along with **Continental**, **Deutsche Telekom**, **Fraunhofer ESK** and **MHP**, successfully concluded tests of connected driving technology on the A9 Digital Test Track. In addition, Nokia joined **ARENA2036**, a collaboration of automotive industry leaders, to create a flexible research factory model for production of the next generation of automobiles.

Nokia also signed an agreement with **Pöyry** and **Infosys** to further enhance and accelerate the adoption of KRTI 4.0™, an artificial intelligence (AI) framework for operational excellence.

In the third pillar of our strategy, developing a strong software business at scale:

This was the first quarter in which Nokia's Cloud Core solutions resources and sales accountability were aligned to the Nokia Software Business Group. While work remains to complete and optimize the integration, Nokia Software continued to demonstrate the strength of its network agnostic portfolio with healthy order intake and wins at **Bharti**, **China Unicom**, **Globacom Nigeria**, **Ooredoo Qatar**, **Orange Poland**, **Telefonica Peru**, **Vodafone Idea**, and **US Cellular**.

Nokia and **Korea Telecom** signed a MOU to collaborate and trial various 5G technologies, including NFV and network slicing. Nokia's IMPACT IoT platform was chosen by **M1 Limited** to enhance its Smart City IoT Solutions. IMPACT was also selected by **Rakuten** to tap opportunities in Japan, and we are also working with Rakuten to build a new mobile network in Japan.

Nokia and **Grameenphone** announced completion of the migration of Grameenphone's 72 million customers to the Nokia User Data Convergence (UDC) cloud core platform, and **Telefónica Group** selected Nokia as its Service Operation Center vendor.

In the fourth pillar of our strategy, now focused primarily on licensing:

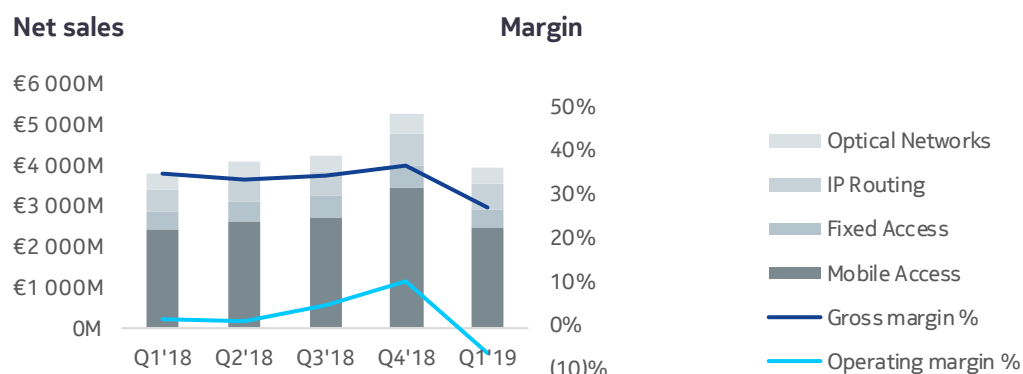
During Q1 2019, Nokia signed patent licensing agreements with Chinese smartphone vendors including **TCL**, **Tinno** and **Wiko**. Nokia also saw continuing momentum in automotive licensing as **Audi** and **Porsche** joined BMW, Mini and Rolls Royce on the roster of brands licensed to our patents for their connected cars.

After the end of Q1 2019, Nokia Technologies agreed to financial terms with a new licensee, further validating our global licensing program. The final agreement is expected to be signed during the coming weeks. Including this new licensee, Nokia Technologies' annualized net sales run-rate would be approximately EUR 1.4 billion. Over more than 20 years, we have cumulatively invested over EUR 125 billion in advanced telecommunications technologies R&D and defined many of the fundamental technologies used in virtually all mobile devices. We have taken a leadership role in standards setting, and we have secured a leading share of essential patents for GSM, 3G, 4G and 5G technologies.

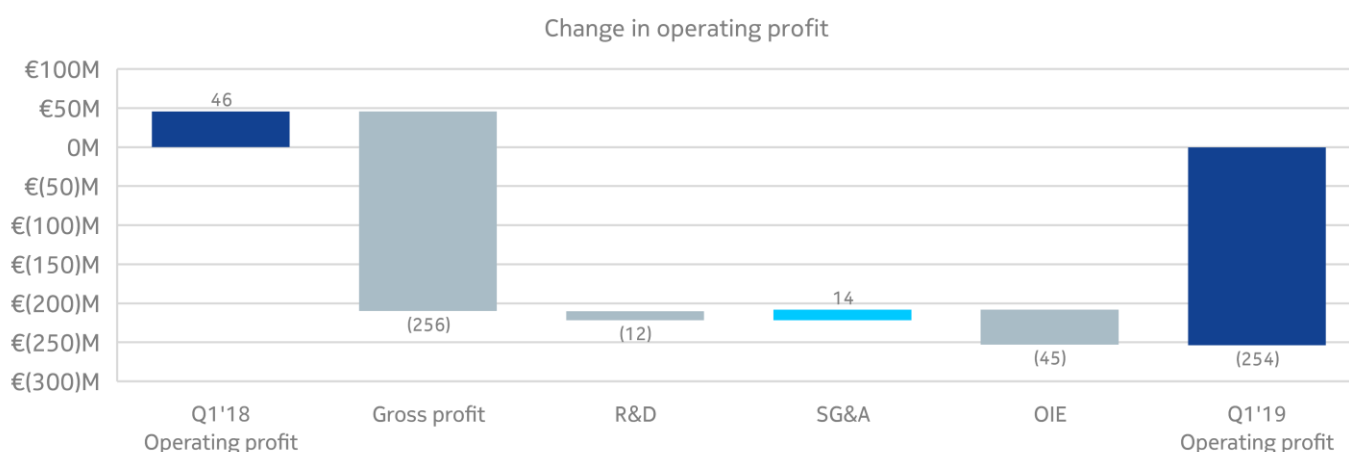
HMD Global, the home of Nokia phones, launched four new Nokia smartphones and one featurephone at Mobile World Congress, delivering pioneering experiences and true innovation in imaging. Gaining over 50% share of voice in smartphone coverage of MWC, the new Nokia devices also won 24 awards during the show; 19 for Nokia 9 PureView. HMD also announced it had technical approval from three North American carriers to start sales in the US and Canada.

Shortly after the quarter closed, **OPPO** launched its new flagship smartphone, the OPPO Reno, which uses Nokia's OZO Audio technology.

Networks, Q1 2019 compared to Q1 2018



EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	3 944	3 783	4%	0%
Mobile Access	2 473	2 426	2%	(2)%
Fixed Access	426	445	(4)%	(8)%
IP Routing	645	550	17%	12%
Optical Networks	400	363	10%	7%
Gross profit	1 061	1 317	(19)%	
Gross margin %	26.9%	34.8%	(790)bps	
R&D	(778)	(766)	2%	
SG&A	(518)	(532)	(3)%	
Other income and expenses	(18)	27		
Operating profit/(loss)	(254)	46		
Operating margin %	(6.4)%	1.2%	(760)bps	



Networks net sales grew 4%. On a constant currency basis, Networks net sales were flat.

The growth in Networks net sales was due to IP Routing, Mobile Access and Optical Networks, partially offset by a decrease in Fixed Access.

The growth in IP Routing was primarily due to our market-leading portfolio. The growth in Mobile Access was primarily due to network deployment services, partially offset by decreases in legacy radio technologies. The growth in Optical

Networks was primarily due to our market-leading portfolio. The decrease in Fixed Access was primarily due to copper access technologies.

Due to the evolving readiness of the 5G ecosystem, in Q1 2019, we were unable to recognize approximately EUR 200 million of net sales related to 5G deliveries mainly in North America, which we expect to recognize in full before the end of 2019.

The decrease in Networks gross profit was primarily due to Mobile Access and Fixed Access, partially offset by IP Routing and Optical Networks. The decrease in Mobile Access and Fixed Access gross profit was primarily due to lower gross margin. The increase in IP Routing and Optical Networks gross profit was primarily due to higher net sales.

The gross margin decline in Mobile Access was broad-based, extending across nearly all products and services, as well as regions. From a products and services perspective, the Mobile Access gross margin decline was particularly due to legacy radio technologies. In Q1 2019, Mobile Access gross margin was negatively affected by an unfavorable product mix, with a greater proportion of network deployment services net sales, as well as a lower proportion of software net sales due to the absence of radio software releases in the quarter. From a regional perspective, the Mobile Access gross margin decline was particularly due to North America and Asia-Pacific. This was partially offset by favorable regional mix, with a larger proportion of net sales in North America.

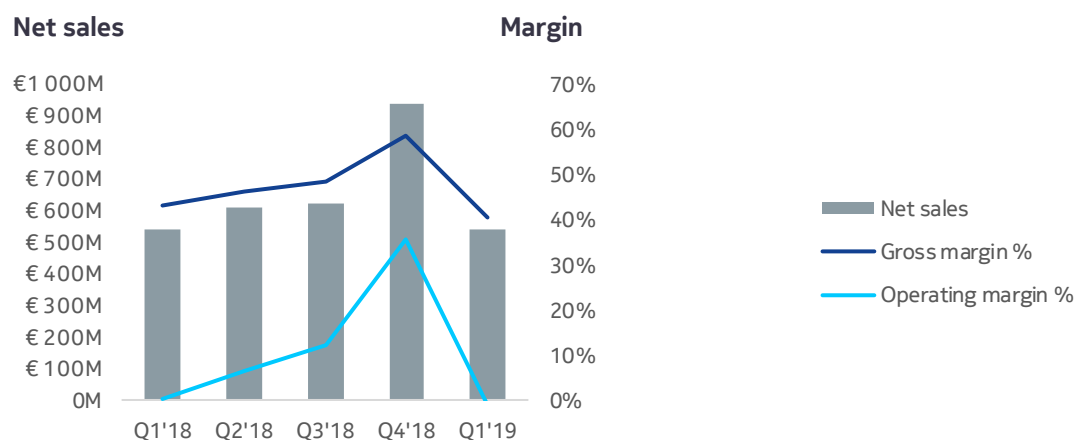
The lower gross margin in Fixed Access was primarily due to copper access technologies, digital home and services. In Q1 2019, Fixed Access gross margin declined across all regions and was also negatively affected by an unfavorable regional mix, with a smaller proportion of net sales in North America. From a regional perspective, the Fixed Access gross margin decline was particularly due to North America.

The increase in Networks R&D expenses was primarily due to higher 5G investments in Mobile Access, partially offset by progress related to Nokia's cost savings program.

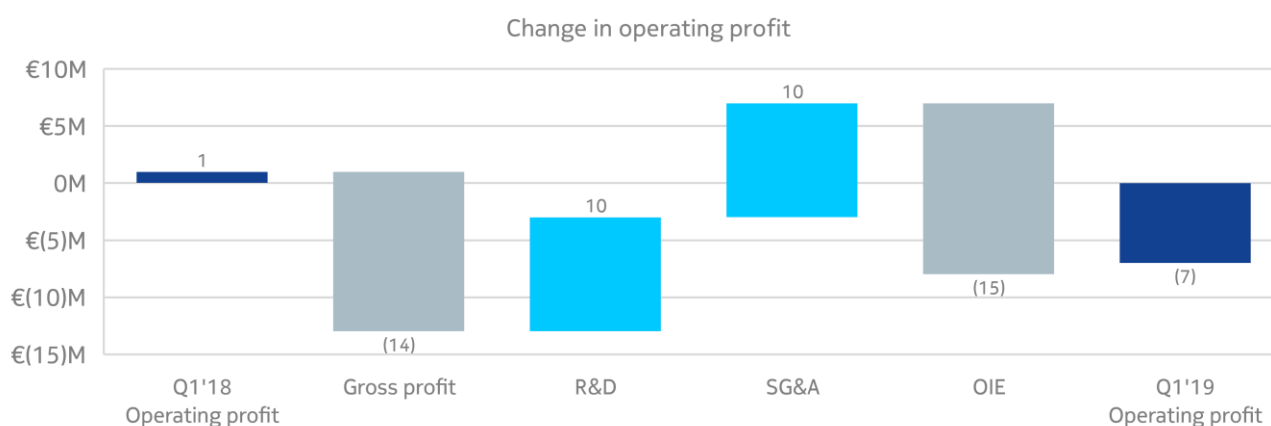
The decrease in Networks SG&A expenses was primarily due to progress related to Nokia's cost savings program.

The net negative fluctuation in other income and expenses was primarily due to foreign exchange hedging.

Nokia Software, Q1 2019 compared to Q1 2018



EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	543	541	0%	(4)%
Gross profit	219	233	(6)%	
Gross margin %	40.3%	43.1%	(280)bps	
R&D	(118)	(128)	(8)%	
SG&A	(101)	(111)	(9)%	
Other income and expenses	(7)	8		
Operating profit/(loss)	(7)	1		
Operating margin %	(1.3)%	0.2%	(150)bps	



Nokia Software net sales grew slightly. On a constant currency basis, Nokia Software net sales decreased 4%.

The slight growth in Nokia Software net sales was primarily due to applications and, to a lesser extent, core networks. In applications, growth was particularly driven by sales of our CloudBand and self-organizing network solutions. From a regional perspective, applications and core networks both grew in North America and Middle East & Africa and declined in Asia-Pacific.

The decrease in Nokia Software gross profit was primarily due to lower gross margin in core networks, partially offset by slightly higher gross margin in applications.

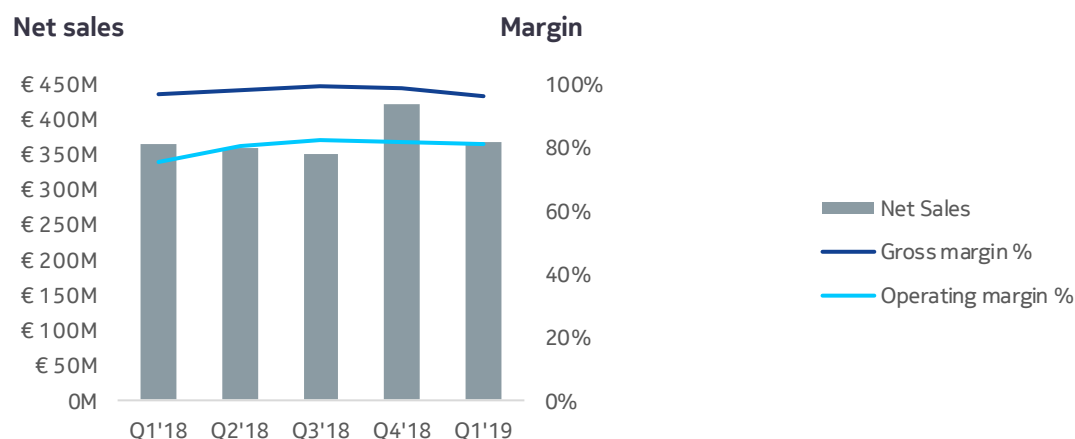
The decrease in Nokia Software R&D expenses was primarily due to an increase in R&D productivity achieved through our investments in a Common Software Foundation and the further optimization of resources.

The decrease in Nokia Software SG&A expenses was primarily due to the integration and streamlining of core networks.

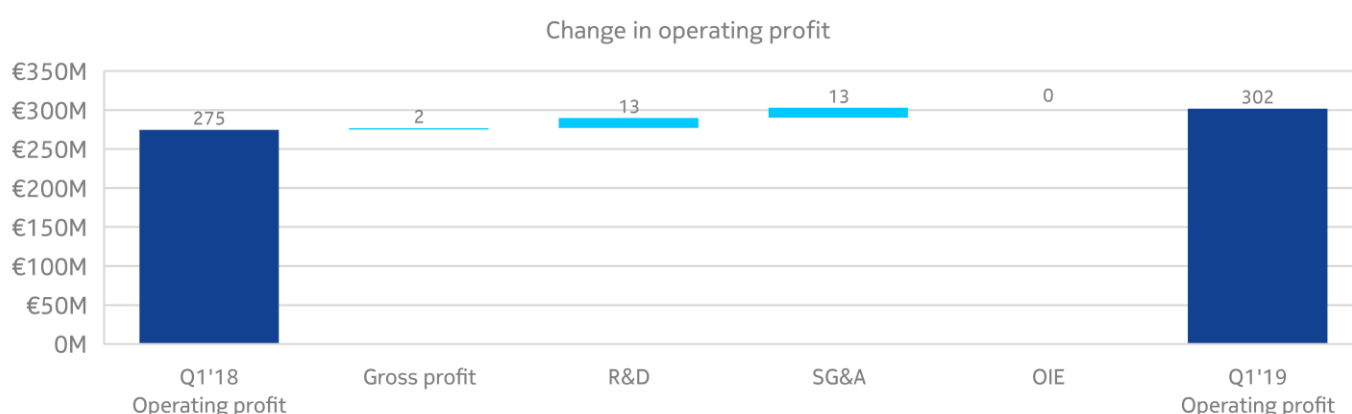
Completing the integration of core networks into Nokia Software is a key priority, and we intend to transform our core networks business to support growth and higher returns, similar to how we transformed our applications business over the past 3 years. As we drive this, we expect overall operating expenses for Nokia Software to continue at similar or slightly higher levels as in Q1 2019.

The net negative fluctuation in other income and expenses was primarily due to foreign exchange hedging and higher loss allowances on trade receivables.

Nokia Technologies, Q1 2019 compared to Q1 2018



EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	370	365	1%	0%
Gross profit	357	355	1%	
Gross margin %	96.5%	97.3%	(80)bps	
R&D	(30)	(43)	(30)%	
SG&A	(25)	(39)	(36)%	
Other income and expenses	0	0		
Operating profit/(loss)	302	274	10%	
Operating margin %	81.6%	75.1%	650bps	



Nokia Technologies net sales grew 1%. On a constant currency basis, Nokia Technologies net sales were flat.

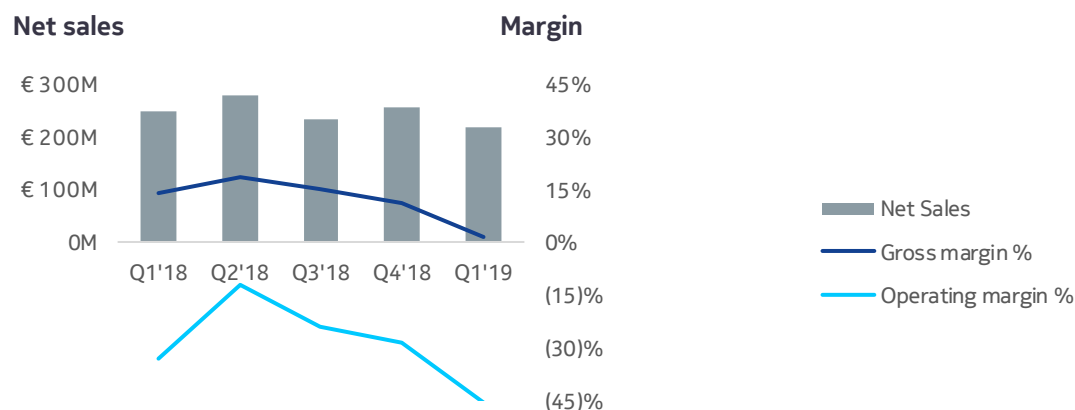
The EUR 370 million of net sales in the first quarter 2019 related entirely to licensing. Of the EUR 365 million of net sales in the first quarter 2018, EUR 349 million related to licensing and EUR 16 million related to digital health products. We sold our digital health business in May 2018.

The growth in Nokia Technologies net sales was primarily due to higher one-time catch-up net sales related to a new license agreement and the sale of certain patents, partially offset by lower recurring licensing net sales, as well as the sale of our digital health business in May 2018. One-time net sales amounted to approximately EUR 40 million in the first quarter 2019 and approximately EUR 10 million in the first quarter 2018.

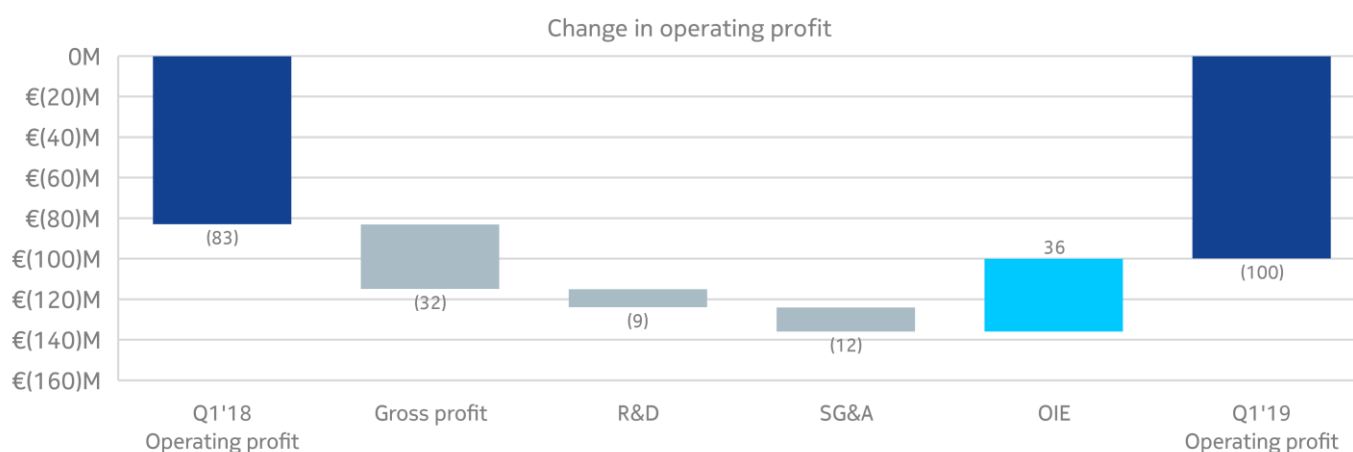
The decrease in Nokia Technologies R&D expenses was primarily due to the absence of costs related to digital health, following the sale of our digital health business.

The decrease in Nokia Technologies SG&A expenses was primarily due to the absence of costs related to digital health, following the sale of our digital health business and lower business support costs.

Group Common and Other, Q1 2019 compared to Q1 2018



EUR million	Q1'19	Q1'18	YoY change	Constant currency YoY change
Net sales	220	252	(13)%	(12)%
Gross profit	4	36	(89)%	
Gross margin %	1.8%	14.3%	(1 250)bps	
R&D	(83)	(74)	12%	
SG&A	(64)	(52)	23%	
Other income and expenses	43	7		
Operating profit/(loss)	(100)	(83)		
Operating margin %	(45.5)%	(32.9)%	(1 260)bps	



Group Common and Other net sales decreased 13%. On a constant currency basis, Group Common and Other net sales decreased 12%.

The decrease in Group Common and Other net sales was primarily due to Alcatel Submarine Networks. The decrease in Alcatel Submarine Networks was primarily due to a lower level of ongoing projects.

The decrease in Group Common and Other gross profit was primarily due to lower gross margin in Radio Frequency Systems and Alcatel Submarine Networks and, to a lesser extent, lower net sales.

The increase in Group Common and Other R&D and SG&A expenses was primarily due to longer-term investments to drive digitalization for the future.

The net positive fluctuation in other income and expenses was primarily due to higher gains in Nokia’s venture fund investments.

Shares

The total number of Nokia shares on March 31, 2019, equaled 5 635 968 159. On March 31, 2019, Nokia and its subsidiary companies owned 37 258 065 Nokia shares, representing approximately 0.7% of the total number of Nokia shares and voting rights.

Financial statement information

Consolidated income statement (condensed, unaudited)

EUR million	Reported Q1'19	Reported Q1'18	Non-IFRS Q1'19	Non-IFRS Q1'18
Net sales (notes 2, 3, 4)	5 032	4 924	5 057	4 929
Cost of sales	(3 452)	(3 119)	(3 416)	(2 988)
Gross profit (notes 2, 3)	1 580	1 805	1 641	1 941
Research and development expenses	(1 156)	(1 167)	(1 009)	(1 011)
Selling, general and administrative expenses	(824)	(847)	(708)	(732)
Other income and expenses	(124)	(127)	17	41
Operating (loss)/profit (notes 2, 3)	(524)	(336)	(59)	239
Share of results of associated companies and joint ventures	(5)	(4)	(5)	(4)
Financial income and expenses	(55)	(108)	(93)	(116)
(Loss)/profit before tax (note 2)	(583)	(448)	(157)	119
Income tax benefit/(expense)	142	94	41	(36)
(Loss)/profit from continuing operations (note 2)	(442)	(354)	(116)	83
(Loss)/profit attributable to equity holders of the parent	(444)	(351)	(118)	86
Non-controlling interests	2	(3)	2	(3)
(Loss)/profit from discontinued operations	(3)	163	0	0
(Loss)/profit attributable to equity holders of the parent	(3)	163	0	0
Non-controlling interests	0	0	0	0
(Loss)/profit for the period	(444)	(191)	(116)	83
(Loss)/profit attributable to equity holders of the parent	(446)	(188)	(118)	86
Non-controlling interests	2	(3)	2	(3)
Earnings per share, EUR (for profit/(loss) attributable to equity holders of the parent)				
Basic earnings per share				
Continuing operations	(0.08)	(0.06)	(0.02)	0.02
Discontinued operations	0.00	0.03	0.00	0.00
(Loss)/profit for the period	(0.08)	(0.03)	(0.02)	0.02
Diluted earnings per share				
Continuing operations	(0.08)	(0.06)	(0.02)	0.02
Discontinued operations	0.00	0.03	0.00	0.00
(Loss)/profit for the period	(0.08)	(0.03)	(0.02)	0.02
Average number of shares ('000 shares)				
Basic				
Continuing operations	5 596 127	5 583 621	5 596 127	5 583 621
Discontinued operations	5 596 127	5 583 621	5 596 127	5 583 621
(Loss)/profit for the period	5 596 127	5 583 621	5 596 127	5 583 621
Diluted				
Continuing operations	5 596 127	5 583 621	5 596 127	5 601 031
Discontinued operations	5 596 127	5 601 031	5 596 127	5 601 031
(Loss)/profit for the period	5 596 127	5 583 621	5 596 127	5 601 031

The above condensed consolidated income statement should be read in conjunction with accompanying notes.

Consolidated statement of comprehensive income (condensed, unaudited)

EUR million	Reported Q1'19	Reported Q1'18
Loss for the period	(444)	(191)
Other comprehensive income		
Items that will not be reclassified to profit or loss:		
Remeasurements of defined benefit pensions	(212)	241
Income tax related to items that will not be reclassified to profit or loss	61	(72)
Items that may be reclassified subsequently to profit or loss:		
Translation differences	336	(285)
Net investment hedges	(95)	93
Cash flow and other hedges	(12)	(31)
Financial assets at fair value through other comprehensive income	(10)	(20)
Other changes, net	(1)	0
Income tax related to items that may be reclassified subsequently to profit or loss	23	(8)
Other comprehensive income/(loss), net of tax	90	(82)
Total comprehensive loss	(354)	(273)
Attributable to:		
Equity holders of the parent	(358)	(270)
Non-controlling interests	4	(3)
	(354)	(273)
Attributable to equity holders of the parent:		
Continuing operations	(355)	(433)
Discontinued operations	(3)	163
	(358)	(270)
Attributable to non-controlling interests:		
Continuing operations	4	(3)
Discontinued operations	0	0
	4	(3)

The above condensed consolidated statement of comprehensive income should be read in conjunction with accompanying notes.

Consolidated statement of financial position (condensed, unaudited)

EUR million	March 31, 2019	March 31, 2018	December 31, 2018
ASSETS			
Goodwill	5 527	5 164	5 452
Other intangible assets	3 139	3 752	3 353
Property, plant and equipment	1 777	1 789	1 790
Right-of-use assets (note 12)	954	0	0
Investments in associated companies and joint ventures	152	121	145
Non-current financial investments ¹ (note 8)	714	658	690
Deferred tax assets (note 6)	5 214	4 636	4 911
Other non-current financial assets (note 8)	429	336	373
Defined benefit pension assets (note 5)	4 336	4 020	4 224
Other non-current assets	305	364	308
Non-current assets	22 546	20 840	21 246
Inventories	3 528	2 777	3 168
Trade receivables (note 8)	4 930	4 624	4 856
Contract assets	1 510	1 692	1 875
Prepaid expenses and accrued income	1 039	1 026	1 024
Social security, VAT and other indirect taxes	553	562	514
Divestment related receivables	47	78	67
Other	439	386	443
Current income tax assets	296	489	227
Other current financial assets (note 8)	327	229	243
Current financial investments ¹ (note 8)	532	1 342	612
Cash and cash equivalents (note 8)	5 862	6 555	6 261
Current assets	18 025	18 734	18 266
Assets held for sale	8	22	5
Total assets	40 579	39 596	39 517

	March 31, 2019	March 31, 2018	December 31, 2018
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital	246	246	246
Share issue premium	407	395	436
Treasury shares	(368)	(418)	(408)
Translation differences	(334)	(1 141)	(592)
Fair value and other reserves	895	970	1 063
Reserve for invested unrestricted equity	15 596	15 589	15 606
(Accumulated deficit)/retained earnings	(1 509)	153	(1 062)
Total capital and reserves attributable to equity holders of the parent	14 932	15 795	15 289
Non-controlling interests	86	79	82
Total equity	15 018	15 874	15 371
Long-term interest-bearing liabilities (notes 8, 10)	3 650	3 169	2 826
Long-term lease liabilities (notes 8, 12)	813	3	2
Deferred tax liabilities (note 6)	332	409	350
Defined benefit pension and post-retirement liabilities (note 5)	4 623	4 268	4 327
Contract liabilities	1 036	1 244	1 113
Deferred revenue and other long-term liabilities	824	1 687	852
Deferred revenue	738	891	764
Other (note 8)	86	796	88
Provisions (note 9)	538	721	572
Non-current liabilities	11 816	11 501	10 042
Short-term interest-bearing liabilities (notes 8, 10)	753	548	994
Short-term lease liabilities (notes 8, 12)	254	0	0
Other financial liabilities (note 8)	883	241	891
Current income tax liabilities	217	233	268
Trade payables (note 8)	4 181	3 584	4 773
Contract liabilities	2 694	2 473	2 383
Accrued expenses, deferred revenue and other liabilities	3 922	4 104	3 940
Deferred revenue	155	155	155
Salaries, wages and social charges	1 641	1 735	1 426
Other	2 127	2 214	2 359
Provisions (note 9)	840	1 038	855
Current liabilities	13 745	12 221	14 104
Total shareholders' equity and liabilities	40 579	39 596	39 517
Interest-bearing liabilities, EUR million	4 403	3 717	3 820
Shareholders' equity per share, EUR	2.67	2.83	2.73
Number of shares (1 000 shares, excluding treasury shares)	5 598 710	5 587 547	5 593 162

March 31, 2018 comparative statement of financial position presented for the adoption of IFRS 15, Revenues from Contracts with Customers, has been revised from that presented in the first quarter 2018 interim report. Refer to note 1, Basis of preparation.

The above condensed consolidated statement of financial position should be read in conjunction with accompanying notes.

Consolidated statement of cash flows (condensed, unaudited)

EUR million	Q1'19	Q1'18
Cash flow from operating activities		
Loss for the period	(444)	(191)
Adjustments		
Depreciation and amortization	408	372
Restructuring charges	126	131
Financial income and expenses	54	14
Income tax benefit	(141)	(165)
Other	4	9
Change in net working capital		
Decrease in receivables ¹	381	551
Increase in inventories	(279)	(168)
Decrease in non-interest-bearing liabilities ¹	(635)	(410)
Cash (used in)/from operations	(526)	143
Interest received	16	24
Interest paid	(60)	(89)
Income taxes paid, net	(177)	(188)
Net cash used in operating activities	(747)	(110)
Cash flow from investing activities		
Purchase of property, plant and equipment and intangible assets	(175)	(260)
Proceeds from sale of property, plant and equipment and intangible assets	0	12
Acquisition of businesses, net of cash acquired	0	(12)
Proceeds from disposal of businesses, net of disposed cash	9	0
Purchase of current financial investments	(305)	(836)
Proceeds from maturities and sale of current financial investments	392	420
Purchase of non-current financial investments	(20)	(19)
Proceeds from sale of non-current financial investments	29	29
Other	0	2
Net cash used in investing activities	(70)	(664)
Cash flow from financing activities		
Purchase of equity instruments of subsidiaries	(1)	0
Proceeds from long-term borrowings	749	30
Repayment of long-term borrowings	(231)	(12)
Repayment of short-term borrowings	(19)	(1)
Payment of lease liabilities	(64)	0
Dividends paid	(1)	(15)
Net cash from financing activities	433	2
Translation differences	(15)	(42)
Net decrease in cash and cash equivalents	(399)	(814)
Cash and cash equivalents at beginning of period	6 261	7 369
Cash and cash equivalents at end of period	5 862	6 555

¹Comparatives for Q1'18 have been adjusted to reflect the revision to the adoption of IFRS 15, Revenue from Contracts with Customers, in the third quarter 2018.

Consolidated statement of cash flows combines cash flows from both the continuing and the discontinued operations. The figures in the consolidated statement of cash flows cannot be directly traced from the statement of financial position without additional information as a result of acquisitions and disposals of subsidiaries and net foreign exchange differences arising on consolidation. The above condensed consolidated statement of cash flows should be read in conjunction with accompanying notes.

Consolidated statement of changes in shareholders' equity (condensed, unaudited)

EUR million	Share capital	Share issue premium	Treasury shares	Translation difference	Fair value and other reserves	Reserve for invested unrestricted equity	(Accumulated deficit)/retained earnings	Attributable to equity holders of the parent	Non-controlling interest	Total equity
January 1, 2018	246	447	(1 480)	(932)	843	15 616	1 345	16 084	80	16 164
Remeasurements of defined benefit pension plans, net of tax	0	0	0	0	170	0	0	170	0	170
Translation differences	0	0	0	(284)	0	0	0	(284)	0	(284)
Net investment hedges, net of tax	0	0	0	75	0	0	0	75	0	75
Cash flow hedges, net of tax	0	0	0	0	(25)	0	0	(25)	0	(25)
Financial assets at fair value through other comprehensive income, net of tax	0	0	0	0	(17)	0	0	(17)	0	(17)
Loss for the period	0	0	0	0	0	0	(188)	(188)	(3)	(191)
Total comprehensive loss	0	0	0	(209)	127	0	(188)	(270)	(3)	(273)
Share-based payment	0	4	0	0	0	0	0	4	0	4
Excess tax benefit on share-based payment	0	1	0	0	0	0	0	1	0	1
Settlement of performance and restricted shares	0	(57)	62	0	0	(26)	0	(21)	0	(21)
Cancellation of treasury shares	0	0	1 000	0	0	0	(1 000)	0	0	0
Other change in non-controlling interest	0	0	0	0	0	0	(2)	(2)	2	0
Total of other equity movements	0	(52)	1 062	0	0	(26)	(1 003)	(19)	2	(17)
March 31, 2018	246	395	(418)	(1 141)	970	15 589	153	15 795	79	15 874
December 31, 2018	246	436	(408)	(592)	1 063	15 606	(1 062)	15 289	82	15 371
Remeasurements of defined benefit pension plans, net of tax	0	0	0	0	(151)	0	0	(151)	0	(151)
Translation differences	0	0	0	334	0	0	0	334	2	336
Net investment hedges, net of tax	0	0	0	(77)	1	0	0	(76)	0	(76)
Cash flow hedges, net of tax	0	0	0	0	(10)	0	0	(10)	0	(10)
Financial assets at fair value through other comprehensive income, net of tax	0	0	0	0	(8)	0	0	(8)	0	(8)
Other decrease, net	0	0	0	0	0	0	(1)	(1)	0	(1)
Loss for the period	0	0	0	0	0	0	(446)	(446)	2	(444)
Total comprehensive loss	0	0	0	257	(168)	0	(447)	(358)	4	(354)
Share-based payment	0	17	0	0	0	0	0	17	0	17
Excess tax benefit on share-based payment	0	2	0	0	0	0	0	2	0	2
Settlement of performance and restricted shares	0	(48)	40	0	0	(10)	0	(18)	0	(18)
Other movements	0	0	0	0	0	0	0	0	0	0
Total of other equity movements	0	(29)	40	0	0	(10)	0	2	0	2
March 31, 2019	246	407	(368)	(334)	895	15 596	(1 509)	14 932	86	15 018

The above condensed consolidated statement of changes in shareholders' equity should be read in conjunction with accompanying notes.

Notes to Financial statements

1. BASIS OF PREPARATION

This unaudited and condensed consolidated financial statement information of Nokia has been prepared in accordance with IAS 34, Interim Financial Reporting, and it should be read in conjunction with the consolidated financial statements for 2018 prepared in accordance with IFRS as published by the IASB and adopted by the EU. The same accounting policies, methods of computation and applications of judgment are followed in this financial statement information as was followed in the consolidated financial statements for 2018 with the exception of changes resulting from adoption of IFRS 16, Leases as described in note 12, "New accounting standards".

This financial report was authorized for issue by management on April 24, 2019.

Nokia presents financial information on reported, non-IFRS and constant currency basis. Non-IFRS measures presented in this document exclude costs related to the acquisition of Alcatel-Lucent and related integration, goodwill impairment charges, intangible asset amortization and other purchase price fair value adjustments, restructuring and associated charges and certain other items that may not be indicative of Nokia's underlying business performance. In order to allow full visibility on determining non-IFRS results, information on non-IFRS exclusions is presented separately for each of the components of profit or loss.

Constant currency reporting provides additional information on change in financial measures on a constant currency basis in order to better reflect the underlying business performance. Therefore, change in financial measures at constant currency excludes the impact of changes in exchange rates in comparison to euro, our reporting currency.

Non-IFRS or constant currency financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS, and either of these financial measures as used by Nokia may not be comparable to similarly titled measures used by other companies or persons.

In 2017, Nokia and China Huaxin Post & Telecommunication Economy Development Center (China Huaxin) commenced operations of the joint venture Nokia Shanghai Bell (NSB). As part of the transaction, China Huaxin obtained the right to fully transfer its ownership interest in NSB to Nokia in exchange for a future cash settlement. To reflect its conditional obligation to China Huaxin, Nokia derecognized the non-controlling interest and records the present value of the expected future cash settlement as a financial liability within current liabilities in line with the option exercise period. The unwinding of the present value discount on the financial liability is recorded as interest expense and any changes in the estimated future cash settlement are recorded within financial income and expense.

Management identified its geographic areas as the relevant category to present disaggregated revenue. Nokia's primary customer base consists of companies that operate on a country specific or a regional basis and are subject to macroeconomic conditions specific to those geographic areas. Further, although Nokia's technology cycle is similar around the world, each country or region is inherently in a different stage of that cycle, often influenced by macroeconomic conditions. Each reportable segment, as described in note 3, Segment Information, operates in every geographic area as described in note 4 Net Sales. No reportable segment has a specific revenue concentration in any geographic area other than Nokia Technologies, which is included within Europe. Each type of customer, as disclosed in Note 4, operates in all geographic areas.

March 31, 2018 comparative statement of financial position presented for the adoption of IFRS 15, Revenues from Contracts with Customers, has been revised from that presented in the first quarter 2018 interim report as follows [increase/(decrease)]: Current assets EUR 334 million - Trade receivables EUR 116 million, Contract assets EUR 286 million and Prepaid expenses and accrued income EUR (68) million; Current liabilities EUR 334 million - Accrued expenses, deferred revenue and other liabilities EUR 586 million and Contract liabilities EUR (252) million. EUR 6 million was reclassified from Non-current contract liabilities to Deferred revenue and other long-term liabilities. As disclosed in our third quarter 2018 interim report, management completed its evaluation of transactions and balances underlying contract assets, contract liabilities and other items impacted by the adoption of IFRS 15. As a result of these procedures, management has revised its March 31, 2018 comparative statement of financial position. These adjustments had no impact on the full year 2018 or 2017 consolidated financial statements.

Percentages and figures presented herein may include rounding differences and therefore may not add up precisely to the totals presented and may vary from previously published financial information.

New and amended standards and interpretations

On January 1, 2019, Nokia adopted IFRS 16, Leases. The nature of the new standard, impact of adoption on Nokia's consolidated financial statements and changes to Nokia's accounting policies resulting from the adoption are described in detail in note 12, "New accounting standards". Other amendments and interpretations that became effective on January 1, 2019, did not have a material impact on Nokia's consolidated financial statements.

New standards or amendments to existing standards issued by the IASB that are not yet effective are not expected to have a material impact on the consolidated financial statements of Nokia when adopted.

Currency exposures, approximately (unaudited)

	Q1'19		Q1'18		Q4'18	
	Net sales	Total costs	Net sales	Total costs	Net sales	Total costs
EUR	~20%	~25%	~25%	~30%	~25%	~30%
USD	~50%	~45%	~45%	~40%	~45%	~45%
CNY	~5%	~10%	~10%	~10%	~10%	~10%
Other	~25%	~20%	~20%	~20%	~20%	~15%
Total	100%	100%	100%	100%	100%	100%

End of Q1'19 balance sheet rate 1 EUR = 1.12 USD, end of Q1'18 balance sheet rate 1 EUR = 1.23 USD and end of Q4'18 balance sheet rate 1 EUR = 1.15 USD

Exchange rates

Nokia is a company with global operations and net sales derived from various countries and invoiced in various currencies. Therefore, our business and results from operations are exposed to changes in exchange rates between the euro, our reporting currency, and other currencies, such as the US dollar and the Chinese yuan. To mitigate the impact of changes in exchange rates on our results, we hedge operative forecasted net foreign exchange exposures, typically within a 12-month horizon, and apply hedge accounting in the majority of cases.

2. NON-IFRS TO REPORTED RECONCILIATION (unaudited)

In addition to information on our reported IFRS results, Nokia provides certain information on a non-IFRS, or underlying business performance, basis. Non-IFRS measures presented in this document exclude costs related to the acquisition of Alcatel-Lucent and related integration, goodwill impairment charges, intangible asset amortization and other purchase price fair value adjustments, restructuring and associated charges and certain other items that may not be indicative of Nokia's underlying business performance. Nokia believes that the non-IFRS results provide meaningful supplemental information to both management and investors regarding Nokia's underlying business performance by excluding the above-described items. These non-IFRS financial measures should not be viewed in isolation or as substitutes to the equivalent IFRS measure(s), but should be used in conjunction with the most directly comparable IFRS measure(s) in the reported results.

Q1'19											
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other income and expenses	Operating profit/(loss)	Financial income and expenses	Income tax (expense)/benefit	Profit/(loss) from continuing operations	Attributable to the equity holders of the parent	Attributable to non-controlling interests
Non-IFRS	5 057	(3 416)	(1 009)	(708)	17	(59)	(93)	41	(116)	(118)	2
Release of acquisition-related fair value adjustments to deferred revenue and inventory	(2)				2	0			0		
Amortization and depreciation of acquired intangible assets and property, plant and equipment			(142)	(87)		(230)		54	(176)	(176)	
Transaction and related costs, including integration costs				(27)		(27)		6	(21)	(21)	
Restructuring and associated charges	(22)	(4)			(136)	(163)		33	(130)	(130)	
Product portfolio strategy costs		(33)	(5)			(38)		8	(30)	(30)	
Impairment of assets					(6)	(6)		1	(5)	(5)	
Divestment of businesses					(1)	(2)			(2)	(2)	
Costs associated with contract exit		1			(1)	0			0		
Change in financial liability to acquire NSB non-controlling interest						0	38		38	38	
Total non-IFRS exclusions	(25)	(36)	(147)	(115)	(141)	(464)	38	101	(326)	(326)	0
Reported	5 032	(3 452)	(1 156)	(824)	(124)	(524)	(55)	142	(442)	(444)	2

Q1'18											
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other income and expenses	Operating profit/(loss)	Financial income and expenses	Income tax (expense)/benefit	Profit/(loss) from continuing operations	Attributable to the equity holders of the parent	Attributable to non-controlling interests
Non-IFRS	4 929	(2 988)	(1 011)	(732)	41	239	(116)	(36)	83	86	(3)
Release of acquisition-related fair value adjustments to deferred revenue and inventory	(5)					(5)		2	(3)	(3)	
Amortization and depreciation of acquired intangible assets and property, plant and equipment		(1)	(148)	(93)		(242)		59	(183)	(183)	
Transaction and related costs, including integration costs		(1)		(22)		(23)		5	(18)	(18)	
Restructuring and associated charges					(153)	(154)		32	(122)	(122)	
Product portfolio strategy costs		(128)	(8)			(136)		28	(108)	(108)	
Impairment of assets					(15)	(15)		4	(11)	(11)	
Change in financial liability to acquire NSB non-controlling interest						0	8		8	8	
Deferred tax valuation allowance						0		(12)	(12)	(12)	
Operating model integration						0		13	13	13	
Total non-IFRS exclusions	(5)	(131)	(156)	(116)	(168)	(575)	8	130	(437)	(437)	0
Reported	4 924	(3 119)	(1 167)	(847)	(127)	(336)	(108)	94	(354)	(351)	(3)

3. SEGMENT INFORMATION (unaudited)

Nokia has three reportable segments for financial reporting purposes: (1) Networks, (2) Nokia Software and (3) Nokia Technologies. Segment-level information for Group Common and Other is also presented.

Networks reportable segment consists of four aggregated operating segments: (1) Mobile Networks, (2) Global Services, (3) Fixed Networks and (4) IP/Optical Networks. The aggregated operating segments have similar economic characteristics, such as long-term margins; have similar products, production processes, distribution methods and customers; and operate in a similar regulatory environment.

In addition, Nokia provides net sales disclosure for the following businesses within Networks reportable segment: (i) Mobile Access (comprises Mobile Networks and Global Services operating segments), (ii) Fixed Access (comprises Fixed Networks operating segment), (iii) IP Routing (comprises part of IP/Optical Networks operating segment) and (iv) Optical Networks (comprises part of IP/Optical Networks operating segment).

Nokia adopted its current operational and reporting structure on January 1, 2019. The reporting structure was revised to better reflect Nokia's strategy, organizational structure and the way the management evaluates operational performance and allocates resources. Previously Nokia had two businesses: Nokia's Networks business and Nokia Technologies, and four reportable segments for financial reporting purposes: (1) Ultra Broadband Networks, (2) Global Services and (3) IP Networks and Applications within Nokia's Networks business; and (4) Nokia Technologies. Furthermore, Ultra Broadband Networks was comprised of two aggregated operating segments: Mobile Networks and Fixed Networks, and IP Networks and Applications was comprised of two aggregated operating segments: IP/Optical Networks and Nokia Software. The most significant changes to the operational and reporting structure are the following: Nokia Software operating segment was moved from within IP Networks and Applications reportable segment into a separate reportable segment and activities related to the Cloud Core software portfolio were reclassified from the Mobile Networks and Global Services operating segments to the Nokia Software reportable segment. Additionally, the Mobile Networks, Global Services, Fixed Networks and IP/Optical Networks operating segments were aggregated into one reportable segment called Networks.

The President and CEO is the chief operating decision maker and monitors the operating results of operating and reportable segments for the purpose of making decisions about resource allocation and performance assessment. Key financial performance measures of the segments include primarily net sales and operating profit. The evaluation of segment performance and allocation of resources is based on non-IFRS operating profit.

Accounting policies of the segments are the same as those described in note 2, "Significant accounting policies" of our Annual Report for 2018. Inter-segment revenues and transfers are accounted for as if the revenues were to third parties, that is, at current market prices. Non-IFRS exclusions are not allocated to the segments.

Networks

Networks comprises Mobile Networks, Global Services, Fixed Networks and IP/Optical Networks operating segments.

The Mobile Networks operating segment focuses on mobile radio including macro radio, small cells and cloud native radio solutions for communications service providers and enterprises.

Global Services operating segment provides a wide range of professional services with multi-vendor capabilities, covering network planning and optimization, network implementation, systems integration as well as company-wide managed services.

The Fixed Networks operating segment provides copper and fiber access products, solutions and services. The portfolio allows for a customized combination of technologies that brings fiber to the most economical point for the customer.

The IP/Optical Networks operating segment provides IP routing and optical transport systems, each with their own software and services to build high capacity network infrastructure for the internet and global connectivity.

Nokia Software

The Nokia Software operating segment offers the Cloud Core software portfolio in addition to software applications spanning customer experience management, network operations and management, communications and collaboration, policy and charging, as well as Cloud, IoT, security, and analytics platforms that enable digital services providers and enterprises to accelerate innovation, monetize services, and optimize their customer experience.

Nokia Technologies

The Nokia Technologies operating segment, building on decades of innovation and R&D leadership in technologies used in virtually all mobile devices used today, is expanding Nokia patent licensing business, reintroducing the Nokia brand to smartphones through brand licensing, and establishing a technology licensing business. The majority of net sales and related costs and expenses attributable to licensing and patenting the separate patent portfolios of Nokia Technologies, Nokia's Networks business, and Nokia Bell Labs are recorded in Nokia Technologies. Each reportable segment continues to separately record its own research and development expenses.

Group Common and Other

Group Common and Other includes Alcatel Submarine Networks and Radio Frequency Systems, both of which are being managed as separate entities. In addition, Group Common and Other includes Nokia Bell Labs' operating expenses, as well as certain corporate-level and centrally managed operating expenses.

Q1'19	Networks ¹	Nokia Software	Nokia Technologies	Group Common and Other	Eliminations	Non-IFRS total	Non-IFRS exclusions ²	Nokia Total
EUR million								
Net sales	3 944	543	370	220	(20)	5 057	(25)	5 032
Cost of sales	(2 882)	(324)	(13)	(217)	20	(3 416)	(36)	(3 452)
Gross profit	1 061	219	357	4	0	1 641	(61)	1 580
<i>% of net sales</i>	26.9%	40.3%	96.5%	1.8%		32.5%		31.4%
Research and development expenses	(778)	(118)	(30)	(83)	0	(1 009)	(147)	(1 156)
Selling, general and administrative expenses	(518)	(101)	(25)	(64)	0	(708)	(115)	(824)
Other income and expenses	(18)	(7)	0	43	0	17	(141)	(124)
Operating profit/(loss)	(254)	(7)	302	(100)	0	(59)	(464)	(524)
<i>% of net sales</i>	(6.4)%	(1.3)%	81.6%	(45.5)%		(1.2)%		(10.4)%
<i>Depreciation and amortization</i>	(138)	(20)	(8)	(13)	0	(178)	(230)	(408)
<i>Share of results of associated companies and joint ventures</i>	(5)	0	0	0	0	(5)	0	(5)
<i>EBITDA</i>	(121)	13	310	(88)	0	114	(235)	(121)

¹ Mobile Access net sales of EUR 2 473 million, Fixed Access net sales of EUR 426 million, IP Routing net sales of EUR 645 million and Optical Networks net sales of EUR 400 million.

² Non-IFRS results exclude costs related to the Alcatel-Lucent transaction and related integration, goodwill impairment charges, intangible asset amortization and purchase price related items, restructuring and associated charges, and certain other items that may not be indicative of Nokia's underlying business performance.

Q1'18	Networks ¹	Nokia Software	Nokia Technologies	Group Common and Other	Eliminations	Non-IFRS total	Non-IFRS exclusions ²	Nokia Total
EUR million								
Net sales	3 783	541	365	252	(12)	4 929	(5)	4 924
Cost of sales	(2 466)	(308)	(10)	(216)	12	(2 988)	(131)	(3 119)
Gross profit	1 317	233	355	36	0	1 941	(135)	1 805
<i>% of net sales</i>	34.8%	43.1%	97.3%	14.3%		39.4%		36.7%
Research and development expenses	(766)	(128)	(43)	(74)	0	(1 011)	(156)	(1 167)
Selling, general and administrative expenses	(532)	(111)	(39)	(52)	0	(732)	(116)	(847)
Other income and expenses	27	8	0	7	0	41	(168)	(127)
Operating profit/(loss)	46	1	274	(83)	0	239	(575)	(336)
<i>% of net sales</i>	1.2%	0.2%	75.1%	(32.9)%		4.8%		(6.8)%
<i>Depreciation and amortization</i>	(96)	(17)	(5)	(12)	0	(130)	(242)	(372)
<i>Share of results of associated companies and joint ventures</i>	(4)	0	1	0	0	(4)	0	(4)
<i>EBITDA</i>	137	19	279	(71)	0	365	(333)	32

¹ Mobile Access net sales of EUR 2 426 million, Fixed Access net sales of EUR 445 million, IP Routing net sales of EUR 550 million and Optical Networks net sales of EUR 363 million.

² Non-IFRS results exclude costs related to the Alcatel-Lucent transaction and related integration, goodwill impairment charges, intangible asset amortization and purchase price related items, restructuring and associated charges, and certain other items that may not be indicative of Nokia's underlying business performance.

4. NET SALES (unaudited)

Net sales by geographic area

EUR million	Q1'19	Q1'18	YoY change
Asia-Pacific	963	910	6%
Europe	1 500	1 506	(0)%
Greater China	434	480	(10)%
Latin America	305	297	3%
Middle East & Africa	413	431	(4)%
North America	1 418	1 301	9%
Total	5 032	4 924	2%

Net sales by customer type

EUR million	Q1'19	Q1'18	YoY change
Communication service providers	4 207	4 080	3%
Enterprise	260	244	7%
Licensees	370	349	6%
Other ¹	195	251	(22)%
Total	5 032	4 924	2%

¹Includes net sales of Alcatel Submarine Networks (ASN) and Radio Frequency Systems (RFS), both of which are being managed as separate entities, and certain other items, such as eliminations of inter-segment revenues and certain items related to purchase price allocation. ASN and RFS net sales include also revenue from communications service providers and enterprise customers.

5. PENSIONS AND OTHER POST-EMPLOYMENT BENEFITS (unaudited)

Nokia operates a number of post-employment plans in various countries including both defined contribution and defined benefit plans. Defined benefit plans include pension plans and post-retirement welfare benefit plans, providing post-retirement healthcare benefits and life insurance coverage. Defined benefit plans expose Nokia to actuarial risks such as investment risk, interest rate risk, and life expectancy risk. The characteristics and associated risks of the defined benefit plans vary depending on legal, fiscal, and economic requirements in each country.

95% of Nokia's defined benefit obligation and 97% of plan assets fair values were remeasured as of March 31, 2019. Nokia's pension and post-retirement plans in the United States have been remeasured by updated valuations from an external actuary and the main pension plans outside of the U.S. (in Germany, United Kingdom, Switzerland and Belgium) have been remeasured based upon updated asset valuations and changes in the discount rates during the reporting period. The impact of not remeasuring other pension and post-employment obligations is considered not material.

Change in pension and post-retirement net asset/(liability) recognized

EUR million	March 31, 2019			March 31, 2018			December 31, 2018		
	Pension benefits ¹	Post-retirement benefits	Total	Pension benefits ¹	Post-retirement benefits	Total	Pension benefits ¹	Post-retirement benefits	Total
Net asset/(liability) recognized at January 1	1 884	(1 987)	(103)	1 525	(1 986)	(461)	1 525	(1 986)	(461)
Current service cost	(38)	0	(38)	(41)	0	(41)	(162)	0	(162)
Net interest income/(expense)	18	(19)	(1)	12	(16)	(4)	48	(64)	(16)
Curtailment	(8)	0	(8)	(17)	0	(17)	(43)	0	(43)
Pension and healthcare plan amendments	0	0	0	0	0	0	(12)	0	(12)
Business combinations	0	0	0	0	0	0	(1)	0	(1)
Total expense recognized in the income statement	(28)	(19)	(47)	(46)	(16)	(62)	(170)	(64)	(234)
Actuarial (losses)/gain for the period	(140)	(86)	(226)	174	100	274	326	144	470
Change in asset ceiling, excluding amounts included in net interest (expense)	14	0	14	(33)	0	(33)	(82)	0	(82)
Total recognized in other comprehensive income	(126)	(86)	(212)	141	100	241	244	144	388
Exchange differences	65	(40)	25	(60)	51	(9)	118	(87)	31
Contributions and benefits paid	55	(1)	54	53	(9)	44	181	6	187
Other movements ²	(1)	(3)	(4)	2	(3)	(1)	(14)	0	(14)
Net asset/(liability) recognized at the end of the period	1 849	(2 136)	(287)	1 615	(1 863)	(248)	1 884	(1 987)	(103)
of which:									
- Defined benefit pension assets	4 336	0	4 336	4 020	0	4 020	4 224	0	4 224
- Defined benefit pension and post-retirement liabilities	(2 487)	(2 136)	(4 623)	(2 405)	(1 863)	(4 268)	(2 340)	(1 987)	(4 327)

¹Includes pensions, retirement indemnities and other post-employment plans.

²Includes Section 420 transfers, medicare subsidies, acquisition through business combinations and other transfers.

Weighted average discount rates

	March 31, 2019	March 31, 2018	December 31, 2018
U.S. Pension	3.5	3.7	3.9
U.S. Post-retirement healthcare and other	3.2	3.5	3.7
U.S. Post-retirement group life	3.6	3.5	4.0
Euro - Pension ¹	1.1	1.4	1.5
U.K. - Pension	2.3	2.5	2.7

¹Includes pensions, retirement indemnities and end-of service gratuities.

Funded status

	March 31, 2019	March 31, 2018	December 31, 2018
Defined benefit obligation	(25 203)	(23 927)	(23 955)
Fair value of plan assets	25 546	24 202	24 479
Funded status	343	275	524
Impact of the asset ceiling	(630)	(523)	(627)
Net liability recognized at end of period	(287)	(248)	(103)

6. DEFERRED TAXES (unaudited)

At March 31, 2019, Nokia had recognized deferred tax assets of EUR 5.2 billion. The deferred tax assets are recognized to the extent it is probable that taxable profit will be available against which the tax losses, tax credits and deductible temporary differences can be utilized in the relevant jurisdictions. The majority of Nokia's recognized deferred tax assets relate to unused tax losses, tax credits and deductible temporary differences in Finland (EUR 2.6 billion) and the United States (EUR 1.3 billion). Based on the recent years' profitability in Finland and the United States, excluding certain integration costs in Finland related to the acquisition of Alcatel Lucent in 2016, and the latest forecasts of future financial performance, Nokia has been able to establish a pattern of sufficient tax profitability in Finland and the United States to conclude that it is probable that Nokia will be able to utilize the tax losses, tax credits and deductible temporary differences in the foreseeable future.

At March 31, 2019, Nokia had unrecognized deferred tax assets of approximately EUR 5 billion related to unused tax losses, tax credits and deductible temporary differences. The majority of the unrecognized deferred tax assets relate to France (approximately EUR 4 billion). These deferred tax assets have not been recognized due to uncertainty regarding their utilization. A significant portion of the French unrecognized deferred tax assets are indefinite in nature and available against future French tax liabilities, subject to a limitation of 50% of annual taxable profits.

At March 31, 2019, Nokia had deferred tax liabilities of EUR 0.3 billion. The majority of the deferred tax liabilities relate to the fair value adjustments on the purchase accounting of Alcatel-Lucent acquisition.

7. NET CASH AND CURRENT FINANCIAL INVESTMENTS (unaudited)

EUR million	March 31, 2019	March 31, 2018	December 31, 2018
Current financial investments	532	1 342	612
Cash and cash equivalents	5 862	6 555	6 261
Total cash and current financial investments	6 394	7 897	6 873
Long-term interest-bearing liabilities ¹	3 650	3 169	2 826
Short-term interest-bearing liabilities ¹	753	548	994
Interest-bearing liabilities	4 403	3 717	3 820
Net cash and current financial investments	1 991	4 179	3 053

¹Lease liabilities are not included in interest-bearing liabilities.

8. FAIR VALUE OF FINANCIAL INSTRUMENTS

(unaudited)

Financial assets and liabilities recorded at fair value are categorized based on the amount of unobservable inputs used to measure their fair value. Three hierarchical levels are based on an increasing amount of judgment associated with the inputs used to derive fair valuation for these assets and liabilities; Level 1 being market values for exchange traded products, Level 2 being primarily based on quotes from third-party pricing services and Level 3 requiring most management judgment. For more information about the valuation methods and principles, refer to note 2, "Significant accounting policies" and note 24, "Fair value of financial instruments", of our Annual Report for 2018. Items carried at fair value in the following table are measured at fair value on a recurring basis.

EURm	Carrying amounts							Fair value	
	Amortized cost	Fair value through profit or loss			Fair value through other comprehensive income			Total	Total
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3		
At March 31, 2019									
Non-current financial investments	0	6	0	708	0	0	0	714	714
Other non-current financial assets	215	0	109	6	0	99	0	429	414
Other current financial assets including derivatives	39	0	182	0	0	106	0	327	327
Trade receivables	0	0	0	0	0	4 930	0	4 930	4 930
Current financial investments	35	0	328	0	0	169	0	532	532
Cash and cash equivalents	4 659	0	1 203	0	0	0	0	5 862	5 862
Total financial assets	4 948	6	1 822	714	0	5 304	0	12 794	12 779
Long-term interest-bearing liabilities	3 650	0	0	0	0	0	0	3 650	3 686
Long-term lease liabilities ¹	813	0	0	0	0	0	0	813	813
Other long-term financial liabilities	0	0	0	18	0	0	0	18	18
Short-term interest-bearing liabilities	753	0	0	0	0	0	0	753	754
Short-term lease liabilities ¹	254	0	0	0	0	0	0	254	254
Other short-term financial liabilities including derivatives	0	0	188	695	0	0	0	883	883
Trade payables	4 181	0	0	0	0	0	0	4 181	4 181
Total financial liabilities	9 651	0	188	713	0	0	0	10 552	10 589

EURm	Carrying amounts							Fair value	
	Amortized cost	Fair value through profit or loss			Fair value through other comprehensive income			Total	Total
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3		
At December 31, 2018									
Non-current financial investments	0	8	0	682	0	0	0	690	690
Other non-current financial assets	188	0	94	6	0	85	0	373	357
Other current financial assets including derivatives	20	0	131	0	0	92	0	243	243
Trade receivables	0	0	0	0	0	4 856	0	4 856	4 856
Current financial investments	106	0	52	0	0	454	0	612	612
Cash and cash equivalents	4 531	0	1 730	0	0	0	0	6 261	6 261
Total financial assets	4 845	8	2 007	688	0	5 487	0	13 035	13 019
Long-term interest-bearing liabilities	2 826	0	0	0	0	0	0	2 826	2 818
Long-term lease liabilities ¹	2	0	0	0	0	0	0	2	2
Other long-term financial liabilities	0	0	0	14	0	0	0	14	14
Short-term interest-bearing liabilities	994	0	0	0	0	0	0	994	997
Other short-term financial liabilities including derivatives	0	0	198	693	0	0	0	891	891
Trade payables	4 773	0	0	0	0	0	0	4 773	4 773
Total financial liabilities	8 595	0	198	707	0	0	0	9 500	9 495

¹As a result of the adoption of IFRS 16 in the beginning of 2019, all lease liabilities are included in financial liabilities. The fair values of lease liabilities are based on discounted cash flow analysis (level 2).

Level 3 Financial assets include a large number of investments in unlisted equities and unlisted venture funds, including investments managed by Nokia Growth Partners specializing in growth-stage investing.

Level 3 Financial liabilities include a conditional obligation to China Huaxin related to Nokia Shanghai Bell.

Reconciliation of the opening and closing balances on level 3 financial assets and liabilities:

EURm	Level 3 Financial Assets	Level 3 Financial Liabilities
Balance at December 31, 2018	688	(707)
Net gains/(losses) in income statement	31	(7)
Additions	20	0
Deductions	(24)	0
Other movements	(1)	1
Balance at March 31, 2019	714	(713)

The gains and losses from venture fund and similar investments categorized in level 3 are included in other operating income and expenses. The gains and losses from other level 3 financial assets and liabilities are recorded in financial income and expenses. A net gain of EUR 37 million (net loss of EUR 96 million in 2018) related to level 3 financial instruments held at March 31, 2019, was included in the profit and loss during 2019.

9. PROVISIONS (unaudited)

EUR million	Restructuring	Divestment related	Warranty	Project losses	Litigation	Environmental liabilities	Material liability	Other	Total
At January 1, 2019	493	66	195	55	109	108	72	329	1 427
Translation differences	0	0	1	0	1	2	2	4	10
Reclassification ¹	(48)	0	0	0	0	0	0	0	(48)
Charged to income statement	126	(13)	16	0	4	5	6	6	150
<i>Additional provisions</i>	137	0	32	0	10	5	13	19	216
<i>Changes in estimates</i>	(11)	(13)	(16)	0	(6)	0	(7)	(13)	(66)
Utilized during period ²	(97)	0	(25)	0	(5)	(1)	(4)	(28)	(160)
At March 31, 2019	474	53	187	55	109	114	76	310	1 378

¹The reclass in restructuring provisions is based on adoption of IFRS 16.

²The utilization of restructuring provision includes items transferred to accrued expenses, of which EUR 31 million remained in accrued expenses as of March 31, 2019.

10. INTEREST-BEARING LIABILITIES (unaudited)

Issuer/Borrower	Instrument	Currency	Nominal (million)	Final maturity	Carrying amount (EUR million)		
					March 31, 2019	March 31, 2018	December 31, 2018
Nokia Corporation	6.75% Senior Notes ¹	EUR	231	February 2019	0	239	232
Nokia Corporation	5.375% Senior Notes	USD	581	May 2019	518	471	507
Nokia Corporation	1.00% Senior Notes	EUR	500	March 2021	499	498	499
Nokia Corporation	3.375% Senior Notes	USD	500	June 2022	436	390	423
Nokia Corporation	2.00% Senior Notes	EUR	750	March 2024	759	744	750
Nokia Corporation	2.00% Senior Notes ²	EUR	750	March 2026	753	0	0
Nokia Corporation	4.375% Senior Notes	USD	500	June 2027	434	384	415
Nokia of America Corporation	6.50% Senior Notes	USD	74	January 2028	66	60	65
Nokia of America Corporation	6.45% Senior Notes	USD	206	March 2029	185	169	182
Nokia Corporation	6.625% Senior Notes	USD	500	May 2039	480	409	455
Nokia Corporation	Revolving credit facility	EUR	1579	June 2020	0	0	0
Nokia Corporation	Loan facilities ³	EUR	750		0	0	0
Nokia Corporation and various subsidiaries	Other liabilities				273	353	292
Total					4 403	3 717	3 820

¹Nokia repaid its EUR 231 million 6.75% Senior Notes in February 2019.

²Nokia issued EUR 750 million 2.00% Senior Notes due 2026 under its EUR 5 billion Euro Medium-Term Note Programme in March 2019.

³Includes a loan facility agreement of EUR 500 million with the European Investment Bank (EIB) and a loan facility agreement of EUR 250 million with the Nordic Investment Bank (NIB). The availability periods of the loan facilities end in February 2020 for EIB and in August 2019 for NIB. The loan facilities have not yet been disbursed and both will have average maturities of approximately five years after disbursements.

All Nokia borrowings are senior unsecured and have no financial covenants.

11. COMMITMENTS AND CONTINGENCIES (unaudited)

EUR million	March 31, 2019	March 31, 2018	December 31, 2018
Contingent liabilities on behalf of Group companies¹			
Guarantees issued by financial institutions	1 620	1 627	1 570
Other guarantees	354	495	505
Contingent liabilities on behalf of other companies			
Other guarantees	26	27	25
Financing commitments			
Customer finance commitments	276	482	313
Financing commitments to associated companies	20	20	20
Venture fund commitments	305	369	314

¹In contingent liabilities on behalf of Group companies Nokia reports guarantees that have been given to third parties in the normal course of business. These are mainly guarantees given by financial institutions to Nokia's customers for the performance of Nokia's obligations under supply agreements, including tender bonds, performance bonds, and warranty bonds issued by financial institutions on behalf of Nokia. Additionally, Nokia has issued corporate guarantees with primary obligation given directly to customers with these guarantees amounting to EUR 1 047 million (EUR 1 040 million at March 31, 2018 and EUR 1 041 million at December 31, 2018). In Other guarantees Nokia reports guarantees related to non-commercial contracts that support Nokia's business activities. As a result of internal policies and active management of outstanding guarantee exposure, Nokia has not been subject to any material guarantee claims during recent years.

The amounts represent the maximum principal amount of commitments and contingencies.

12. NEW ACCOUNTING STANDARDS (unaudited)

IFRS 16 Leases

IFRS 16, Leases, (IFRS 16) was issued in January 2016 and sets out the requirements for the recognition, measurement, presentation and disclosure of leases. IFRS 16 provides a single lessee accounting model, requiring lessees to recognize right-of-use assets and lease liabilities for most leases, excluding short-term leases, in the consolidated statement of financial position.

Nokia adopted IFRS 16 on the effective date of January 1, 2019 using the cumulative catch-up transition method. In accordance with the IFRS 16 transition guidance, comparative information is not restated. Key judgments and estimates used under IFRS 16 primarily relate to the evaluation of lease terms and the use of discount rates.

Use of practical expedients

IFRS 16 allows for entities to elect a number of practical expedients to simplify the initial adoption of IFRS 16 as well as the ongoing application of IFRS 16.

Nokia elected to adopt the following practical expedients upon adoption of IFRS 16:

- Nokia applied IFRS 16 to contracts that were previously identified as leases applying IAS 17, Leases, and IFRIC 4, Determining whether an Arrangement contains a Lease;
- Nokia adjusted the right-of-use assets by the amount of onerous lease contract provisions recognized in the consolidated statement of financial position in accordance with IAS 37, Provisions, Contingent Liabilities and Contingent Assets; and
- Nokia excluded initial direct costs related to the execution of lease contracts from the measurement of the right-of-use assets.
- Nokia applied hindsight to estimate the lease term for all lease contracts existing on the effective date of January 1, 2019.

Nokia elected to adopt the following practical expedients on an ongoing basis:

- Nokia will not separate non-lease components from lease components and will instead account for each lease component and associated non-lease component as a single lease component; and
- Nokia will not recognize any short-term leases on the consolidated statement of financial position where the lease term is 12 months or less at the lease commencement date. Instead, Nokia will recognize the lease payments associated with short-term leases as an expense recognized on a basis representative of the pattern of the lease's benefit.

In accordance with the requirements of the previous accounting standard, IAS 17 Leases, Nokia disclosed non-cancellable operating lease commitments of EUR 1 099 million within Note 30 of the 2018 annual report. As of January 1, 2019, Nokia recorded lease liabilities in accordance with IFRS 16 of EUR 1 092 million for leases which had previously been classified as operating leases under the requirements of IAS 17. These lease liabilities were measured at the present value of remaining lease payments, using a discount rate based on Nokia's estimated incremental borrowing rate. As of January 1, 2019, the weighted average discount rate was 2.6%. The IFRS 16 lease liabilities were at a similar level to the IAS 17 non-cancellable operating lease commitments due to offsetting impacts from the following accounting policy changes related to the adoption of IFRS 16:

- IFRS 16 lease liabilities were higher than the IAS 17 non-cancellable operating lease commitments due to:
 - o Inclusion of IFRS 16 lease liabilities for onerous lease contracts whereas the IAS 17 disclosure excluded such lease commitments
 - o Inclusion of renewal option periods in the estimated lease term for certain IFRS 16 lease contracts whereas the IAS 17 disclosure included only lease commitments over the non-cancellable lease term
 - o Application of the practical expedient under IFRS 16 which allows for the inclusion of certain non-lease components in the determination of the IFRS 16 lease liabilities
- IFRS 16 lease liabilities were lower than the IAS 17 non-cancellable operating lease commitments due to:
 - o Exclusion of lease contracts from the determination of the IFRS 16 lease liabilities where the commencement date was subsequent to January 1, 2019
 - o Application of the practical expedient under IFRS 16 which allows for the exemption of short-term leases from lease accounting
 - o The effect from discounting the future lease payments in the determination of the present value of the IFRS 16 lease liabilities

IFRS 16 opening balance sheet impact

On adoption, all lease liabilities were recorded with an equal amount recorded for the related right-of-use assets. The right-of-use assets were then adjusted for onerous lease contract provisions and accrued lease payments recognized in the statement of financial position immediately before adoption and for sublease receivables recognized upon adoption. The following table depicts the opening balances recorded upon adoption of IFRS 16 on January 1, 2019:

EUR million	January 1, 2019
Right-of-use assets	993
Lease liabilities, long-term and short-term	1 092

The adoption of IFRS 16 slightly reduced operating loss in Q1'19 as the interest component on the lease payments is recognized as interest expense of EUR 7 million within financial income and expenses. In the consolidated statement of cash flows, cash flow from operating activities increased in Q1'19 as the principal component of lease payments of EUR 64 million was recorded within cash flow from financing activities. Nokia's activities as a lessor are not material and hence Nokia does not expect any material impact on the consolidated financial statements related to such activities.

13. PERFORMANCE MEASURES (unaudited)

In the reporting of financial information, Nokia has adopted various performance measures of historical or future financial performance, position or cash flows other than those defined or specified under International Financial Reporting Standards (IFRS). These measures are not defined by IFRS and therefore may not be directly comparable with financial measures used by other companies, including those in Nokia's industry. The following table provides summarized information on the performance measures included in this interim report.

Performance measure	Definition	Purpose
Key performance measures		
Non-IFRS measures	Non-IFRS measures exclude costs related to the acquisition of Alcatel-Lucent and related integration, goodwill impairment charges, intangible asset amortization and other purchase price fair value adjustments, restructuring and associated charges and certain other items that may not be indicative of Nokia's underlying business performance. Refer to note 2, "Non-IFRS to reported reconciliation".	We believe that our non-IFRS results provide meaningful supplemental information to both management and investors regarding Nokia's underlying business performance by excluding the non-IFRS items that may not be indicative of Nokia's business operating results. Non-IFRS operating profit is used in determining management remuneration.
Constant currency measures	When financial measures are reported on a constant currency basis, exchange rates used to translate the amounts in local currencies to euro, our reporting currency, are the average actual periodic exchange rates for the comparative financial period. Therefore, the constant currency measures exclude the impact of changes in exchange rates during the current period in comparison to euro.	We provide additional information on a constant currency basis in order to better reflect the underlying business performance.
Other performance measures		
Recurring/One-time measures	Recurring measures, such as recurring net sales, are based on revenues that are likely to continue in the future. Recurring measures exclude e.g. the impact of catch-up net sales relating to prior periods. One-time measures, such as one-time net sales, reflect the revenues that are not likely to continue in the future.	We use recurring/one-time measures to improve comparability between financial periods.
Total cash and current financial investments	Total cash and current financial investments consist of cash and cash equivalents and current financial investments.	Total cash and current financial investments is used to indicate funds available to Nokia to run its current and invest in future business activities as well as provide return for security holders.
Net cash and current financial investments	Net cash and current financial investments equals total cash and current financial investments less long-term and short-term interest-bearing liabilities. Lease liabilities are not included in interest-bearing liabilities. Refer to note 7, "Net cash and current financial investments".	Net cash and current financial investments is used to indicate Nokia's liquidity position after cash required to settle the interest-bearing liabilities.
EBITDA	Operating profit/(loss) before depreciations and amortizations and adjusted for share of results of associated companies and joint ventures.	We use EBITDA as a measure of Nokia's operating performance.
Adjusted profit/(loss) before changes in net working capital	Profit/(loss) for the period adjusted for the movements in non-cash items before changes in net working capital.	We use adjusted profit/(loss) before changes in net working capital to provide a structured presentation of cash flows.
Free cash flow	Net cash from operating activities - purchases of property, plant and equipment and intangible assets (capital expenditures) + proceeds from sale of property, plant and equipment and intangible assets - purchase of non-current financial investments + proceeds from sale of non-current financial investments.	Free cash flow is the cash that Nokia generates after net investments to tangible, intangible and non-current financial investments and it represents the cash available for distribution among its security holders. It is a measure of cash generation, working capital efficiency and capital discipline of the business.
Capital expenditure	Purchases of property, plant and equipment and intangible assets (excluding assets acquired under business combinations).	We use capital expenditure to describe investments in profit generating activities in the future.
Recurring annual cost savings	Reduction in cost of sales and operating expenses resulting from the cost savings program and the impact of which is considered recurring in nature.	We use recurring annual cost savings measure to monitor the progress of our cost savings program established after the Alcatel-Lucent transaction against plan.
Restructuring and associated charges, liabilities and cash outflows	Charges, liabilities and cash outflows related to activities that either meet the strict definition of restructuring under IFRS or are closely associated with such activities.	We use restructuring and associated charges, liabilities and cash outflows to measure the progress of our integration and transformation activities.
Charges and cash outflows related to network equipment swaps	Charges and cash outflows related to product portfolio integration for key customers.	We use charges and cash outflows related to network equipment swaps to measure the progress of our integration and transformation activities.

RISKS AND FORWARD-LOOKING STATEMENTS

It should be noted that Nokia and its businesses are exposed to various risks and uncertainties and certain statements herein that are not historical facts are forward-looking statements. These forward-looking statements reflect Nokia's current expectations and views of future developments and include statements regarding: A) expectations, plans or benefits related to our strategies and growth management; B) expectations, plans or benefits related to future performance of our businesses, including our ability to execute during the second half of 2019, and any expected future dividends; C) expectations and targets regarding financial performance, results, operating expenses, taxes, currency exchange rates, hedging, cost savings and competitiveness, as well as results of operations including targeted synergies and those related to market share, prices, net sales, income and margins; D) expectations, plans or benefits related to changes in organizational and operational structure; E) expectations regarding market developments, general economic conditions and structural changes; F) our ability to integrate acquired businesses into our operations and achieve the targeted business plans and benefits, including targeted benefits, synergies, cost savings and efficiencies; G) expectations, plans or benefits related to any future collaboration or to business collaboration agreements or patent license agreements or arbitration awards, including income to be received under any collaboration or partnership, agreement or award; H) timing of the deliveries of our products and services, including our short term and longer term expectations around the rollout of 5G and our ability to capitalize on such rollout; and the overall readiness of the 5G ecosystem ; I) expectations and targets regarding collaboration and partnering arrangements, joint ventures or the creation of joint ventures, and the related administrative, legal, regulatory and other conditions, as well as our expected customer reach; J) outcome of pending and threatened litigation, arbitration, disputes, regulatory proceedings or investigations by authorities; K) expectations regarding restructurings, investments, capital structure optimization efforts, uses of proceeds from transactions, acquisitions and divestments and our ability to achieve the financial and operational targets set in connection with any such restructurings, investments, capital structure optimization efforts, divestments and acquisitions, including our current cost savings program; L) expectations, plans or benefits related to future capital expenditures, temporary incremental expenditures or other R&D expenditures to develop or rollout new products, including 5G; and M) statements preceded by or including "believe", "expect", "expectations", "commit", "anticipate", "foresee", "see", "target", "estimate", "designed", "aim", "plan", "intend", "influence", "assumption", "focus", "continue", "project", "should", "is to", "will" or similar expressions. These forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from such statements. These statements are based on management's best assumptions and beliefs in light of the information currently available to it. These forward-looking statements are only predictions based upon our current expectations and views of future events and developments and are subject to risks and uncertainties that are difficult to predict because they relate to events and depend on circumstances that will occur in the future. Factors, including risks and uncertainties that could cause these differences include, but are not limited to: 1) our strategy is subject to various risks and uncertainties and we may be unable to successfully implement our strategic plans, sustain or improve the operational and financial performance of our business groups, correctly identify or successfully pursue business opportunities or otherwise grow our business; 2) general economic and market conditions and other developments in the economies where we operate, including the timeline for the deployment of 5G and our ability to successfully capitalize on that deployment; 3) competition and our ability to effectively and profitably invest in existing and new high-quality products, services, upgrades and technologies and bring them to market in a timely manner; 4) our dependence on the development of the industries in which we operate, including the cyclicity and variability of the information technology and telecommunications industries and our own R&D capabilities and investments; 5) our dependence on a limited number of customers and large multi-year agreements, as well as external events impacting our customers including mergers and acquisitions; 6) our ability to maintain our existing sources of intellectual property-related revenue through our intellectual property, including through licensing, establish new sources of revenue and protect our intellectual property from infringement; 7) our ability to manage and improve our financial and operating performance, cost savings, competitiveness and synergies generally, expectations and timing around our ability to recognize any net sales and our ability to implement changes to our organizational and operational structure efficiently; 8) our global business and exposure to regulatory, political or other developments in various countries or regions, including emerging markets and the associated risks in relation to tax matters and exchange controls, among others; 9) our ability to achieve the anticipated benefits, synergies, cost savings and efficiencies of acquisitions, including the acquisition of Alcatel-Lucent; 10) exchange rate fluctuations, as well as hedging activities; 11) our ability to successfully realize the expectations, plans or benefits related to any future collaboration or business collaboration agreements and patent license agreements or arbitration awards, including income to be received under any collaboration, partnership, agreement or arbitration award; 12) Nokia Technologies' ability to protect its IPR and to maintain and establish new sources of patent, brand and technology licensing income and IPR-related revenues, particularly in the smartphone market, which may not materialize as planned, 13) our dependence on IPR technologies, including those that we have developed and those that are licensed to us, and the risk of associated IPR-related legal claims, licensing costs and restrictions on use; 14) our exposure to direct and indirect regulation, including economic or trade policies, and the reliability of our governance, internal controls and compliance

processes to prevent regulatory penalties in our business or in our joint ventures; 15) our reliance on third-party solutions for data storage and service distribution, which expose us to risks relating to security, regulation and cybersecurity breaches; 16) inefficiencies, breaches, malfunctions or disruptions of information technology systems, or our customers' security concerns; 17) our exposure to various legal frameworks regulating corruption, fraud, trade policies, and other risk areas, and the possibility of proceedings or investigations that result in fines, penalties or sanctions; 18) adverse developments with respect to customer financing or extended payment terms we provide to customers; 19) the potential complex tax issues, tax disputes and tax obligations we may face in various jurisdictions, including the risk of obligations to pay additional taxes; 20) our actual or anticipated performance, among other factors, which could reduce our ability to utilize deferred tax assets; 21) our ability to retain, motivate, develop and recruit appropriately skilled employees; 22) disruptions to our manufacturing, service creation, delivery, logistics and supply chain processes, and the risks related to our geographically-concentrated production sites; 23) the impact of litigation, arbitration, agreement-related disputes or product liability allegations associated with our business; 24) our ability to re-establish investment grade rating or maintain our credit ratings; 25) our ability to achieve targeted benefits from, or successfully implement planned transactions, as well as the liabilities related thereto; 26) our involvement in joint ventures and jointly-managed companies; 27) the carrying amount of our goodwill may not be recoverable; 28) uncertainty related to the amount of dividends and equity return we are able to distribute to shareholders for each financial period; 29) pension costs, employee fund-related costs, and healthcare costs; 30) our ability to successfully complete and capitalize on our order backlogs and continue converting our sales pipeline into net sales; and 31) risks related to undersea infrastructure, as well as the risk factors specified on pages 60 to 75 of our 2018 annual report on Form 20-F published on March 21, 2019 under "Operating and financial review and prospects-Risk factors" and in our other filings or documents furnished with the U.S. Securities and Exchange Commission. Other unknown or unpredictable factors or underlying assumptions subsequently proven to be incorrect could cause actual results to differ materially from those in the forward-looking statements. We do not undertake any obligation to publicly update or revise forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent legally required.

This financial report was authorized for issue by management on April 24, 2019.

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- Nokia's Annual General Meeting 2019 is planned to be held on May 21, 2019.
- Nokia plans to publish its second quarter and half year 2019 results on July 25, 2019.
- Nokia plans to publish its third quarter and January-September 2019 results on October 24, 2019.