

Report for Q4 and full year 2021

Solid end to a transformational year

- 2021 was a transformational year for Nokia, including refocusing on and strengthening our technology leadership.
- In Q4, Nokia's underlying business performed largely as expected with other operating income being above expectations.
- Q4 net sales declined 5% y-o-y in constant currency as expected with strong growth in Network Infrastructure of +10% offset by Mobile Networks at -16%. Full year net sales grew 3% y-o-y in constant currency.
- Comparable operating margin of 14.2% (reported 11.5%) in Q4 declined 190bps y-o-y (reported +480bps) due to lower Q4 seasonality as expected.
- Full year comparable operating margin of 12.5% (reported 9.7%) expanded 300bps y-o-y (reported +570bps) but also benefited from approximately 150bps of one-offs.
- Comparable diluted EPS of EUR 0.13 in Q4; reported diluted EPS of EUR 0.12.
- Continued strong free cash flow generation of EUR 0.4bn in Q4. Full year free cash flow of EUR 2.4bn.
- Guidance for 2022 net sales of EUR 22.6 – 23.8bn and a comparable operating margin in the range 11-13.5%.
- New long-term targets to grow revenue faster than the market and a comparable operating margin of $\geq 14\%$.
- Board proposes dividend authorization of EUR 0.08 per share. Share buyback program to be initiated to return EUR 600m over 2 years.

EUR million (except for EPS in EUR)	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	6 414	6 553	(2)%	(5)%	22 202	21 852	2%	3%
Gross margin %	39.5%	39.0%	50bps		39.8%	37.5%	230bps	
Research and development expenses	(1 118)	(1 145)	(2)%		(4 214)	(4 087)	3%	
Selling, general and administrative expenses	(758)	(777)	(2)%		(2 792)	(2 898)	(4)%	
Operating profit	740	441	68%		2 158	885	144%	
Operating margin %	11.5%	6.7%	480bps		9.7%	4.0%	570bps	
Profit/(loss) for the period	680	(2 696)			1 645	(2 516)		
EPS, diluted	0.12	(0.48)			0.29	(0.45)		
Net cash and current financial investments	4 615	2 485	86%		4 615	2 485	86%	
Comparable results								
Net sales	6 414	6 554	(2)%	(5)%	22 202	21 854	2%	3%
Gross margin %	40.1%	41.6%	(150)bps		40.4%	38.9%	150bps	
Research and development expenses	(1 092)	(1 010)	8%		(4 084)	(3 817)	7%	
Selling, general and administrative expenses	(659)	(670)	(2)%		(2 379)	(2 489)	(4)%	
Operating profit	908	1 056	(14)%		2 775	2 081	33%	
Operating margin %	14.2%	16.1%	(190)bps		12.5%	9.5%	300bps	
Profit for the period	731	784	(7)%		2 109	1 437	47%	
EPS, diluted	0.13	0.14	(7)%		0.37	0.25	48%	
ROIC ¹	20.1%	11.9%	823bps		20.1%	11.9%	823bps	

¹ Comparable ROIC = Comparable operating profit after tax, last four quarters / invested capital, average of last five quarters' ending balances. Refer to Note 10, Performance measures, in the Financial statement information section for details.

Reconciliation of reported operating profit to comparable operating profit

EUR million	Q4'21	Q4'20	YoY change	Q1-Q4'21	Q1-Q4'20	YoY change
Reported operating profit	740	441	68%	2 158	885	144%
Amortization of acquired intangible assets	99	99		391	407	
Restructuring and associated charges	52	314		263	651	
Gain on sale of fixed assets	(30)	0		(53)	(2)	
Impairment and write-off of assets, net of reversals	13	216		45	241	
Settlement of legal disputes	0	0		(80)	0	
Gain on defined benefit plan amendment	0	0		0	(90)	
Other, net	34	(14)		51	(11)	
Comparable operating profit	908	1 056	(14)%	2 775	2 081	33%



Pekka Lundmark
President and CEO

2021 was a strong year for Nokia driven by our growing technology leadership, robust demand and a faster than expected reset of our business. This enabled us to deliver 3% constant currency net sales growth and a comparable operating margin of 12.5%. Thanks to a solid Q4 capping off a strong 2021, we have created an excellent foundation as we begin to move into the next phase of our strategy to deliver growth and expand profitability.

All our business groups made significant progress this year to make us more competitive in all the markets in which we compete. Mobile Networks largely closed the gap to competition in 5G and improved its gross margin while continuing to step up R&D investments. Network Infrastructure extended its technology leadership with significant growth driven by Fixed Networks and Submarine Networks. Cloud and Network Services continued to rebalance its portfolio and saw encouraging growth in its key focus areas. Nokia

Technologies made good progress expanding in areas such as automotive and consumer electronics.

The progress we have made with cash generation in the business has strengthened our balance sheet to the point we can look to reinstate shareholder distributions through both a dividend and share buyback program.

Nokia enters 2022 in a strong position with improved margins, faster than expected strategy execution and a high order backlog, although the global supply chain situation remains tight. We see opportunities in the 5G roll out and growing enterprise market. Accordingly, we expect 2022 to bring another year of sales growth and we are targeting a comparable operating margin of 11-13.5% in 2022.

Considering how quickly we have executed on our strategy, we are now introducing new long-term targets. We still expect to deliver progress in 2023 but we want to emphasize that is not the end of our ambition. Our long-term target is to grow faster than the market and to achieve a comparable operating margin of at least 14%. The pace of delivery will depend on both the market environment and decisions we may make on R&D investments to secure our long-term competitiveness and sustainable profitability.

Finally, I want to thank our employees whose excellence, resilience and adaptability have been critical in delivering this performance in 2021. We recognise how valuable each person is to Nokia's performance and we will increase investment in our people through our renewed people strategy.

Shareholder distribution

Dividend policy and 2021 proposal

In line with Nokia's dividend policy as stated below, Nokia's Board of Directors proposes that the Annual General Meeting authorizes the Board to resolve on a dividend of EUR 0.08 per share be paid to investors in respect of financial year 2021. If the resolution is approved the dividend would be paid in quarterly installments starting after the AGM.

Our dividend policy is to target recurring, stable and over time growing ordinary dividend payments, taking into account the previous year's earnings as well as the company's financial position and business outlook.

Share buyback program

In 2020 and 2021, Nokia has generated strong cash flow which has significantly improved the cash position of the company. To manage the company's capital structure, Nokia's Board of Directors is initiating a share buyback program under the current authorization from the AGM to repurchase shares, with purchases expected to begin in Q1. The program targets to return up to EUR 600m of cash to shareholders in tranches over a period of two years, subject to continued authorization from the AGM.

Outlook

Full year 2022

Net sales ¹	EUR 22.6 billion to EUR 23.8 billion
Comparable operating margin ²	11 to 13.5%
Free cash flow ²	25-55% conversion from comparable operating profit

¹ Assuming the rate 1 EUR = 1.13 USD as of 31 Dec 2021 continues throughout 2022.

² Please refer to Note 10, Performance measures, in the Financial statement information, for a full explanation of how these terms are defined.

Outlook assumptions

The outlook, the long-term targets (3-5 years) and all of the underlying outlook assumptions described below are subject to risk factors as described in the Risk Factors section later in this report. All of the below outlook assumptions are new as they now refer to 2022 and over the longer-term.

- Nokia's outlook assumptions for the comparable operating margin of each business group in 2022 are provided below:

	Full year 2022
Mobile Networks	6.5 to 9.5%
Network Infrastructure	9.5 to 12.5%
Cloud and Network Services	4.0 to 7.0%
Nokia Technologies	>75%

- We expect Nokia Technologies to deliver a largely stable operating profit performance in 2022 and over the longer-term;
- We expect the net negative impact of Group Common and Other to be EUR 250 million in 2022 and over the longer-term;
- In full year 2022, Nokia expects the free cash flow performance of

Nokia Technologies to be approximately EUR 450 million lower than its operating profit, primarily due to prepayments we received from certain licensees in previous years;

- Comparable financial income and expenses are expected to be an expense of approximately EUR 150-200 million in full year 2022 and over the longer-term;
- Comparable income tax expenses are expected to be approximately EUR 450 million in full year 2022 and over the longer-term;
- Cash outflows related to income taxes are expected to be approximately EUR 400 million in full year 2022 and over the longer-term;
- Capital expenditures are expected to be approximately EUR 650 million in full year 2022 and around EUR 600 million over the longer-term; and
- Rule of thumb related to currency fluctuations: Assuming our current mix of net sales and total costs (refer to Note 1, Basis of Preparation, in the Financial statement information section for details), we expect that a 10% increase in the EUR/USD exchange rate would have an impact of approximately negative 4 to 5% on net sales and an approximately neutral impact on operating profit.

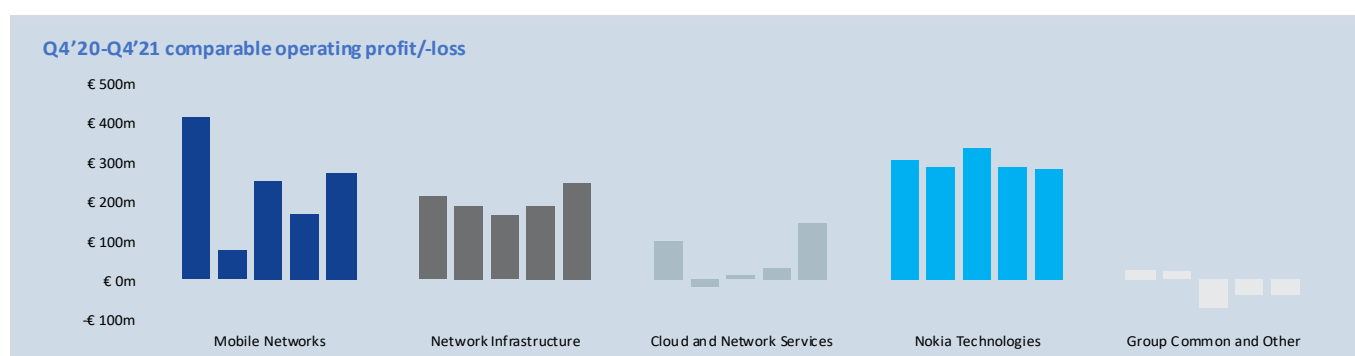
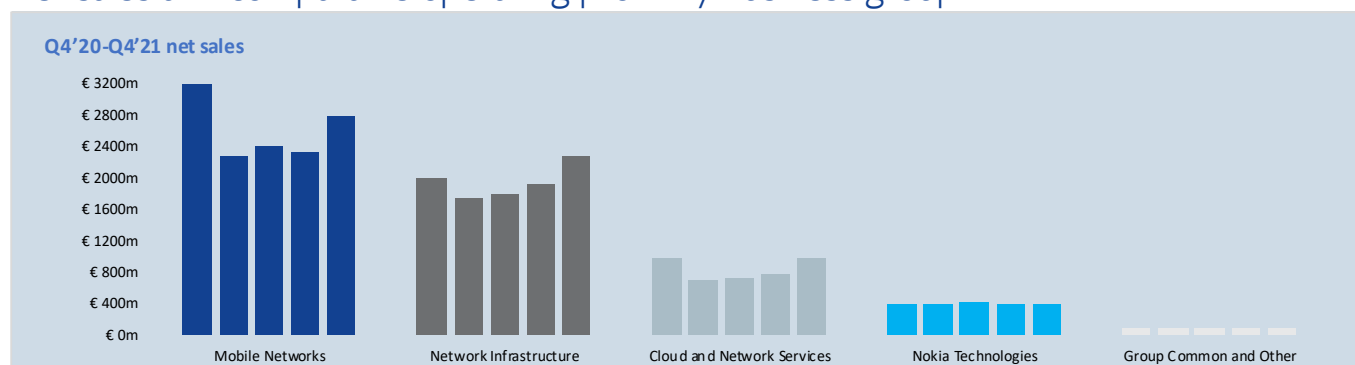
Long-term targets

With Nokia's new 2022 guidance for comparable operating margin exceeding the prior 2023 outlook for comparable operating margin and to better reflect long-term ambitions, Nokia has replaced its prior 2023 outlook with long-term targets (3-5 years) for the business, as laid out below. These new targets are intended to show Nokia's plan to deliver continuous improvement over time in the business.

Net sales	Grow faster than the market
Comparable operating margin	≥14%
Free cash flow	55-85% conversion from comparable operating profit

Financial Results

Net sales and comparable operating profit by business group

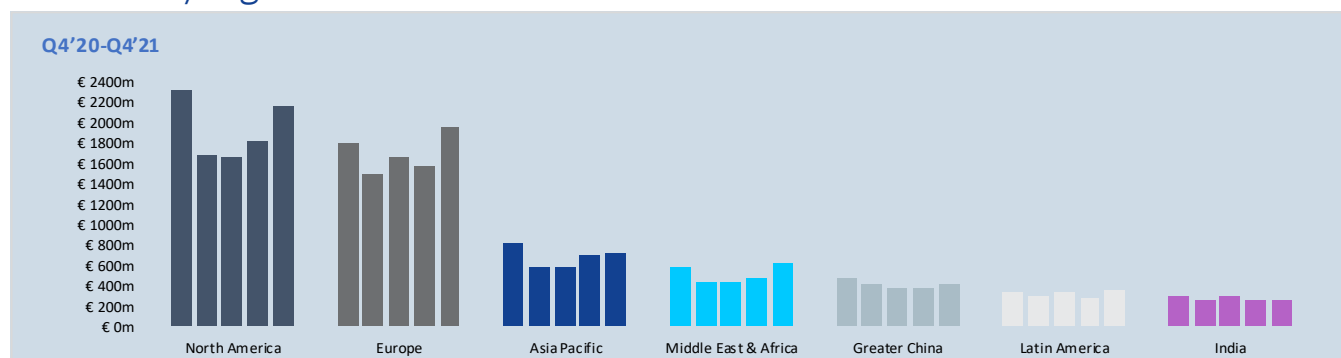


EUR million	Q4'21	Q4'20	Constant currency		Q1-Q4'21	Q1-Q4'20	Constant currency	
			YoY change	YoY change			YoY change	YoY change
Net sales	6 414	6 553	(2)%	(5)%	22 202	21 852	2%	3%
Mobile Networks	2 761	3 180	(13)%	(16)%	9 717	10 397	(7)%	(5)%
Network Infrastructure	2 254	1 979	14%	10%	7 674	6 736	14%	15%
Cloud and Network Services	964	962	0%	(3)%	3 089	3 087	0%	1%
Nokia Technologies	368	382	(4)%	(4)%	1 502	1 402	7%	8%
Group Common and Other	74	59	25%	23%	257	269	(4)%	(2)%
Items affecting comparability	0	(1)			0	(2)		
Eliminations	(7)	(8)	(13)%		(37)	(38)	(3)%	
Comparable operating profit	908	1 056	(14)%		2 775	2 081	33%	
Mobile Networks	270	415	(35)%		765	818	(6)%	
Network Infrastructure	248	211	18%		784	457	72%	
Cloud and Network Services	145	97			166	(67)		
Nokia Technologies	282	307	(8)%		1 185	1 123	6%	
Group Common and Other	(38)	26			(125)	(251)		

Q4 2021 to Q4 2020 bridge for net sales and operating profit

EUR million	Q4'21	Volume, price, mix and other	Foreign exchange impact	Items affecting comparability	Q4'20
Net sales	6 414	(354)	214	1	6 553
Operating profit	740	(175)	27	447	441
Operating margin %	11.5%				6.7%

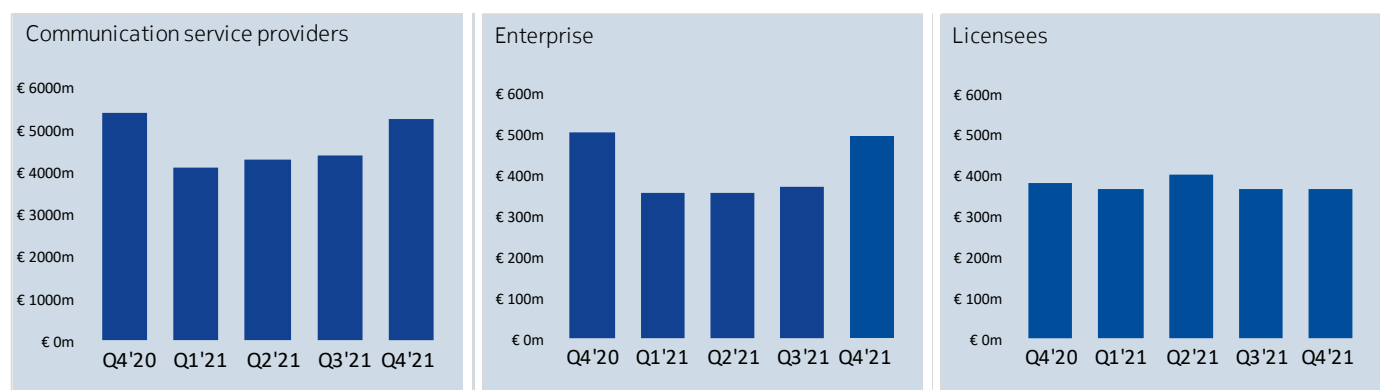
Net sales by region



EUR million	Q4'21	Q4'20 ¹	YoY		Q1-Q4'21	Q1-Q4'20 ¹	YoY	
			change	change			change	change
Asia Pacific	712	806	(12)%	(13)%	2 562	2 742	(7)%	(5)%
Europe	1 940	1 789	8%	7%	6 635	6 427	3%	3%
Greater China	406	459	(12)%	(18)%	1 545	1 510	2%	0%
India	250	294	(15)%	(19)%	1 039	954	9%	13%
Latin America	350	330	6%	3%	1 226	1 070	15%	17%
Middle East & Africa	610	570	7%	3%	1 915	1 981	(3)%	(2)%
North America	2 146	2 304	(7)%	(12)%	7 280	7 168	2%	4%
Total	6 414	6 553	(2)%	(5)%	22 202	21 852	2%	3%

¹ In the first quarter of 2021, Nokia aligned how it externally reports financial information on a regional basis with its internal reporting structure. As a result, India which was earlier presented as part of Asia Pacific region is presented as a separate region. In addition, certain countries are now presented as part of a different region. The comparative net sales by region amounts for Q4'20 and Q1-Q4'20 have been recast accordingly.

Net sales by customer type



EUR million	Q4'21	Q4'20	YoY		Q1-Q4'21	Q1-Q4'20	YoY	
			change	change			change	change
Communication service providers	5 238	5 393	(3)%	(7)%	17 977	17 954	0%	2%
Enterprise	495	502	(1)%	(4)%	1 575	1 571	0%	1%
Licensees	368	382	(4)%	(4)%	1 502	1 402	7%	8%
Other ¹	312	277	13%	12%	1 148	925	24%	24%
Total	6 414	6 553	(2)%	(5)%	22 202	21 852	2%	3%

¹ Includes net sales of Submarine Networks which operates in a different market, and Radio Frequency Systems (RFS), which is being managed as a separate entity, and certain other items, such as eliminations of inter-segment revenues and certain items related to purchase price allocation. Submarine Networks and RFS net sales include also revenue from communication service providers and enterprise customers.

Q4 2021 compared to Q4 2020

Net sales

In Q4 2021, reported net sales decreased 2%, primarily driven by Mobile Networks, which declined 13%, largely offset by Network Infrastructure, which increased 14%.

On a constant currency basis, Nokia net sales decreased 5%, reflecting less pronounced seasonality and supply chain constraints, as expected. This was particularly evident in Mobile Networks, which declined 16%, and was also impacted by earlier communicated market share loss and price erosion in North America. Nokia Technologies and Cloud and Network Services net sales also declined. Despite facing some supply chain constraints, Network Infrastructure continued to show strong growth in the quarter, with net sales increasing by 10%.

From a regional perspective, North America, Asia Pacific, Greater China and India declined, on a constant currency basis. This was partly offset by increases in Europe, Middle East and Africa and Latin America. Net sales in North America decreased 12% on a constant currency basis, primarily due to Mobile Networks, partly offset by growth in Network Infrastructure. The decline in Asia Pacific was primarily driven by Mobile Networks.

From a customer perspective, net sales to Enterprise customers decreased 1% on a reported basis and 4% on a constant currency basis. In the quarter, we delivered very strong order intake growth putting us in a strong position for 2022 but with limited help to our 2021 revenue growth which was also impacted by supply chain constraints. We now have more than 420 customers for our private wireless solutions. In Q4 2021, we added 88 new Enterprise customers and our pipeline remains strong.

Gross margin

Reported gross margin in Q4 2021 was 39.5%, compared to 39.0% in Q4 2020. Comparable gross margin was 40.1%, compared to 41.6% in Q4 2020. The decline in comparable gross margin was driven by Mobile Networks and Network Infrastructure. The decline in Mobile Networks comparable gross margin stems mainly from lower sales coverage of fixed costs as a result of lower sales in North America. The decrease in Network Infrastructure was primarily driven by a higher proportion of net sales from Fixed Networks, as well as higher indirect cost of sales.

Operating profit and margin

Reported operating profit was EUR 740 million, or 11.5% of net sales, compared to EUR 441 million, or 6.7% of net sales in Q4 2020. Comparable operating profit was EUR 908 million, or 14.2% of net sales, compared to EUR 1,056 million, or 16.1% of net sales in Q4 2020. The lower comparable operating profit and operating margin were primarily driven by lower gross profit and higher R&D expenses, in both Mobile Networks and Network Infrastructure. This was partially offset by a net positive fluctuation in other income and expenses and lower SG&A expenses. The net positive fluctuation in other income and expenses reflected the absence of loss allowances on certain trade receivables that negatively impacted Q4 2020, partly offset by lower net benefits related to Nokia's venture fund investments in Q4 2021 compared to Q4 2020. In Q4 2021, operating profit was negatively impacted by higher variable pay accruals, compared to Q4 2020.

In Q4 2021, the net benefit related to Nokia's venture fund investments, which is recorded in Group Common and Other

results, was approximately EUR 60 million, compared to a net benefit of approximately EUR 110 million in Q4 2020.

In Q4 2021, the difference between reported and comparable operating profit was primarily related to the amortization of acquired intangible assets, restructuring and associated charges and the negative impact from a change in provisions related to past acquisitions, partly offset by a gain on the sale of fixed assets. In Q4 2020, the difference between reported and comparable operating profit was primarily related to restructuring and associated charges, a charge related to the impairment of goodwill and the amortization of acquired intangible assets.

Profit/loss for the period

Reported net profit was EUR 680 million, compared to a net loss of EUR 2 696 million in Q4 2020. Comparable net profit was EUR 731 million, compared to EUR 784 million in Q4 2020. The decrease in comparable net profit was primarily driven by the decline in comparable operating profit and a net negative fluctuation in financial income and expenses, partially offset by a decrease in income tax expenses, reflecting lower profit before tax.

In Q4 2021, in addition to the items impacting comparability included in operating profit (and their associated tax effects), the difference between reported and comparable net profit was related to a tax benefit related to past operating model integration and a benefit related to a change in the recognition of deferred tax assets, partly offset by loss allowances on customer financing loans. Q4 2020 reported net profit included a EUR 2.9 billion derecognition of Finnish deferred tax assets and loss allowances on customer financing loans, partly offset by a change in financial liability to acquire Nokia Shanghai-Bell non-controlling interest.

Earnings per share

Reported diluted EPS was EUR 0.12, compared to negative EUR 0.48 in Q4 2020. Comparable diluted EPS was EUR 0.13, compared to EUR 0.14 in Q4 2020.

Comparable return on Invested Capital ("ROIC")

Q4 2021 comparable ROIC was 20.1%, compared to 11.9% in Q4 2020. The increase was primarily driven by growth in operating profit for rolling four quarters and lower average invested capital, reflecting growth in average total cash and current financial investments and a decrease in average total interest-bearing liabilities.

Cash performance

During Q4 2021, net cash increased EUR 315 million, resulting in an end-of-quarter net cash balance of approximately EUR 4.6 billion. During Q4 2021, total cash decreased by EUR 113 million, resulting in an end-of-quarter total cash balance of approximately EUR 9.3 billion, reflecting the early repayment of debt due in June 2022. The cash performance in Q4 2021 reflected strong operating profit partly offset by a decrease in cash related to net working capital. Q4 2021 was the seventh quarter in a row of positive free cash flow.

January-December 2021 compared to January-December 2020

Net sales

In full year 2021, reported net sales increased 2%, primarily driven by Network Infrastructure and Nokia Technologies, partially offset by Mobile Networks.

On a constant currency basis, Nokia net sales increased 3% in full year 2021. Network Infrastructure saw growth across all four of its businesses. Nokia Technologies net sales grew, driven by higher patent licensing net sales related to both new and renewed patent license agreements signed this year and in Q4 2020 and catch-up net sales related to new patent license agreements, partially offset by lower brand licensing net sales. Cloud and Network Services net sales grew slightly, as growth in Core Networks and Enterprise Solutions was almost entirely offset by a decline in Business Applications and Cloud and Cognitive Services. Mobile Networks net sales declined, primarily driven by the earlier communicated market share loss and price erosion in North America. In full year 2021, net sales were also impacted by supply constraints, particularly in Mobile Networks and Network Infrastructure.

From a regional perspective, the increase in constant currency net sales was driven by growth across most regions, with the exception of Asia Pacific and Middle East and Africa which declined, as well Greater China which was flat. Notably, net sales in North America increased 2% on a reported basis and 4% on a constant currency basis, primarily due to Network Infrastructure and Cloud and Network Services, partially offset by Mobile Networks.

From a customer perspective, net sales to Enterprise customers were flat on a reported basis and increased 1% on a constant currency basis. In 2021, we added 315 new Enterprise customers, and our pipeline remains strong. We also continued to have strong momentum in private wireless, now with more than 420 customers.

Gross margin

Reported gross margin in full year 2021 was 39.8%, compared to 37.5% in full year 2020. Comparable gross margin was 40.4%, compared to 38.9% in the year-ago period. The improvement in comparable gross margin was primarily driven by Mobile Networks, Cloud and Network Services and, to a lesser extent, Nokia Technologies. The increase in Mobile Networks stems mainly from progress in our cost competitiveness, 5G growth, favorable regional mix and the impact of a one-time software deal that was completed in Q2 2021. This was partly offset by the earlier communicated impact from market share loss and price erosion in North America. The increase in Cloud and Network Services was primarily driven by the absence of a project-related loss provisions that negatively impacted the year-ago period. The increase in Nokia Technologies gross profit and gross margin reflected higher net sales.

Operating profit and margin

Reported operating profit in full year 2021 was EUR 2 158 million, or 9.7% of net sales, compared to EUR 885 million, or 4.0% of net sales, in full year 2020. Comparable operating profit was EUR 2 775 million, or 12.5% of net sales, compared to EUR 2 081 million, or 9.5% of net sales in the year-ago period. The improvement in comparable operating profit and operating margin was primarily driven by higher gross profit, a net positive fluctuation in other income and expenses, primarily related to increased net benefits from Nokia's venture fund investments, a net positive fluctuation in the amount of loss allowances on trade receivables and foreign exchange hedging, as well as lower SG&A expenses. This was partially offset by higher R&D expenses in Mobile Networks and, to a lesser extent, Network Infrastructure. In full year 2021, operating

profit was negatively impacted by higher variable pay accruals, compared to full year 2020.

In full year 2021, the net benefit related to Nokia's venture fund investments, which is recorded in Group Common and Other results, was approximately EUR 190 million, compared to a net benefit of approximately EUR 50 million in the year-ago period.

Nokia benefited from approximately 150bps of one-offs in financial year 2021 to its comparable operating margin related to venture fund investments, a one-off software contract in Q2, reversals of loss allowances on certain trade receivables and some other one-time benefits.

In full year 2021, the difference between reported and comparable operating profit was primarily related to the amortization of acquired intangible assets, restructuring and associated charges, the impairment and write-off of assets, net of reversals, the negative impact from a change in provisions related to past acquisitions and fair value losses on a legacy IPR fund, partly offset by a gain related to the settlement of legal disputes and a gain on the sale of fixed assets. In full year 2020, the difference between reported and comparable operating profit was primarily related to restructuring and associated charges, amortization of acquired intangible assets and the impairment and write-off of assets, net of reversals, partly offset by a gain on defined benefit plan amendment.

Profit/loss for the period

Reported net profit was EUR 1 645 million, compared to a net loss of EUR 2 516 million in full year 2020. Comparable net profit was EUR 2 109 million, compared to EUR 1 437 million in the year-ago period. The improvement in comparable net profit was primarily driven by the increase in comparable operating profit, partially offset by an increase in income tax expenses, reflecting higher profit before tax.

In full year 2021, in addition to the items impacting comparability included in operating profit (and their associated tax effects), the difference between reported and comparable net profit/loss was primarily related to a tax benefit related to past operating model integration, a benefit related to a change in the recognition of deferred tax assets and a deferred tax benefit due to tax rate changes, partly offset by a change in financial liability to acquire Nokia Shanghai-Bell non-controlling interest and a loss allowance on customer financing loans. In 2020, reported net profit included a EUR 2.9 billion derecognition of Finnish deferred tax assets, a loss allowance on customer financing loans and a one-off deferred tax expense related to legal entity restructuring, partly offset by a change in financial liability to acquire Nokia Shanghai-Bell non-controlling interest.

Earnings per share

Reported diluted EPS in full year 2021 was EUR 0.29, compared to negative EUR 0.45 in full year 2020. Comparable diluted EPS was EUR 0.37, compared to EUR 0.25 in the year-ago period.

Cash performance

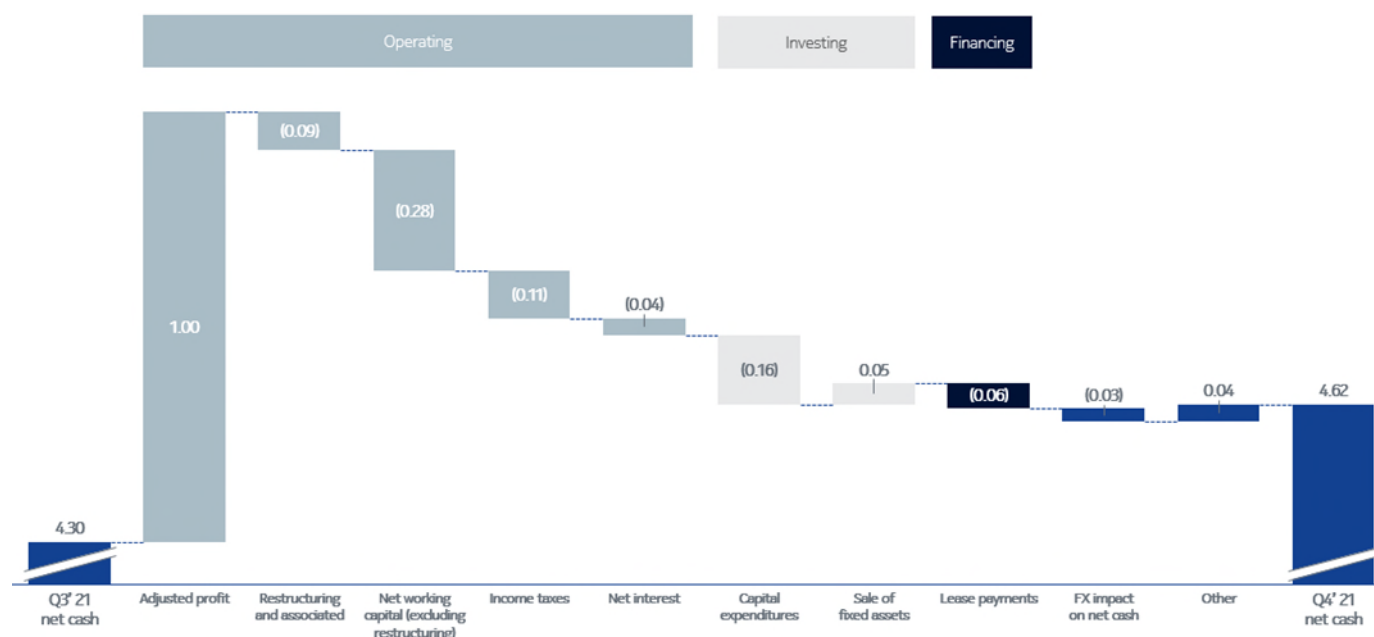
At the end of 2021, Nokia had a net cash balance of EUR 4.6 billion and a total cash balance of EUR 9.3 billion. In 2021, our free cash flow was EUR 2.4 billion, reflective of our strong operating profit and net working capital management. On a full year basis, we reduced the balance sheet impact related to the sale of accounts receivables, which had a negative impact on our cash performance.

Cash and cash flow in Q4 2021

EUR million, at end of period	Q4'21	Q3'21	QoQ change	Q4'20	YTD change
Total cash and current financial investments	9 268	9 381	(1)%	8 061	15%
Net cash and current financial investments ¹	4 615	4 300	7%	2 485	86%

¹ Net cash and current financial investments does not include lease liabilities. For details, please refer to Note 10, Performance measures, in the Financial statement information.

EUR billion



Free cash flow

During Q4 2021, Nokia's free cash flow was EUR 385 million, reflecting strong operating profit, partly offset by cash outflows related to net working capital, restructuring, income taxes and net interest.

Net cash from operating activities

Net cash from operating activities was driven by:

- Nokia's adjusted profit of EUR 1 001 million.
- Approximately EUR 90 million of restructuring and associated cash outflows, related to our current and previous cost savings programs.
- Excluding the restructuring and associated cash outflows, the decrease in net cash related to net working capital was approximately EUR 280 million, as follows:
 - The increase in receivables was approximately EUR 720 million, mainly reflecting seasonality.
 - The decrease in inventories was approximately EUR 130 million, reflecting some seasonality and limited ability to increase inventories due to supply chain challenges.
 - The increase in liabilities was approximately EUR 300 million, primarily due to an increase in both accounts payable and liabilities related to employee variable pay, partially offset by a decrease in contract liabilities and deferred revenue.

- An outflow related to cash taxes of approximately EUR 110 million.
- An outflow related to net interest of approximately EUR 40 million.

Net cash used in investing activities

- Net cash used in investing activities was related primarily to capital expenditures of approximately EUR 160 million, which was partially offset by a net cash inflow from the sale of fixed assets of approximately EUR 50 million, related to the sale of real estate, and non-current financial investments of approximately EUR 10 million.

Net cash used in financing activities

- Net cash used in financing activities was related primarily to lease payments of approximately EUR 60 million.

Change in total cash and net cash

In Q4 2021, the approximately EUR 430 million difference between the change in total cash and net cash was primarily due to the early redemption of Senior Notes due June 2022.

Foreign exchange rates had an approximately EUR 30 million negative impact on net cash.

Comparable return on invested capital

EUR million	Rolling four quarters		
	Q4'21	Q3'21	Q4'20
Comparable operating profit	2 775	2 923	2 081
Comparable profit before tax	2 609	2 781	1 918
Comparable income tax expense	(500)	(620)	(481)
Comparable operating profit after tax	2 243	2 271	1 559

EUR million	Average		
	31 December 2021	30 September 2021	31 December 2020
Total equity	14 901	14 453	14 898
Total interest-bearing liabilities	5 105	5 327	5 310
Total cash and current financial investments	(8 861)	(8 533)	(7 100)
Invested capital	11 145	11 247	13 108
Comparable ROIC¹	20.1%	20.2%	11.9%

¹ Comparable ROIC = Comparable operating profit after tax, last four quarters / invested capital, average of last five quarters' ending balances. Refer to Note 10, Performance measures, in the Financial statement information for details.

Sustainability

Our strategy and focus areas

At Nokia, we create technology that helps the world act together. Connectivity and technology play a critical role in helping to solve many of the world's greatest challenges. Our sustainability strategy is focused on the areas we believe will have the greatest impact on sustainable development and our profitability: climate, integrity and culture.

Climate

In Q4, Nokia's President and CEO Pekka Lundmark attended COP26 in Glasgow, reiterating the company's commitments to net-zero, highlighting concrete actions being taken and the critical role of connectivity and digitalization in driving the sustainable transformation of asset heavy industries and processes that is required to fight climate change. Nokia also announced a new target to purchase 100% electricity from renewable sources by 2025 to power its offices, R&D labs, and factories.

Nokia became a founding member of the First Movers Coalition, a public-private partnership between the US State Department and the World Economic Forum, focused on accelerating innovation and the path to market for emerging solutions that are essential to help reduce emissions to net-zero. As a concrete step, Nokia joined forces with DB Schenker and Lufthansa Cargo on a carbon neutral logistics route to transport 10 tons of communication equipment each week, using sustainable aviation fuel for the flight and an alternative biofuel for the final land transport. Nokia's products took their first carbon-neutral flight in October 2021.

Nokia is honored to have won the COP26 Compass Award for Supply Chain Capacity Building, run by DEFRA UK and the Responsible Business Alliance. The award is a great recognition of Nokia's collaboration and capacity building with its suppliers – a key part of our efforts towards reaching our emissions targets. In December, CDP, the world's leading global disclosure system for environmental impact awarded Nokia Leadership level and an A-score for its work to cut emissions, mitigate climate risks and help develop a low-carbon economy.

Integrity

As part of Nokia's commitment to respect Human Rights, Nokia is a board member of the multi-stakeholder group Global Network Initiative (GNI), which examines human rights in the ICT sector. Companies participating in GNI are independently assessed every two to three years. Nokia is proud to be the first telecommunications equipment vendor to have successfully completed an assessment and has now kicked off our second assessment in December 2021, which will be carried out by an independent external assessor.

Culture

Nokia's people are its greatest asset and it aims to enable a culture that drives business value based on three essentials: open, fearless and empowered. In support of this culture, the third annual employee inclusion survey was conducted in Q4. Nokia's average internal inclusion score improved – on a scale of 1-10 – from 7.6 to 8.0 and the number of employees who believe that inclusion and diversity efforts are having a positive impact on company culture increased from 74% to 79%.

In the Bloomberg Gender Equality Index 2022, Nokia got an overall score of 73.67%, well above the industry average of 69.63%. Nokia does however recognize that more work needs to be done and will continue to prioritize actions towards improved gender balance.

Other topics

Nokia announced a partnership with UNICEF Finland, UNICEF Morocco and Orange Foundation to empower marginalized young people – particularly girls – in Morocco with digital, entrepreneurial and environmental skills, including transferable skills such as working with others, self-esteem, creativity and communication, as part of UNICEF's UPSHIFT program. This program is aligned with Nokia's purpose and continued focus to reduce the digital divide and provide training in digital skills to the communities in which it operates.

Segment details

Mobile Networks, Q4 2021 compared to Q4 2020

EUR million	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	2 761	3 180	(13)%	(16)%	9 717	10 397	(7)%	(5)%
Gross margin %	37.1%	38.7%	(160)bps		36.9%	35.2%	170bps	
Operating profit/(loss)	238	273	(13)%		637	515	24%	
Operating margin %	8.6%	8.6%	0bps		6.6%	5.0%	160bps	
Comparable results								
Gross margin %	37.6%	39.5%	(190)bps		37.4%	35.9%	150bps	
Operating profit/(loss)	270	415	(35)%		765	818	(6)%	
Operating margin %	9.8%	13.0%	(320)bps		7.9%	7.9%	0bps	

Addressable market development

The estimated Mobile Networks addressable market, excluding China, for 2021 was EUR 46 billion and grew approximately 5% on a constant currency basis.

We currently forecast an addressable market for 2022 of EUR 49 billion. On a constant currency basis, we estimate that the addressable market will grow by approximately 3% in 2022.

Q4 2021 compared to Q4 2020

Net sales

Mobile Networks net sales decreased 13%. On a constant currency basis, net sales decreased 16%.

The decline in Mobile Networks net sales reflected less pronounced seasonality in Q4, as expected, with lower net sales in both radio access products, as well as services. Additionally, net sales were impacted by supply chain constraints.

From a regional perspective, North America drove the majority of the decline, as business was impacted by earlier communicated market share loss and price erosion. Elsewhere, 5G deployments drove growth in Europe, while both Asia Pacific and Greater China declined overall.

Gross margin

Reported gross margin was 37.1%, compared to 38.7% in Q4 2020. Comparable gross margin was 37.6%, compared to 39.5% in Q4 2020. The decline in comparable gross margin stems mainly from lower sales coverage of fixed costs as a result of lower sales in North America.

Operating profit/(loss) and margin

Reported operating profit was EUR 238 million, or 8.6% of net sales, compared to EUR 273 million, or 8.6% of net sales, in Q4 2020. Comparable operating profit was EUR 270 million, or 9.8% of net sales, compared to EUR 415 million, or 13.0% of net sales, in Q4 2020. The decrease in comparable operating profit and operating margin primarily reflects lower gross profit, as well as an increase in R&D expenses to accelerate our product roadmaps and cost competitiveness. This was partially offset by a net positive fluctuation in other operating income and expenses, mainly related to the absence of loss allowances on certain trade receivables that negatively impacted Q4 2020, as well as lower SG&A expenses. In Q4 2021, operating profit was negatively impacted by higher variable pay accruals, compared to Q4 2020.

In both Q4 2021 and Q4 2020, the difference between reported and comparable operating profit was primarily related to restructuring and associated charges and the amortization of acquired intangible assets.

Operational Key Performance Indicators

Proportion of our 5G shipments that are "5G Powered by ReefShark"

This KPI tracks shipments of our System-on-Chip ("SoC") based 5G Powered by ReefShark ("5G PBR") product portfolio. Increased 5G PBR shipments are expected to help reduce our product cost and improve the power efficiency of our products.

In Q4 2021, 5G PBR accounted for 68% of shipments, marking a strong sequential improvement. Pleasingly, in December 5G PBR shipments reached 76%, which puts us on track to achieve our end of 2022 target of ~100% of product shipments. The new AirScale radio and baseband products launched in Q2 2021 are also important final steps towards our full SoC portfolio evolution.

Our weighted 5G conversion rate and market share

This KPI measures how we are doing in converting our end of 2018 4G footprint into 5G footprint. It factors in customer size, as well as new 5G footprint where we did not previously have a 4G installed base (meaning it can be over 100%).

At the end of Q4 2021, our 5G conversion rate remained approximately 90% excluding China and in the low 80% range including China. Since the end of 2018, our 4G to 5G conversion rate has been impacted by not converting all of our 4G footprint into 5G footprint in North America and China. We believe this has now stabilized and we see opportunities through which it could start to improve, but the timing of deals remains uncertain.

We finished full year 2021 with our 4G + 5G market share at approximately 26%, excluding China. This was in-line with our targeted range of 25% to 27%.

Given the strong progress that Mobile Networks has made, the evolution of our strategic priorities and the fact that changes in these KPIs are smaller over time, we plan to no longer report on the weighted 5G conversion and internal 4G + 5G market share KPIs going forward (considering external market share estimates are readily available). We do however continue to see market share expansion opportunities and we will continue to report the 5G PBR KPI through 2022, until we have largely completed the transition to SoCs.

Network Infrastructure, Q4 2021 compared to Q4 2020

EUR million	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	2 254	1 979	14%	10%	7 674	6 736	14%	15%
IP Networks	755	761	(1)%	(5)%	2 679	2 585	4%	5%
Optical Networks	506	474	7%	3%	1 708	1 695	1%	2%
Fixed Networks	747	517	44%	38%	2 358	1 759	34%	35%
Submarine Networks	246	227	8%	8%	929	697	33%	33%
Gross margin %	33.6%	34.6%	(100)bps		34.7%	34.0%	70bps	
Operating profit/(loss)	156	(102)			426	(158)		
Operating margin %	6.9%	(5.2)%	1 210bps		5.6%	(2.3)%	790bps	
Comparable results								
Gross margin %	34.0%	36.1%	(210)bps		35.0%	35.1%	(10)bps	
Operating profit/(loss)	248	211	18%		784	457	72%	
Operating margin %	11.0%	10.7%	30bps		10.2%	6.8%	340bps	

Addressable market development

The estimated Network Infrastructure addressable market, excluding Submarine Networks, for 2021 was EUR 42 billion, down from the previous estimation of EUR 43 billion. The change is primarily due to a reassessment of the Fiber-To-The-Home (FTTH) technology mix. The 2021 addressable market grew approximately 5% on a constant currency basis.

We currently forecast an addressable market for 2022 of EUR 45 billion. On a constant currency basis, we estimate that the addressable market will grow by approximately 3% in 2022.

Q4 2021 compared to Q4 2020

Net sales

Network Infrastructure net sales increased 14%. On a constant currency basis, net sales increased 10%, reflecting strong growth in Fixed Networks, growth in Submarine Networks and Optical Networks, and a decline in IP Networks.

The modest decline in IP Networks – driven by supply chain constraints – was in comparison to a very strong year-ago quarter. From a regional perspective, growth in North America was more than offset by declines in Europe, Asia Pacific and Middle East & Africa.

Growth in Optical Networks reflected traction in North America, partly offset by declines in India and Greater China.

The strong performance in Fixed Networks resulted from continued growth in Fixed Wireless Access and fiber technologies, as CSPs continue to invest in broadband connectivity, particularly in North America.

Submarine Networks' performance continued to show the influence of ongoing major submarine telecommunications projects.

Gross margin

Reported gross margin was 33.6%, compared to 34.6% in Q4 2020. Comparable gross margin was 34.0%, compared to 36.1% in Q4 2020. The decline in gross margin was primarily driven by unfavorable mix within Network Infrastructure, with a higher proportion of net sales from Fixed Networks, as well as higher indirect cost of sales.

Operating profit/(loss) and margin

Reported operating profit was EUR 156 million, or 6.9% of net sales, compared to a loss of EUR 102 million, or negative 5.2% of net sales, in Q4 2020. Comparable operating profit was EUR 248 million, or 11.0% of net sales, compared to EUR 211 million, or 10.7% of net sales, in Q4 2020. The increase in comparable operating profit and operating margin was primarily driven by higher gross profit and a net positive fluctuation in other operating income and expenses, related to the absence of loss allowances on certain trade receivables that negatively impacted Q4 2020 and other one-time income received in Q4 2021. This was partially offset by higher R&D expenses, as we continued to invest in customer-focused technology leadership, as well as higher SG&A expenses. In Q4 2021, operating profit was negatively impacted by higher variable pay accruals, compared to Q4 2020.

In Q4 2021, the difference between reported and comparable operating profit was primarily related to the amortization of acquired intangible assets and restructuring and associated charges. In Q4 2020, the difference between reported and comparable operating profit was primarily related to the impairment of goodwill, the amortization of acquired intangible assets and restructuring and associated charges.

Cloud and Network Services, Q4 2021 compared to Q4 2020

EUR million	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	964	962	0%	(3)%	3 089	3 087	0%	1%
Gross margin %	40.4%	26.9%	1 350bps		35.9%	27.4%	850bps	
Operating profit/(loss)	135	(63)			80	(334)		
Operating margin %	14.0%	(6.5)%	2 050bps		2.6%	(10.8)%	1 340bps	
Comparable results								
Gross margin %	41.8%	38.9%	290bps		37.6%	32.9%	470bps	
Operating profit/(loss)	145	97	49%		166	(67)		
Operating margin %	15.0%	10.1%	490bps		5.4%	(2.2)%	760bps	

Addressable market development

The estimated Cloud and Network Services addressable market for 2021 was EUR 26 billion and grew approximately 4% on a constant currency basis.

We currently forecast an addressable market for 2022 of EUR 28 billion. On a constant currency basis, we estimate that the addressable market will grow by approximately 5% in 2022.

Q4 2021 compared to Q4 2020

Net sales

Cloud and Network Services net sales were flat. On a constant currency basis, Cloud and Network Services net sales decreased 3%.

The net sales performance reflected slight declines in both Cloud and Cognitive Services and Core Networks, largely offset by double digit growth in Enterprise Solutions, particularly in Europe.

Gross margin

Reported gross margin was 40.4%, compared to 26.9% in Q4 2020. Comparable gross margin was 41.8%, compared to 38.9% in Q4 2020. The expansion in gross profit and margin was driven by the

absence of a project-related loss provision that negatively impacted Q4 2020, partially offset by product mix.

Operating profit/(loss) and margin

Reported operating profit was EUR 135 million, or 14.0% of net sales, compared to an operating loss of EUR 63 million, or negative 6.5% of net sales, in Q4 2020. Comparable operating profit was EUR 145 million, or 15.0% of net sales, compared to an operating profit of EUR 97 million, or 10.1% of net sales, in Q4 2020. The improvement was primarily driven by higher gross profit and lower SG&A expenses. In Q4 2021, operating profit was negatively impacted by higher variable pay accruals, compared to Q4 2020.

In both Q4 2021 and Q4 2020, the difference between reported and comparable operating result was primarily related to restructuring and associated charges, the amortization of acquired intangible assets and project-related loss provisions.

Nokia Technologies, Q4 2021 compared to Q4 2020

EUR million	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	368	382	(4)%	(4)%	1 502	1 402	7%	8%
Gross margin %	99.7%	99.5%	20bps		99.6%	99.3%	30bps	
Operating profit/(loss)	282	306	(8)%		1 184	1 120	6%	
Operating margin %	76.6%	80.1%	(35)bps		78.8%	79.9%	(11)bps	
Comparable results								
Gross margin %	99.7%	99.5%	20bps		99.7%	99.4%	30bps	
Operating profit/(loss)	282	307	(8)%		1 185	1 123	6%	
Operating margin %	76.6%	80.4%	(38)bps		78.9%	80.1%	(12)bps	

Net sales

Nokia Technologies net sales decreased 4% on both a reported and constant currency basis.

The decrease in Nokia Technologies net sales was primarily due to the absence of catch-up net sales from a renewed patent license agreement, which benefitted the year-ago quarter, lower net sales from one licensee, following the expiration of a patent licensing agreement in Q3 2021 and lower brand licensing net sales. This was partly offset by higher net sales related to a new patent license agreement signed earlier this year, as well as positive traction in other patent licensing agreements in the consumer electronics sector.

Nokia Technologies annualized net sales run rate was in the range of approximately EUR 1.4 to 1.5 billion in Q4 2021.

Gross margin

Reported gross margin was 99.7%, compared to 99.5% in Q4 2020. Comparable gross margin was 99.7%, compared to 99.5% in Q4 2020.

Operating profit/(loss) and margin

Reported operating profit was EUR 282 million, or 76.6% of net sales, compared to EUR 306 million, or 80.1% of net sales, in Q4 2020. Comparable operating profit was EUR 282 million, or 76.6% of net sales, compared to EUR 307 million, or 80.4% of net sales, in Q4 2020. The decline was primarily driven by lower net sales and higher operating expenses. In Q4 2021, operating profit was negatively impacted by higher variable pay accruals, compared to Q4 2020.

Group Common and Other, Q4 2021 compared to Q4 2020

EUR million	Q4'21	Q4'20	YoY change	Constant currency YoY change	Q1-Q4'21	Q1-Q4'20	YoY change	Constant currency YoY change
Reported results								
Net sales	74	59	25%	23%	257	269	(4)%	(2)%
Gross margin %	(4.1)%	(8.5)%	440bps		(5.1)%	(0.4)%	(470)bps	
Operating profit/(loss)	(71)	28			(169)	(258)		
Operating margin %	(95.9)%	47.5%	(14 340)bps		(65.8)%	(95.9)%	3 010bps	
Comparable results								
Gross margin %	(4.1)%	(3.4)%	(70)bps		(5.1)%	2.6%	(770)bps	
Operating profit/(loss)	(38)	26			(125)	(251)		
Operating margin %	(51.4)%	44.1%	(9 550)bps		(48.6)%	(93.3)%	4 470bps	

Net sales

Group Common and Other net sales increased 25%. On a constant currency basis, Group Common and Other net sales increased 23%. The increase in Group Common and Other net sales was driven by Radio Frequency Systems.

Gross margin

Reported gross margin was negative 4.1%, compared to negative 8.5% in Q4 2020. Comparable gross margin was negative 4.1%, compared to negative 3.4% in Q4 2020. The decrease was driven by Radio Frequency Systems.

Operating profit/(loss) and margin

Reported operating loss was EUR 71 million, or negative 95.9% of net sales, compared to an operating profit of EUR 28 million, or 47.5% of net sales, in Q4 2020. Comparable operating loss was EUR 38 million, or negative 51.4% of net sales, compared to an operating profit of EUR 26 million, or 44.1% of net sales, in Q4 2020.

The decline in comparable operating result and operating margin was primarily driven by a net negative fluctuation in other operating income and expense, primarily related to a lower net benefit from Nokia's venture fund investments in Q4 2021 compared to Q4 2020. In Q4 2021, the operating result was negatively impacted by higher variable pay accruals, compared to Q4 2020.

In Q4 2021, the net benefit related to Nokia's venture fund investments was approximately EUR 60 million, compared to a net benefit of approximately EUR 110 million in Q4 2020.

In Q4 2021, the difference between reported and comparable operating result was primarily related to the negative impact of a change in provisions related to past acquisitions, fair value losses on a legacy IPR fund and restructuring and associated charges. In Q4 2020, the difference between reported and comparable operating result was primarily related to restructuring and associated charges.

Additional information

Dividend policy

Target recurring, stable and over time growing ordinary dividend payments, taking into account the previous year's earnings as well as the company's financial position and business outlook.

Cost savings program

In Q1 2021, we announced plans to reset our cost base, targeting a reduction of approximately EUR 600 million by the end of 2023.

Given the strength in our end markets in 2021, the pace of restructuring in 2021 continues to be slower than we initially planned. The overall size of the plan however remains unchanged and continues to depend on the evolution of our end markets – consistent with our commentary when we announced the plan. However, we have now updated our expectations for restructuring and associated charges as well as cash outflows.

We now expect these cost savings to result in approximately EUR 500-600 million of restructuring and associated charges by 2023, down from our previous estimate of EUR 600-700 million.

We now expect total restructuring and associated cash outflows to be approximately EUR 1 050-1 150 million, down slightly from our previous estimate of EUR 1 100-1 200 million. This total includes approximately EUR 500 million of cash outflows related to our previous restructuring program.

In EUR million, rounded to the nearest EUR 50 million	Actual	Expected amounts for			Total amount ¹
	2021	2022	2023	Beyond 2023	
Recurring gross cost savings	150	250	100	100	600
- cost of sales	50	100	50		200
- operating expenses	100	150	50	100	400
Restructuring and associated charges related to our most recent cost savings program	250	~100	~200		500-600
Restructuring and associated cash outflows ²	350	~300	~200	~250	1 050-1 150

¹ Savings expected by end of 2023.

² Includes cash outflows related to the most recent cost savings program, as well as the remaining cash outflows related to our previous programs.

Restructuring and associated charges by Business Group

In EUR million, rounded to the nearest EUR 50 million	
Mobile Networks	300-350
Network Infrastructure	~100
Cloud and Network Services	100-150
Total restructuring and associated charges	500-600

Significant events

January – December 2021

On 16 March 2021, Nokia announced plans to reset its cost base to invest in future capabilities. On a group level, this was expected to lower the company's cost base by approximately EUR 600 million by the end of 2023. These savings were intended to offset increased investments in R&D, future capabilities and costs related to salary inflation. Planned restructuring was anticipated to result in an 80 000-85 000 employee organization, over an 18-24-month period, instead of the approximately 90 000 employees Nokia had at the time of the announcement. The exact number will depend on market developments over the next two years from the announcement.

On 17 March 2021, Nokia announced it had appointed Melissa Schoeb as Chief Corporate Affairs Officer and member of the Group Leadership team effective from 12 April 2021. Nokia's Chief Corporate Affairs Officer oversees Communications, Government Relations, Brand and Sustainability. Schoeb joined Nokia from Occidental, one of the world's largest independent oil and gas companies, where she was Vice President, Corporate Affairs.

On 18 March 2021, Nokia held its Capital Markets Day and provided an overview of long-term market trends, how it is setting itself up for value creation, detailed plans for each of its business segments, its financial outlook and its updated dividend policy. For more details, refer to the stock exchange release by Nokia on 18 March 2021, and Nokia's investor relations website at www.nokia.com/investors.

On 8 April 2021, Nokia held its Annual General Meeting at its headquarters in Espoo under special arrangements due to the COVID-19 pandemic. Approximately 66 300 shareholders representing approximately 2 470 million shares and votes were represented at the meeting. The following resolutions were made:

- No dividend was paid for the financial year 2020.
- Sari Baldauf, Bruce Brown, Thomas Dannenfeldt, Jeanette Horan, Edward Kozel, Søren Skou, Carla Smits-Nusteling and Kari Stadigh were re-elected as members of the Board of Directors for a term ending at the close of the next AGM. In an assembly meeting that took place after the AGM, the Board re-elected Sari Baldauf as Chair of the Board, and Kari Stadigh as Vice Chair of the Board.
- Remuneration Report of the company's governing bodies was supported.
- Deloitte Oy was re-elected as the auditor for Nokia for the financial year 2022.
- Board was authorized to resolve to repurchase a maximum of 550 million Nokia shares and to issue a maximum of 550 million shares through issuance of shares or special rights entitling to shares in one or more issues. The authorizations are effective until 7 October 2022 and they terminated the corresponding authorizations granted by the Annual General Meeting on 27 May 2020.

Shares

The total number of Nokia shares on 31 December 2021, equaled 5 675 461 159. On 31 December 2021 Nokia and its subsidiary companies owned 40 467 555 Nokia shares, representing

approximately 0.7% of the total number of Nokia shares and voting rights.

Risk Factors

Nokia and its businesses are exposed to a number of risks and uncertainties which include but are not limited to:

- Competitive intensity, which is expected to continue at a high level;
 - Our ability to ensure competitiveness of our product roadmaps and costs through additional R&D investments;
 - Our ability to procure certain standard components and the costs thereof, such as semiconductors;
 - Disturbance in the global supply chain;
 - Scope and duration of the COVID-19 pandemic, and its economic impact;
 - Accelerating inflation;
 - Other macroeconomic, geopolitical, industry and competitive developments;
 - Timing and value of new and existing patent licensing agreements with smartphone vendors, automotive companies, consumer electronics companies and other licensees;
 - Results in brand and technology licensing; costs to protect and enforce our intellectual property rights; and the regulatory landscape for patent licensing;
 - Timing of completions and acceptances of certain projects;
 - Our product and regional mix;
 - Uncertainty in forecasting income tax expenses and cash outflows, over the long-term, as they are also subject to possible changes due to regional profit mix, net sales subject to withholding taxes, the timing of patent licensing cash flow and changes in tax legislation, including potential tax reform in the U.S. and OECD initiatives;
 - Our ability to utilize our US and Finnish deferred tax assets and their recognition on our balance sheet;
 - Our ability to meet our sustainability and other ESG targets, including our targets relating to greenhouse gas emissions;
- as well as the risk factors specified under Forward-looking Statements of this report, and our 2020 annual report on Form 20-F published on 4 March 2021 under Operating and financial review and prospects-Risk factors.

Forward-looking statements

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, benefits or outlook related to our strategies, product launches, growth management, sustainability and other ESG targets, and operational key performance indicators; B) expectations, plans or benefits related to future performance of our businesses (including the expected impact, timing and duration of COVID-19 on our businesses, our supply chain and our customers' businesses) and any future dividends and other distributions of profit; C) expectations and targets regarding financial performance, cash generation, results, the timing of receivables, operating expenses, taxes, currency exchange rates, hedging, investment funds, inflation, product cost reductions and competitiveness, as well as results of operations including market share, prices, net sales, income and margins; D) ability to execute, expectations, plans or

benefits related to changes in organizational structure and operating model; and E) any statements preceded by or including "continue", "believe", "commit", "estimate", "expect", "aim", "influence", "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 our 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 them. 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 those risks and uncertainties identified in the Risk Factors above.

Financial statement information

Consolidated income statement (condensed)

EUR million	Reported				Comparable			
	Q4'21	Q4'20	Q1–Q4'21	Q1–Q4'20	Q4'21	Q4'20	Q1–Q4'21	Q1–Q4'20
Net sales (Notes 2, 3)	6 414	6 553	22 202	21 852	6 414	6 554	22 202	21 854
Cost of sales	(3 880)	(4 000)	(13 368)	(13 659)	(3 843)	(3 830)	(13 237)	(13 345)
Gross profit (Note 2)	2 534	2 553	8 834	8 193	2 571	2 724	8 965	8 509
Research and development expenses	(1 118)	(1 145)	(4 214)	(4 087)	(1 092)	(1 010)	(4 084)	(3 817)
Selling, general and administrative expenses	(758)	(777)	(2 792)	(2 898)	(659)	(670)	(2 379)	(2 489)
Other operating income and expenses	82	(189)	330	(323)	88	11	273	(122)
Operating profit (Note 2)	740	441	2 158	885	908	1 056	2 775	2 081
Share of results of associated companies and joint ventures	21	20	9	22	21	20	9	22
Financial income and expenses	(68)	(29)	(241)	(164)	(38)	(13)	(176)	(184)
Profit before tax	693	431	1 926	743	891	1 063	2 609	1 918
Income tax expense (Note 5)	(11)	(3 131)	(272)	(3 256)	(159)	(279)	(500)	(481)
Profit/(loss) from continuing operations	682	(2 700)	1 654	(2 513)	731	784	2 109	1 437
(Loss)/profit from discontinued operations	(1)	4	(9)	(3)	0	0	0	0
Profit/(loss) for the period	680	(2 696)	1 645	(2 516)	731	784	2 109	1 437
Attributable to								
Equity holders of the parent	676	(2 693)	1 623	(2 523)	727	787	2 087	1 430
Non-controlling interests	4	(4)	22	7	4	(4)	22	7
Earnings per share, EUR (for profit attributable to equity holders of the parent)								
Basic								
Continuing operations	0.12	(0.48)	0.29	(0.45)	0.13	0.14	0.37	0.25
Profit for the period	0.12	(0.48)	0.29	(0.45)	0.13	0.14	0.37	0.25
Diluted								
Continuing operations	0.12	(0.48)	0.29	(0.45)	0.13	0.14	0.37	0.25
Profit for the period	0.12	(0.48)	0.29	(0.45)	0.13	0.14	0.37	0.25
Average number of shares ('000 shares)								
Basic								
Continuing operations	5 634 946	5 617 463	5 630 025	5 612 418	5 634 946	5 617 463	5 630 025	5 612 418
Profit for the period	5 634 946	5 617 463	5 630 025	5 612 418	5 634 946	5 617 463	5 630 025	5 612 418
Diluted								
Continuing operations	5 713 089	5 617 463	5 684 235	5 612 418	5 713 089	5 640 341	5 684 235	5 636 082
Profit for the period	5 713 089	5 617 463	5 684 235	5 612 418	5 713 089	5 640 341	5 684 235	5 636 082

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

Consolidated statement of comprehensive income (condensed)

EUR million	Reported			
	Q4'21	Q4'20	Q1–Q4'21	Q1–Q4'20
Profit/(loss) for the period	680	(2 696)	1 645	(2 516)
Other comprehensive income				
Items that will not be reclassified to profit or loss				
Remeasurements of defined benefit plans	98	486	3 040	624
Income tax related to items that will not be reclassified to profit or loss	(22)	(115)	(755)	(140)
Items that may be reclassified subsequently to profit or loss				
Translation differences	374	(490)	1 153	(1 232)
Net investment hedges	(95)	61	(249)	266
Cash flow and other hedges	10	(30)	0	15
Financial assets at fair value through other comprehensive income	(2)	2	7	47
Other changes, net	(1)	0	0	3
Income tax related to items that may be reclassified subsequently to profit or loss	1	83	2	25
Other comprehensive income/(loss), net of tax	363	(3)	3 198	(392)
Total comprehensive income/(loss) for the period	1 043	(2 699)	4 843	(2 908)
Attributable to:				
Equity holders of the parent	1 037	(2 696)	4 814	(2 914)
Non-controlling interests	6	(3)	29	6

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

Consolidated statement of financial position (condensed)

EUR million	31 December 2021	31 December 2020
ASSETS		
Goodwill	5 431	5 074
Other intangible assets	1 620	1 953
Property, plant and equipment	1 924	1 783
Right-of-use assets	884	805
Investments in associated companies and joint ventures	243	233
Non-current financial investments (Note 6)	758	745
Deferred tax assets (Note 5)	1 272	1 822
Other non-current financial assets (Note 6)	325	306
Defined benefit pension assets (Note 4)	7 740	5 038
Other non-current assets	255	217
Non-current assets	20 452	17 976
Inventories	2 392	2 242
Trade receivables (Note 6)	5 382	5 503
Contract assets	1 146	1 080
Prepaid expenses and accrued income	859	850
Current income tax assets	214	265
Other current financial assets (Note 6)	336	214
Current financial investments (Note 6)	2 577	1 121
Cash and cash equivalents (Note 6)	6 691	6 940
Current assets	19 597	18 215
Total assets	40 049	36 191
SHAREHOLDERS' EQUITY AND LIABILITIES		
Share capital	246	246
Share issue premium	454	443
Treasury shares	(352)	(352)
Translation differences	(396)	(1 295)
Fair value and other reserves	4 219	1 910
Reserve for invested unrestricted equity	15 726	15 656
Accumulated deficit	(2 537)	(4 143)
Total capital and reserves attributable to equity holders of the parent	17 360	12 465
Non-controlling interests	102	80
Total equity	17 462	12 545
Long-term interest-bearing liabilities (Notes 6, 8)	4 537	5 015
Long-term lease liabilities	824	721
Deferred tax liabilities	282	260
Defined benefit pension and post-employment liabilities (Note 4)	3 408	4 046
Contract liabilities	354	566
Deferred revenue and other long-term liabilities	436	541
Provisions (Note 7)	645	736
Non-current liabilities	10 486	11 885
Short-term interest-bearing liabilities (Notes 6, 8)	116	561
Short-term lease liabilities	185	189
Other financial liabilities (Note 6)	762	738
Current income tax liabilities	202	188
Trade payables (Note 6)	3 679	3 174
Contract liabilities	2 293	2 394
Accrued expenses, deferred revenue and other liabilities (Note 6)	3 940	3 721
Provisions (Note 7)	924	796
Current liabilities	12 101	11 761
Total shareholders' equity and liabilities	40 049	36 191
Shareholders' equity per share, EUR	3.08	2.22
Number of shares (1 000 shares, excluding treasury shares)	5 634 994	5 617 496

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

Consolidated statement of cash flows (condensed)

EUR million	Q4'21	Q4'20	Q1-Q4'21	Q1-Q4'20
Cash flow from operating activities				
Profit/(loss) for the period	680	(2 696)	1 645	(2 516)
Adjustments	321	3 765	1 713	5 267
Depreciation and amortization	277	279	1 095	1 132
Impairment charges	15	220	40	246
Restructuring charges	14	217	183	454
Financial income and expenses	69	28	240	167
Income tax expense	12	3 128	273	3 254
Gain from non-current investments	(53)	(109)	(188)	(61)
Other	(13)	2	70	75
Cash from operations before changes in net working capital	1 001	1 069	3 358	2 751
Change in net working capital	(373)	(135)	(268)	(710)
(Increase)/decrease in receivables	(718)	(1 107)	239	(418)
Decrease/(increase) in inventories	132	485	(48)	553
Increase/(decrease) in non-interest-bearing liabilities	213	487	(459)	(845)
Cash from operations	628	934	3 090	2 041
Interest received	6	9	41	33
Interest paid	(42)	(31)	(192)	(35)
Income taxes paid, net	(107)	(33)	(314)	(280)
Net cash from operating activities	485	879	2 625	1 759
Cash flow from investing activities				
Purchase of property, plant and equipment and intangible assets	(159)	(139)	(560)	(479)
Proceeds from sale of property, plant and equipment and intangible assets	47	8	103	13
Acquisition of businesses, net of cash acquired	0	0	(33)	(104)
Proceeds from disposal of businesses, net of disposed cash	0	0	0	11
Purchase of current financial investments	(251)	(353)	(1 845)	(1 154)
Proceeds from maturities and sale of current financial investments	148	23	398	123
Purchase of non-current financial investments	(22)	(15)	(77)	(59)
Proceeds from sale of non-current financial investments	34	45	277	122
Foreign exchange hedging of cash and cash equivalents ¹	(39)	(17)	(77)	79
Other	10	(1)	19	10
Net cash used in investing activities	(232)	(449)	(1 795)	(1 438)
Cash flow from financing activities				
Purchase of a subsidiary's equity instruments	0	0	0	(1)
Proceeds from long-term borrowings	0	2	17	1 595
Repayment of long-term borrowings	(445)	(16)	(927)	(246)
Repayment of short-term borrowings	(4)	(102)	(67)	(83)
Payment of principal portion of lease liabilities	(56)	(51)	(226)	(234)
Dividends paid	(5)	(130)	(9)	(148)
Net cash (used in)/from financing activities	(510)	(297)	(1 212)	883
Translation differences ¹	45	(29)	133	(174)
Net (decrease)/increase in cash and cash equivalents	(212)	104	(249)	1 030
Cash and cash equivalents at beginning of period	6 903	6 836	6 940	5 910
Cash and cash equivalents at end of period	6 691	6 940	6 691	6 940

¹In 2021, Nokia changed the presentation of the cash flows relating to foreign exchange hedging of cash and cash equivalents from translation differences to cash flow from investing activities. The comparative amounts for 2020 have been reclassified accordingly. Refer to Note 1, Basis of preparation.

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)

EUR million	Share capital	Share issue premium	Treasury shares	Translation differences	Fair value and other reserves	Reserve for invested unrestricted equity	Accumulated deficit	Attributable to equity holders of the parent	Non-controlling interests	Total equity
1 January 2020	246	427	(352)	(372)	1 382	15 607	(1 613)	15 325	76	15 401
Loss for the period	0	0	0	0	0	0	(2 523)	(2 523)	7	(2 516)
Other comprehensive loss	0	0	0	(922)	528	0	3	(391)	(1)	(392)
Total comprehensive loss	0	0	0	(922)	528	0	(2 520)	(2 914)	6	(2 908)
Share-based compensation	0	76	0	0	0	0	0	76	0	76
Excess tax benefit on share-based compensation	0	2	0	0	0	0	0	2	0	2
Settlement of performance and restricted shares	0	(62)	0	0	0	49	0	(13)	0	(13)
Dividend	0	0	0	0	0	0	0	0	(5)	(5)
Acquisition of non-controlling interest	0	0	0	0	0	0	(10)	(10)	0	(10)
Investment in subsidiary by non-controlling interest	0	0	0	0	0	0	0	0	2	2
Other movements	0	0	0	(1)	0	0	0	(1)	1	0
Total transactions with owners	0	16	0	(1)	0	49	(10)	54	(2)	52
31 December 2020	246	443	(352)	(1 295)	1 910	15 656	(4 143)	12 465	80	12 545
1 January 2021	246	443	(352)	(1 295)	1 910	15 656	(4 143)	12 465	80	12 545
Profit for the period	0	0	0	0	0	0	1 623	1 623	22	1 645
Other comprehensive income	0	0	0	899	2 309	0	(17)	3 191	7	3 198
Total comprehensive income	0	0	0	899	2 309	0	1 606	4 814	29	4 843
Share-based compensation	0	108	0	0	0	0	0	108	0	108
Settlement of performance and restricted shares	0	(97)	0	0	0	70	0	(27)	0	(27)
Dividend	0	0	0	0	0	0	0	0	(7)	(7)
Total transactions with owners	0	11	0	0	0	70	0	81	(7)	74
31 December 2021	246	454	(352)	(396)	4 219	15 726	(2 537)	17 360	102	17 462

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 2020 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 2020. 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. This financial report was authorized for issue by the Board of Directors on 3 February 2022.

Certain comparative information for Q4'20 and Q1-Q4'20 presented in this condensed consolidated financial information of Nokia has been revised from that presented in the fourth quarter 2020 due to an adjusting event after the reporting period related to a debt restructuring request of an emerging market customer recorded after the Report for Q4 and Full Year 2020 was published but before the consolidated financial statements for 2020 were authorized for issue.

Net sales and operating profit of the Nokia Group, particularly in Mobile Networks, Network Infrastructure and Cloud and Network Services segments, are subject to seasonal fluctuations being generally highest in the fourth quarter and lowest in the first quarter of the year. This is mainly due to the seasonality in the spending cycles of communication service providers.

Management has identified its regions 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 regions. 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 2, Segment Information, operates in every region as described in Note 3, Net Sales. No reportable segment has a specific revenue concentration in any region other than Nokia Technologies, which is included in Europe. Each type of customer, as disclosed in Note 3, Net Sales, operates in all regions.

In 2017, Nokia and China Huaxin Post & Telecommunication Economy Development Center (China Huaxin) commenced operations of the joint venture Nokia Shanghai Bell (NSB). China Huaxin obtained the right to fully transfer its ownership interest in NSB to Nokia in exchange for a future cash settlement. To reflect this obligation, Nokia derecognized the non-controlling interest and records a financial liability in current liabilities in line with the option exercise period. Any changes in the estimated future cash settlement are recorded in financial income and expense.

In the first quarter of 2021, Nokia reviewed the presentation of cash flows related to foreign exchange hedging of cash and cash equivalents. As a result, Nokia reclassified the results of foreign exchange hedging of cash and cash flows previously presented in translation differences to the cash flow from investing activities to enhance the relevance of information provided in Nokia's consolidated statement of cash flows. The comparative amounts for 2020 have been reclassified accordingly. Related to Q4 2020, as a result of the reclassification, the net cash used in investing activities increased by EUR 17 million and translation differences increased by EUR 17 million compared to the previously reported amounts. Related to Q1-Q4 2020, as a result of the reclassification, the net cash used in investing activities decreased by EUR 79 million and translation differences decreased by EUR 79 million compared to the previously reported amounts.

In 2020, the global economy and financial markets were severely affected by the COVID-19 pandemic. To date, the impact of COVID-19 on our financial performance and financial position has been limited, primarily relating to temporary factory closures in the first half of 2020. As of 31 December 2021, potential risks and uncertainties continue to exist related to the scope and duration of the COVID-19 pandemic as well as the pace and shape of the economic recovery, and it is impossible to predict with accuracy the precise impact of such risks on our business.

Comparable and constant currency measures

Nokia presents financial information on a reported, comparable (until the fourth quarter of 2020 non-IFRS) and constant currency basis. Comparable measures presented in this document exclude intangible asset amortization and other purchase price fair value adjustments, goodwill impairments, restructuring related charges and certain other items affecting comparability. In order to allow full visibility on determining comparable results, information on items affecting comparability 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.

As comparable or constant currency financial measures are not defined in IFRS they may not be directly comparable with similarly titled measures used by other companies, including those in the same industry. The primary rationale for presenting these measures is that the management uses these measures in assessing the financial performance of Nokia and believes that these measures provide meaningful supplemental information on the underlying business performance of Nokia. These financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS. Refer to Note 10, Performance measures, for further details.

Foreign exchange rates

Nokia's net sales are derived from various countries and invoiced in various currencies. Therefore, our business and results from operations are exposed to changes in foreign 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.

The below table shows the exposure to different currencies for net sales and total costs.

	Q4'21		Q4'20		Q3'21	
	Net sales	Total costs	Net sales	Total costs	Net sales	Total costs
EUR	~25%	~25%	~20%	~25%	~25%	~25%
USD	~50%	~50%	~55%	~50%	~50%	~50%
CNY	~5%	~5%	~5%	~5%	~5%	~5%
Other	~20%	~20%	~20%	~20%	~20%	~20%
Total	100%	100%	100%	100%	100%	100%

End of Q4'21 balance sheet rate 1 EUR = 1.13 USD, end of Q4'20 balance sheet rate 1 EUR = 1.23 USD and end of Q3'21 balance sheet rate 1 EUR = 1.16 USD

New and amended standards and interpretations

The amendments to IFRS standards that became effective on 1 January 2021, did not have a material impact on Nokia's consolidated financial statements. New standards and amendments to existing standards issued by the IASB that are not yet effective are not expected to have a material impact on Nokia's consolidated financial statements when adopted.

2. SEGMENT INFORMATION

Nokia has four operating and reportable segments for the financial reporting purposes: (1) Mobile Networks, (2) Network Infrastructure, (3) Cloud and Network Services and (4) Nokia Technologies. Segment-level information for Group Common and Other is also presented.

In addition, Nokia provides net sales disclosure for the following businesses within the Network Infrastructure segment: (i) IP Networks, (ii) Optical Networks, (iii) Fixed Networks and (iv) Submarine Networks.

Nokia adopted its current operational and reporting structure on 1 January 2021. The reporting structure was revised to reflect Nokia's new strategy and operational model which is aligned with the way the management evaluates the operational performance of Nokia and allocates resources. Previously Nokia had three reportable segments: (1) Networks, (2) Nokia Software and (3) Nokia Technologies. Furthermore, Networks reportable segment consisted of four aggregated operating segments: (1) Mobile Networks, (2) Global Services, (3) Fixed Networks and (4) IP/Optical Networks. The most significant changes to the operational and reporting structure are the reclassifications of the following product areas:

- Network management was reclassified from Nokia Software to Mobile Networks
- Submarine Networks was reclassified from Group Common and Other to Network Infrastructure
- Packet Core was reclassified from IP/Optical Networks to Cloud and Network Services
- Managed Services, Network Cognitive Services and Enterprise Solution Services were reclassified from Global Services to Cloud and Network Services
- Digital Automation and Analytics & IoT was reclassified from Group Common and Other to Cloud and Network Services

Segment information for 2020 has been recast for comparability purposes according to the new operating and reporting structure.

The President and CEO is the chief operating decision-maker and monitors the operating results of segments for the purpose of assessing performance and making decisions about resource allocation. Key financial performance measures of the segments include primarily net sales and operating profit. The evaluation of segment performance and allocation of resources is primarily based on comparable operating profit which the management believes is the most relevant measure for this purpose. Comparable operating profit excludes intangible asset amortization and other purchase price fair value adjustments, goodwill impairments, restructuring related charges and certain other items affecting comparability.

Accounting policies of the segments are the same as those described in Note 2, Significant accounting policies in the consolidated financial statements for 2020, except that items affecting comparability are excluded from the measurement of comparable measures. For more information on comparable measures, refer to Notes 1, Basis of preparation and 10, Performance Measures. Inter-segment revenues and transfers are accounted for as if the revenues were to third parties, that is, at current market prices.

Mobile Networks

The Mobile Networks operating segment offers technologies for Radio Access Networks (RAN) as well as Microwave Radio Links (MWR) for transport networks. RAN includes 3GPP radio technologies ranging from 2G/GSM to 5G/NR in licensed and unlicensed spectrum for both macro and small cell deployments. In addition to RAN and MWR products, the Mobile Networks operating segment provides associated network management solutions as well as network planning, network optimization, network deployment and technical support services.

Network Infrastructure

The Network Infrastructure operating segment serves communication service providers, enterprises, webscales and public sector customers. It comprises the following businesses: (i) Optical Networks, which provides optical transport networks for metro, regional, longhaul and ultra-longhaul applications; (ii) IP Networks, which provides IP networks and services for residential, mobile, enterprise and cloud applications; (iii) Fixed Networks, which provides fiber, fixed wireless access, and copper technologies; and (iv) Submarine Networks, which offers undersea cable transmission.

Cloud and Network Services

The Cloud and Network Services operating segment is built around software and the cloud and is focused on driving leadership in cloud-native software and as-a-service deliver models, as demand for critical networks accelerates; and with strong market positions in communications software, private wireless networks, and cognitive (or intelligent) services. The Cloud and Network Services portfolio encompasses core networks, including both voice and packet core; business applications covering areas like security and digital operations; cloud and cognitive services; and enterprise solutions covering private wireless and industrial automation.

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 the 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 patent portfolio is recorded in Nokia Technologies, while each segment separately records its own research and development expenses.

Group Common and Other

Group Common and Other includes Radio Frequency Systems which is managed as a separate entity. In addition, Group Common and Other includes Nokia Bell Labs' operating expenses, certain corporate-level and centrally managed operating expenses, as well as fair value gains and losses on investments in unlisted venture funds, including investments managed by NGP Capital.

Mobile Networks

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	2 761	0	2 761	3 181	0	3 180
Gross profit	1 037	(14)	1 023	1 256	(24)	1 232
<i>Gross margin %</i>	<i>37.6%</i>		<i>37.1%</i>	<i>39.5%</i>		<i>38.7%</i>
Operating profit	270	(32)	238	415	(142)	273
<i>Operating margin %</i>	<i>9.8%</i>		<i>8.6%</i>	<i>13.0%</i>		<i>8.6%</i>
Other segment items						
Depreciation and amortization	(87)	(14)	(101)	(87)	(16)	(103)
Share of results of associated companies and joint ventures	18	0	18	21	0	21
EBITDA	375	(18)	357	523	(126)	397

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	9 717	0	9 717	10 398	(1)	10 397
Gross profit	3 637	(56)	3 581	3 732	(69)	3 663
<i>Gross margin %</i>	<i>37.4%</i>		<i>36.9%</i>	<i>35.9%</i>		<i>35.2%</i>
Operating profit	765	(128)	637	818	(303)	515
<i>Operating margin %</i>	<i>7.9%</i>		<i>6.6%</i>	<i>7.9%</i>		<i>5.0%</i>
Other segment items						
Depreciation and amortization	(338)	(61)	(398)	(347)	(66)	(413)
Share of results of associated companies and joint ventures	6	0	6	21	0	21
EBITDA	1 109	(67)	1 041	1 186	(237)	949

Network Infrastructure

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales⁽¹⁾	2 254	0	2 254	1 980	0	1 979
Gross profit	767	(10)	758	715	(30)	685
<i>Gross margin %</i>	<i>34.0%</i>		<i>33.6%</i>	<i>36.1%</i>		<i>34.6%</i>
Operating profit/(loss)	248	(93)	156	211	(313)	(102)
<i>Operating margin %</i>	<i>11.0%</i>		<i>6.9%</i>	<i>10.7%</i>		<i>(5.2)%</i>
Other segment items						
Depreciation and amortization	(53)	(77)	(130)	(50)	(75)	(124)
Share of results of associated companies and joint ventures	0	0	0	1	0	1
EBITDA	301	(16)	286	262	(238)	23

¹In Q4'21, IP Networks net sales of EUR 755 million, Optical Networks net sales of EUR 506 million, Fixed Networks net sales of EUR 747 million and Submarine Networks net sales of EUR 246 million. In Q4'20, IP Networks net sales of EUR 761 million, Optical Networks net sales of EUR 474 million, Fixed Networks net sales of EUR 517 million and Submarine Networks net sales of EUR 227 million.

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales⁽¹⁾	7 674	0	7 674	6 736	0	6 736
Gross profit	2 684	(23)	2 661	2 361	(69)	2 292
<i>Gross margin %</i>	<i>35.0%</i>		<i>34.7%</i>	<i>35.1%</i>		<i>34.0%</i>
Operating profit/(loss)	784	(358)	426	457	(615)	(158)
<i>Operating margin %</i>	<i>10.2%</i>		<i>5.6%</i>	<i>6.8%</i>		<i>(2.3)%</i>
Other segment items						
Depreciation and amortization	(208)	(299)	(507)	(201)	(308)	(508)
Share of results of associated companies and joint ventures	(1)	0	(1)	(1)	0	(1)
EBITDA	991	(59)	932	656	(307)	348

¹In Q1-Q4'21, IP Networks net sales of EUR 2 679 million, Optical Networks net sales of EUR 1 708 million, Fixed Networks net sales of EUR 2 358 million and Submarine Networks net sales of EUR 929 million. In Q1-Q4'20, IP Networks net sales of EUR 2 585 million, Optical Networks net sales of EUR 1 695 million, Fixed Networks net sales of EUR 1 759 million and Submarine Networks net sales of EUR 697 million.

Cloud and Network Services

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	964	0	964	962	0	962
Gross profit	403	(14)	389	374	(115)	259
<i>Gross margin %</i>	<i>41.8%</i>		<i>40.4%</i>	<i>38.9%</i>		<i>26.9%</i>
Operating profit/(loss)	145	(10)	135	97	(160)	(63)
<i>Operating margin %</i>	<i>15.0%</i>		<i>14.0%</i>	<i>10.1%</i>		<i>(6.5)%</i>
Other segment items						
Depreciation and amortization	(23)	(7)	(30)	(27)	(8)	(35)
Share of results of associated companies and joint ventures	3	0	3	2	0	2
EBITDA	171	(3)	168	126	(152)	(26)

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	3 089	0	3 089	3 087	0	3 087
Gross profit	1 160	(51)	1 109	1 016	(171)	845
<i>Gross margin %</i>	<i>37.6%</i>		<i>35.9%</i>	<i>32.9%</i>		<i>27.4%</i>
Operating profit/(loss)	166	(86)	80	(67)	(267)	(334)
<i>Operating margin %</i>	<i>5.4%</i>		<i>2.6%</i>	<i>(2.2)%</i>		<i>(10.8)%</i>
Other segment items						
Depreciation and amortization	(95)	(29)	(125)	(114)	(31)	(145)
Share of results of associated companies and joint ventures	6	0	6	5	0	5
EBITDA	267	(57)	211	52	(236)	(184)

Nokia Technologies

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	368	0	368	382	0	382
Gross profit	367	0	367	380	0	380
<i>Gross margin %</i>	<i>99.7%</i>		<i>99.7%</i>	<i>99.5%</i>		<i>99.5%</i>
Operating profit	282	0	282	307	(1)	306
<i>Operating margin %</i>	<i>76.6%</i>		<i>76.6%</i>	<i>80.4%</i>		<i>80.1%</i>
Other segment items						
Depreciation and amortization	(8)	0	(8)	(10)	0	(10)
Share of results of associated companies and joint ventures	0	0	0	0	0	0
EBITDA	290	0	290	317	(1)	316

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	1 502	0	1 502	1 402	0	1 402
Gross profit	1 497	0	1 496	1 393	(1)	1 392
<i>Gross margin %</i>	<i>99.7%</i>		<i>99.6%</i>	<i>99.4%</i>		<i>99.3%</i>
Operating profit	1 185	(1)	1 184	1 123	(3)	1 120
<i>Operating margin %</i>	<i>78.9%</i>		<i>78.8%</i>	<i>80.1%</i>		<i>79.9%</i>
Other segment items						
Depreciation and amortization	(33)	0	(33)	(39)	0	(39)
Share of results of associated companies and joint ventures	(2)	0	(2)	1	0	1
EBITDA	1 216	(1)	1 215	1 163	(4)	1 160

Group Common and Other

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	74	0	74	59	0	59
Gross (loss)	(3)	1	(3)	(2)	(3)	(5)
<i>Gross margin %</i>	<i>(4.1)%</i>		<i>(4.1)%</i>	<i>(3.4)%</i>		<i>(8.5)%</i>
Operating (loss)/profit	(38)	(33)	(71)	26	2	28
<i>Operating margin %</i>	<i>(51.4)%</i>		<i>(95.9)%</i>	<i>44.1%</i>		<i>47.5%</i>
Other segment items						
Depreciation and amortization	(6)	0	(7)	(6)	0	(7)
Share of results of associated companies and joint ventures	0	0	0	(4)	0	(4)
EBITDA	(32)	(33)	(64)	28	2	31

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	257	0	257	269	0	269
Gross (loss)/profit	(13)	0	(13)	7	(8)	(1)
<i>Gross margin %</i>	<i>(5.1)%</i>		<i>(5.1)%</i>	<i>2.6%</i>		<i>(0.4)%</i>
Operating loss	(125)	(44)	(169)	(251)	(7)	(258)
<i>Operating margin %</i>	<i>(48.6)%</i>		<i>(65.8)%</i>	<i>(93.3)%</i>		<i>(95.9)%</i>
Other segment items						
Depreciation and amortization	(30)	(1)	(31)	(25)	(1)	(26)
Share of results of associated companies and joint ventures	0	0	0	(5)	0	(5)
EBITDA	(95)	(43)	(138)	(231)	(6)	(237)

Nokia Group

EUR million	Q4'21			Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	6 414	0	6 414	6 554	(1)	6 553
Gross profit	2 571	(37)	2 534	2 724	(171)	2 553
<i>Gross margin %</i>	<i>40.1%</i>		<i>39.5%</i>	<i>41.6%</i>		<i>39.0%</i>
Operating profit	908	(168)	740	1 056	(615)	441
<i>Operating margin %</i>	<i>14.2%</i>		<i>11.5%</i>	<i>16.1%</i>		<i>6.7%</i>
Other segment items						
Depreciation and amortization	(178)	(99)	(277)	(180)	(99)	(279)
Share of results of associated companies and joint ventures	21	0	21	20	0	20
EBITDA	1 107	(69)	1 038	1 256	(516)	740

EUR million	Q1-Q4'21			Q1-Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales	22 202	0	22 202	21 854	(2)	21 852
Gross profit	8 965	(131)	8 834	8 509	(316)	8 193
<i>Gross margin %</i>	<i>40.4%</i>		<i>39.8%</i>	<i>38.9%</i>		<i>37.5%</i>
Operating profit	2 775	(617)	2 158	2 081	(1 196)	885
<i>Operating margin %</i>	<i>12.5%</i>		<i>9.7%</i>	<i>9.5%</i>		<i>4.0%</i>
Other segment items						
Depreciation and amortization	(704)	(391)	(1 095)	(725)	(407)	(1 132)
Share of results of associated companies and joint ventures	9	0	9	22	0	22
EBITDA	3 488	(226)	3 262	2 828	(789)	2 039

Reconciliation of the segments to the Group

EUR million	Q4'21			Q1-Q4'21		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales						
Mobile Networks	2 761	0	2 761	9 717	0	9 717
Network Infrastructure	2 254	0	2 254	7 674	0	7 674
Cloud and Network Services	964	0	964	3 089	0	3 089
Nokia Technologies	368	0	368	1 502	0	1 502
Group Common and Other	74	0	74	257	0	257
Segment total	6 421	0	6 421	22 239	0	22 239
Eliminations	(7)	0	(7)	(37)	0	(37)
Nokia Group	6 414	0	6 414	22 202	0	22 202
Gross profit/(loss)						
Mobile Networks	1 037	(14)	1 023	3 637	(56)	3 581
Network Infrastructure	767	(10)	758	2 684	(23)	2 661
Cloud and Network Services	403	(14)	389	1 160	(51)	1 109
Nokia Technologies	367	0	367	1 497	0	1 496
Group Common and Other	(3)	1	(3)	(13)	0	(13)
Segment total	2 571	(37)	2 534	8 965	(131)	8 834
Nokia Group	2 571	(37)	2 534	8 965	(131)	8 834
Operating profit/(loss)						
Mobile Networks	270	(32)	238	765	(128)	637
Network Infrastructure	248	(93)	156	784	(358)	426
Cloud and Network Services	145	(10)	135	166	(86)	80
Nokia Technologies	282	0	282	1 185	(1)	1 184
Group Common and Other	(38)	(33)	(71)	(125)	(44)	(169)
Segment total	908	(168)	740	2 775	(617)	2 158
Nokia Group	908	(168)	740	2 775	(617)	2 158

EUR million	Q4'20			Q1–Q4'20		
	Comparable	Items affecting comparability	Reported	Comparable	Items affecting comparability	Reported
Net sales						
Mobile Networks	3 181	0	3 180	10 398	(1)	10 397
Network Infrastructure	1 980	0	1 979	6 736	0	6 736
Cloud and Network Services	962	0	962	3 087	0	3 087
Nokia Technologies	382	0	382	1 402	0	1 402
Group Common and Other	59	0	59	269	0	269
Segment total	6 564	0	6 562	21 892	(1)	21 891
Eliminations	(8)	0	(8)	(38)	0	(38)
Nokia Group	6 554	(1)	6 553	21 854	(2)	21 852
Gross profit/(loss)						
Mobile Networks	1 256	(24)	1 232	3 732	(69)	3 663
Network Infrastructure	715	(30)	685	2 361	(69)	2 292
Cloud and Network Services	374	(115)	259	1 016	(171)	845
Nokia Technologies	380	0	380	1 393	(1)	1 392
Group Common and Other	(2)	(3)	(5)	7	(8)	(1)
Segment total	2 724	(171)	2 553	8 509	(316)	8 193
Nokia Group	2 724	(171)	2 553	8 509	(316)	8 193
Operating profit/(loss)						
Mobile Networks	415	(142)	273	818	(303)	515
Network Infrastructure	211	(313)	(102)	457	(615)	(158)
Cloud and Network Services	97	(160)	(63)	(67)	(267)	(334)
Nokia Technologies	307	(1)	306	1 123	(3)	1 120
Group Common and Other	26	2	28	(251)	(7)	(258)
Segment total	1 056	(615)	441	2 081	(1 196)	885
Nokia Group	1 056	(615)	441	2 081	(1 196)	885

3. NET SALES

Net sales by region

EUR million	Q4'21	Q4'20 ¹	YoY change	Q1-Q4'21	Q1-Q4'20 ¹	YoY change
Asia Pacific	712	806	(12)%	2 562	2 742	(7)%
Europe	1 940	1 789	8%	6 635	6 427	3%
Greater China	406	459	(12)%	1 545	1 510	2%
India	250	294	(15)%	1 039	954	9%
Latin America	350	330	6%	1 226	1 070	15%
Middle East & Africa	610	570	7%	1 915	1 981	(3)%
North America	2 146	2 304	(7)%	7 280	7 168	2%
Total	6 414	6 553	(2)%	22 202	21 852	2%

¹In the first quarter of 2021, Nokia aligned how it externally reports financial information on a regional basis with its internal reporting structure. As a result, India which was earlier presented as part of Asia Pacific region is presented as a separate region. In addition, certain countries are now presented as part of a different region. The comparative net sales by region amounts for Q4'20 and Q1-Q4'20 have been recast accordingly.

Net sales by customer type

EUR million	Q4'21	Q4'20	YoY change	Q1-Q4'21	Q1-Q4'20	YoY change
Communication service providers	5 238	5 393	(3)%	17 977	17 954	0%
Enterprise	495	502	(1)%	1 575	1 571	0%
Licensees	368	382	(4)%	1 502	1 402	7%
Other ¹	312	277	13%	1 148	925	24%
Total	6 414	6 553	(2)%	22 202	21 852	2%

¹Includes net sales of Submarine Networks which operates in a different market, and Radio Frequency Systems (RFS), which is being managed as a separate entity, and certain other items, such as eliminations of inter-segment revenues and certain items related to purchase price allocation. Submarine Networks and RFS net sales include also revenue from communication service providers and enterprise customers.

4. PENSIONS AND OTHER POST-EMPLOYMENT BENEFITS

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 other post-employment benefit plans, providing retirement healthcare benefits and life insurance coverage. Nokia remeasures all pension and post-retirement plan assets and obligations annually, as of 31 December, through valuations performed by external actuaries. As of 31 December 2021, the weighted average discount rates used in remeasurement of the most significant plans were as follows (comparatives as of 31 December 2020): U.S. Pension 2.40% (1.94%), U.S. Opeb 2.42% (1.97%), Germany 0.87% (0.35%) and U.K. 1.87% (1.26%).

The funded status of Nokia's defined benefit plans (before the effect of the asset ceiling) increased from EUR 4 184 million, or 118.5%, as of 30 September 2021 to EUR 4 424 million, or 119.5% as of 31 December 2021. During the quarter the global defined benefit plan asset portfolio was invested approximately 69% in fixed income, 5% in equities and 26% in other asset classes, mainly private equity and real estate. Market conditions for financial assets have continued to stabilize after COVID-19 related stress in 2020. Should there be another increase in financial market volatility, fair values of pension assets may fluctuate in future quarters.

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

EUR million	31 December 2021			31 December 2020		
	Pensions ¹	US Opeb	Total	Pensions ¹	US Opeb	Total
Net asset/(liability) recognized 1 January	2 572	(1 580)	992	2 348	(1 861)	487
Recognized in income statement	(128)	(29)	(157)	(196)	43	(153)
Recognized in other comprehensive income	2 906	134	3 040	707	(83)	624
Contributions and benefits paid	177	(6)	171	186	6	192
Exchange differences and other movements ²	61	225	286	(473)	315	(158)
Net asset/(liability) recognized at the end of the period	5 588	(1 256)	4 332	2 572	(1 580)	992

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

²Includes Section 420 transfers, medicare subsidies, and other transfers.

Funded status

EUR million	31 December 2021	30 September 2021	30 June 2021	31 March 2021	31 December 2020
Defined benefit obligation ¹	(22 704)	(22 632)	(22 599)	(22 630)	(23 501)
Fair value of plan assets ¹	27 128	26 816	26 219	25 824	25 688
Funded status	4 424	4 184	3 620	3 194	2 187
Effects of asset ceiling ²	(92)	(90)	(1 459)	(1 368)	(1 195)
Net asset recognized at the end of the period	4 332	4 094	2 161	1 826	992

¹The comparative amounts for defined benefit obligation and fair value of plan assets have been changed for each quarter in 2020 to reflect the timing of US benefit payments.

²In the third quarter of 2021, Nokia modified the terms of its US defined benefit pension plans. As a result of the modification, Nokia recognized a reduction in the effect of the asset ceiling of EUR 1 396 million.

5. DEFERRED TAXES

Deferred tax assets are recognized to the extent it is probable that future taxable profit will be available against which the unused tax losses, unused tax credits and deductible temporary differences can be utilized in the relevant jurisdictions. As of 31 December 2021, Nokia has recognized deferred tax assets of EUR 1.3 billion (EUR 1.8 billion as of 31 December 2020).

In addition, as of 31 December 2021, Nokia has unrecognized deferred tax assets of approximately EUR 8 billion (EUR 8 billion as of 31 December 2020), the majority of which relate to France (approximately EUR 4 billion) and Finland (approximately EUR 3 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. The majority of Finnish unrecognized deferred tax assets are not subject to expiry and are available against future Finnish tax liabilities.

Nokia continually evaluates the probability of utilizing its deferred tax assets and considers both positive and negative evidence in its assessment. At 31 December 2020, Nokia concluded based on its assessment that it is not probable that it will be able to utilize the unused tax losses, unused tax credits and deductible temporary differences in Finland in the foreseeable future. This assessment was done primarily based on the historical performance. Consequently, Nokia derecognized EUR 2 918 million deferred tax assets related to Finland.

At 31 December 2021, Nokia continues to conclude that such utilization is not probable. When an entity has incurred losses in recent years in a certain jurisdiction, additional caution should be exercised before a deferred tax asset is recognized. The entity recognizes a deferred tax asset arising from unused losses or tax credits only to the extent the entity has sufficient taxable temporary differences or there is convincing other evidence that sufficient tax profit will be available against which the unused tax losses or unused tax credits can be utilized in the future. Positive evidence of future taxable profits may be assigned less weight in assessing the appropriateness of recording a deferred tax asset when there is other negative evidence such as cumulative losses, which are considered strong evidence that future taxable profits may not be available.

In 2021, Nokia generated accounting and taxable profit in Finland and there were improvements in financial performance compared to the previous periods. At 31 December 2021, Nokia does not consider that it has generated an established pattern of sufficient tax profitability to conclude that it is probable that Nokia will be able to utilize the deferred tax assets in Finland. This conclusion is based on the weighting of objective negative evidence against more subjective positive evidence. The primary factors in this weighting were the more objective record of a pattern of financial performance compared to the more inherently subjective expectations regarding future financial performance in Finland.

Nokia continues to assess the realizability of deferred tax assets including in particular its actual profit record and may re-recognize deferred tax assets related to Finland where a clear pattern of tax profitability can be established.

6. FAIR VALUE OF FINANCIAL INSTRUMENTS

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, in the consolidated financial statements for 2020. Items carried at fair value in the following table are measured at fair value on a recurring basis.

EUR million	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		
31 December 2021									
Non-current financial investments	0	8	0	750	0	0	0	758	758
Other non-current financial assets	130	0	101	0	0	94	0	325	325
Other current financial assets including derivatives	115	0	200	0	0	21	0	336	336
Trade receivables	0	0	0	0	0	5 382	0	5 382	5 382
Current financial investments	526	0	2 051	0	0	0	0	2 577	2 577
Cash and cash equivalents	4 627	0	2 064	0	0	0	0	6 691	6 691
Total financial assets	5 398	8	4 416	750	0	5 497	0	16 069	16 069
Long-term interest-bearing liabilities	4 537	0	0	0	0	0	0	4 537	4 775
Other long-term financial liabilities	0	0	0	68	0	0	0	68	68
Short-term interest-bearing liabilities	116	0	0	0	0	0	0	116	116
Other short-term financial liabilities including derivatives	0	0	240	522	0	0	0	762	762
Discounts without performance obligations	479	0	0	0	0	0	0	479	479
Trade payables	3 679	0	0	0	0	0	0	3 679	3 679
Total financial liabilities	8 811	0	240	590	0	0	0	9 641	9 879

EUR million	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		
31 December 2020									
Non-current financial investments	0	31	0	714	0	0	0	745	745
Other non-current financial assets	115	0	99	5	0	87	0	306	306
Other current financial assets including derivatives	22	0	169	8	0	15	0	214	214
Trade receivables	0	0	0	0	0	5 503	0	5 503	5 503
Current financial investments	134	0	882	0	0	105	0	1 121	1 121
Cash and cash equivalents	4 333	0	2 607	0	0	0	0	6 940	6 940
Total financial assets	4 604	31	3 757	727	0	5 710	0	14 829	14 829
Long-term interest-bearing liabilities	5 015	0	0	0	0	0	0	5 015	5 140
Other long-term financial liabilities	0	0	0	19	0	0	0	19	19
Short-term interest-bearing liabilities	561	0	0	0	0	0	0	561	561
Other short-term financial liabilities including derivatives	0	0	318	420	0	0	0	738	738
Discounts without performance obligations	747	0	0	0	0	0	0	747	747
Trade payables	3 174	0	0	0	0	0	0	3 174	3 174
Total financial liabilities	9 497	0	318	439	0	0	0	10 254	10 379

Lease liabilities are not included in the fair value of financial instruments.

Level 3 Financial assets include a large number of investments in unlisted equities and unlisted venture funds, including investments managed by NGP Capital specializing in growth-stage investing. The fair value of level 3 investments is determined using one or more valuation techniques with unobservable inputs, where the use of the market approach generally consists of using comparable market transactions, while the use of the income approach generally consists of calculating the net present value of expected future cash flows.

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:

EUR million	Level 3 Financial Assets	Level 3 Financial Liabilities
Balance as of 31 December 2020	727	(439)
Net gains/(losses) in income statement	177	(107)
Acquisitions through business combination	0	(48)
Additions	69	0
Deductions	(218)	7
Transfers out of level 3	(7)	0
Other movements	2	(3)
Balance as of 31 December 2021	750	(590)

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 85 million (net gain of EUR 102 million in 2020) related to level 3 financial instruments held at 31 December 2021 was included in the profit and loss during 2021.

7. PROVISIONS

EUR million	Restructuring	Warranty	Litigation	Environmental	Project losses	Divestment-related	Material liability	Other ¹	Total
As of 1 January 2021	441	220	73	113	276	49	130	230	1 532
Translation differences	1	1	2	8	3	0	0	14	29
Reclassification	(5)	0	(1)	0	0	(12)	0	70	52
Charged to income statement									
<i>Additions</i>	221	197	81	36	22	12	35	141	745
<i>Reversals</i>	(38)	(17)	(20)	(1)	(3)	(3)	(36)	(27)	(145)
Total charged to income statement	183	180	61	35	19	9	(1)	114	600
Utilized during period ²	(308)	(147)	(33)	(7)	(63)	0	(40)	(46)	(644)
As of 31 December 2021	312	254	102	149	235	46	89	382	1 569
Non-current	156	19	14	133	124	43	13	143	645
Current	156	235	88	16	111	3	76	239	924

¹Other provisions include provisions for various obligations such as indirect tax provisions, employee-related provisions other than restructuring provisions and asset retirement obligations.

²The utilization of restructuring provision includes items transferred to accrued expenses, of which EUR 69 million remained in accrued expenses as of 31 December 2021.

8. INTEREST-BEARING LIABILITIES

Issuer/borrower	Instrument	Currency	Nominal (million)	Final maturity	Carrying amount (EUR million)	
					31 December 2021	31 December 2020
Nokia Corporation	1.00% Senior Notes ¹	EUR	350	March 2021	0	350
Nokia Corporation	3.375% Senior Notes ²	USD	500	June 2022	0	417
Nokia Corporation	2.00% Senior Notes	EUR	750	March 2024	759	762
Nokia Corporation	EIB R&D Loan	EUR	500	February 2025	500	500
Nokia Corporation	NIB R&D Loan ³	EUR	250	May 2025	250	250
Nokia Corporation	2.375% Senior Notes	EUR	500	May 2025	497	497
Nokia Corporation	2.00% Senior Notes	EUR	750	March 2026	760	762
Nokia Corporation	4.375% Senior Notes	USD	500	June 2027	464	448
Nokia of America Corporation	6.50% Senior Notes	USD	74	January 2028	66	61
Nokia Corporation	3.125% Senior Notes	EUR	500	May 2028	497	497
Nokia of America Corporation	6.45% Senior Notes	USD	206	March 2029	183	169
Nokia Corporation	6.625% Senior Notes	USD	500	May 2039	553	541
Nokia Corporation and various subsidiaries	Other liabilities				124	322
Total					4 653	5 576

¹Nokia redeemed EUR 350 million of the 1.00% Senior Notes due March 2021 in February 2021.

²Nokia redeemed USD 500 million of the 3.375% Senior Notes due June 2022 in December 2021.

³The loan from the Nordic Investment Bank (NIB) is repayable in three equal annual installments in 2023, 2024 and 2025.

Significant credit facilities and funding programs

Financing arrangement	Committed / uncommitted	Currency	Nominal (million)	Utilized (million)	
				31 December 2021	31 December 2020
Revolving Credit Facility ¹	Committed	EUR	1 500	0	0
Finnish Commercial Paper Programme	Uncommitted	EUR	750	0	0
Euro-Commercial Paper Programme	Uncommitted	EUR	1 500	0	0
Euro Medium Term Note Programme ²	Uncommitted	EUR	5 000	2 500	2 850

¹Nokia exercised its option to extend the maturity date of the Revolving Credit Facility in June 2021. Subsequent to the extension, the facility has its maturity in June 2026, except for EUR 88 million having its maturity in June 2024.

²All euro-denominated bonds have been issued under the Euro Medium Term Note Programme.

All borrowings and credit facilities presented in the tables above are senior unsecured and have no financial covenants.

9. COMMITMENTS, CONTINGENCIES AND LEGAL PROCEEDINGS

EUR million	31 December 2021	31 December 2020
Contingent liabilities on behalf of Group companies		
Guarantees issued by financial institutions		
Commercial guarantees	1 281	1 107
Non-commercial guarantees	442	450
Corporate guarantees		
Commercial guarantees	457	453
Non-commercial guarantees	35	53
Financing commitments		
Customer finance commitments	21	180
Venture fund commitments	137	189
Other contingent liabilities and financing commitments¹		
Other guarantees and financing commitments	4	11

¹Other contingent liabilities and financing commitments exclude committed lease contracts that have not yet commenced and purchase obligations. Refer to Note 30, Commitments, contingencies and legal proceedings, in the consolidated financial statements for 2020.

The amounts in the table above represent the maximum principal amount of commitments and contingencies, and these amounts do not reflect management's expected outcomes.

Intellectual property rights litigations

In 2019 and 2020, Nokia filed patent infringement lawsuits against Lenovo in four countries, including United States, regarding 19 Nokia patents used in Lenovo's products. Lenovo responded with counterclaims and nullity proceedings, and in 2020, Lenovo filed an action in the United States against Nokia alleging breach of RAND obligations and other claims. In the first quarter of 2021, Nokia concluded a multi-year, multi-technology patent cross-license agreement with Lenovo. The agreement resolves all pending patent litigation and other proceedings between the two parties, in all jurisdictions. Under the agreement, Lenovo will make a net balancing payment to Nokia.

In 2019, Nokia commenced patent infringement proceedings against Daimler in Germany regarding ten Nokia patents relevant to the 3G and 4G cellular standards used in Daimler's connected cars. In 2020, one of the cases was referred to the Court of Justice of the European Union on questions relating to standard essential patent litigation. In the second quarter of 2021, Nokia and Daimler announced that they have signed a patent licensing agreement under which Nokia licenses mobile telecommunications technology to Daimler and receives payment in return. The parties have agreed to settle all pending litigation between Daimler and Nokia, including the complaint by Daimler against Nokia to the European Commission. Invalidation actions brought by Daimler's suppliers and their respective complaints to the European Commission regarding Nokia's licensing practice continue.

In the third quarter of 2021, Nokia commenced patent infringement proceedings against Oppo, OnePlus and Realme in several countries in Asia and Europe. Across these actions, more than 30 patents are in suit, covering a mix of cellular standards and technologies such as connectivity, user interface and security. Oppo responded by filing invalidation actions against certain Nokia patents, a number of patent infringement actions against Nokia equipment in Germany and China and actions in China against Nokia relating to standard essential patent licensing issues.

10. PERFORMANCE MEASURES

Certain financial measures presented in this interim report are not measures of financial performance, financial position or cash flows defined in IFRS, and therefore may not be directly comparable with financial measures used by other companies, including those in the same industry. The primary rationale for presenting these measures is that the management uses these measures in assessing the financial performance of Nokia and believes that these measures provide meaningful supplemental information on the underlying business performance. These financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS.

The following tables provide summarized information on the performance measures included in this interim report as well as reconciliations of the performance measures to the amounts presented in the financial statements.

Performance measure	Definition	Purpose
Comparable measures	Comparable measures exclude intangible asset amortization and other purchase price fair value adjustments, goodwill impairments, restructuring related charges and certain other items affecting comparability. Reconciliation of reported and comparable consolidated statement of income is presented below.	We believe that our comparable results provide meaningful supplemental information to both management and investors regarding Nokia's underlying business performance by excluding certain items of income and expenses that may not be indicative of Nokia's business operating results. Comparable operating profit is used also in determining management remuneration.
Constant currency net sales / Net sales adjusted for currency fluctuations	When net sales are reported on a constant currency basis / adjusted for currency fluctuations, 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 net sales / net sales adjusted for currency fluctuations exclude the impact of changes in exchange rates during the current period in comparison to euro.	We provide additional information on net sales on a constant currency basis / adjusted for currency fluctuations in order to better reflect the underlying business performance.
Comparable return on invested capital (ROIC)	Comparable operating profit after tax, last four quarters / Invested capital, average of last five quarters' ending balances. Calculation of comparable return on invested capital is presented below.	Comparable return on invested capital is used to measure how efficiently Nokia uses its capital to generate profits from its operations.
Comparable operating profit after tax	Comparable operating profit - (comparable operating profit x (-comparable income tax expense / comparable profit before tax))	Comparable operating profit after tax indicates the profitability of Nokia's underlying business operations after deducting the income tax impact. We use comparable operating profit after tax to calculate comparable return on invested capital.
Invested capital	Total equity + total interest-bearing liabilities - total cash and current financial investments	Invested capital indicates the book value of capital raised from equity and debt instrument holders less cash and liquid assets held by Nokia. We use invested capital to calculate comparable return on invested capital.
Total cash and current financial investments ("Total cash")	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")	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. Reconciliation of net cash and current financial investments to the amounts in the consolidated statement of financial position is presented below.	Net cash and current financial investments is used to indicate Nokia's liquidity position after cash required to settle the interest-bearing liabilities.
Free cash flow	Net cash from/(used in) 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. Reconciliation of free cash flow to the amounts in the consolidated statement of cash flows is presented below.	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/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.
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)	Adjusted profit/(loss) equals the cash from operations before changes in net working capital subtotal in the consolidated statement of cash flows.	We use adjusted profit/(loss) to provide a structured presentation when describing the cash flows.
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.

Comparable to reported reconciliation

Q4'21									
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	6 414	(3 843)	(1 092)	(659)	88	908	(38)	(159)	731
Amortization of acquired intangible assets			(15)	(84)		(99)		18	(82)
Restructuring and associated charges		(33)	(5)	(12)	(2)	(52)			(52)
Gain on sale of fixed assets					30	30			30
Change in provisions related to past acquisitions					(26)	(26)			(26)
Impairment and write-off of assets, net of reversals		(5)	(7)	(2)		(13)			(13)
Fair value losses on legacy IPR fund					(7)	(7)			(7)
Costs associated with contract exit		1				1			1
Divestment of businesses					(1)	(1)			(1)
Loss allowance on customer financing loan						0	(32)		(32)
Change in financial liability to acquire NSB non-controlling interest						0	2		2
Prior year tax benefit related to past operating model integration						0		69	69
Changes in the recognition of deferred tax assets						0		61	61
Items affecting comparability	0	(37)	(26)	(98)	(6)	(168)	(30)	148	(50)
Reported	6 414	(3 880)	(1 118)	(758)	82	740	(68)	(11)	682

Q4'20									
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	6 554	(3 830)	(1 010)	(670)	11	1 056	(13)	(279)	784
Amortization of acquired intangible assets			(14)	(85)		(99)		20	(79)
Restructuring and associated charges		(164)	(114)	(36)		(314)		63	(251)
Impairment and write-off of assets, net of reversals		(6)	(7)	(3)	(200)	(216)		3	(212)
Transaction and related costs, including integration costs				12		12		(2)	9
Costs associated with contract exit				4		4		(1)	3
Release of acquisition-related fair value adjustments to deferred revenue and inventory	(1)					(1)			0
Divestment of businesses		(1)				(1)			(1)
Loss allowance on customer financing loan						0	(58)	12	(46)
Change in financial liability to acquire NSB non-controlling interest						0	41		41
Changes in the recognition of deferred tax assets						0		(2 947)	(2 947)
Items affecting comparability	(1)	(171)	(136)	(108)	(200)	(615)	(17)	(2 852)	(3 484)
Reported	6 553	(4 000)	(1 145)	(777)	(189)	441	(29)	(3 131)	(2 700)

Q1–Q4'21									
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	22 202	(13 237)	(4 084)	(2 379)	273	2 775	(176)	(500)	2 109
Amortization of acquired intangible assets			(56)	(335)		(391)		80	(312)
Restructuring and associated charges		(121)	(62)	(74)	(6)	(263)			(263)
Impairment and write-off of assets, net of reversals		(9)	(12)	(3)	(21)	(45)			(45)
Settlement of legal disputes					80	80			80
Gain on sale of fixed assets					53	53			53
Change in provisions related to past acquisitions					(26)	(26)			(26)
Fair value losses on legacy IPR fund					(23)	(23)			(23)
Divestment of businesses					(1)	(1)			(1)
Change in financial liability to acquire NSB non-controlling interest						0	(33)		(33)
Loss allowance on customer financing loan						0	(32)		(32)
Prior year tax benefit related to past operating model integration						0		69	69
Changes in the recognition of deferred tax assets						0		61	61
Deferred tax benefit due to tax rate changes						0		17	17
Items affecting comparability	0	(131)	(130)	(413)	56	(617)	(65)	228	(454)
Reported	22 202	(13 368)	(4 214)	(2 792)	330	2 158	(241)	(272)	1 654

Q1–Q4'20									
EUR million	Net sales	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	21 854	(13 345)	(3 817)	(2 489)	(122)	2 081	(184)	(481)	1 437
Amortization of acquired intangible assets			(57)	(350)		(407)		89	(318)
Restructuring and associated charges		(393)	(190)	(68)		(651)		129	(522)
Impairment and write-off of assets, net of reversals		(12)	(24)	(5)	(200)	(241)		9	(232)
Gain on defined benefit plan amendment		90				90		(18)	72
Transaction and related costs, including integration costs				11		11		(2)	8
Costs associated with contract exit				4		5		(1)	4
Release of acquisition-related fair value adjustments to deferred revenue and inventory	(2)					(2)		1	(2)
Gain on sale of fixed assets		1	1			2			1
Divestment of businesses		(1)			(1)	(2)			(1)
Change in financial liability to acquire NSB non-controlling interest						0	79		79
Loss allowance on customer financing loan						0	(58)	12	(46)
Changes in the recognition of deferred tax assets						0		(2 947)	(2 947)
Legal entity restructuring						0		(45)	(45)
Items affecting comparability	(2)	(314)	(270)	(408)	(201)	(1 196)	21	(2 774)	(3 950)
Reported	21 852	(13 659)	(4 087)	(2 898)	(323)	885	(164)	(3 256)	(2 513)

Net cash and current financial investments

EUR million	31 December 2021	30 September 2021	30 June 2021	31 March 2021	31 December 2020
Current financial investments	2 577	2 478	1 499	1 527	1 121
Cash and cash equivalents	6 691	6 903	7 252	7 315	6 940
Total cash and current financial investments	9 268	9 381	8 751	8 842	8 061
Long-term interest-bearing liabilities ¹	4 537	4 524	4 504	5 039	5 015
Short-term interest-bearing liabilities ¹	116	557	559	114	561
Total interest-bearing liabilities	4 653	5 081	5 063	5 153	5 576
Net cash and current financial investments	4 615	4 300	3 688	3 689	2 485

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

Free cash flow

EUR million	Q4'21	Q4'20	Q1-Q4'21	Q1-Q4'20
Net cash from operating activities	485	879	2 625	1 759
Purchase of property, plant and equipment and intangible assets	(159)	(139)	(560)	(479)
Proceeds from sale of property, plant and equipment and intangible assets	47	8	103	13
Purchase of non-current financial investments	(22)	(15)	(77)	(59)
Proceeds from sale of non-current financial investments	34	45	277	122
Free cash flow	385	778	2 368	1 356

Comparable return on invested capital (ROIC) Q4'21

EUR million	Rolling four quarters	Q4'21	Q3'21	Q2'21	Q1'21
Comparable operating profit	2 775	908	633	682	551
Comparable profit before tax	2 609	891	580	643	495
Comparable income tax expense	(500)	(159)	(117)	(104)	(120)
Comparable operating profit after tax	2 243	746	505	572	417

EUR million	Average	31 December 2021	30 September 2021	30 June 2021	31 March 2021	31 December 2020
Total equity	14 901	17 462	16 392	14 337	13 771	12 545
Total interest-bearing liabilities	5 105	4 653	5 080	5 063	5 153	5 576
Total cash and current financial investments	8 861	9 268	9 381	8 751	8 842	8 061
Invested capital	11 145	12 847	12 091	10 649	10 082	10 060
Comparable ROIC	20.1%					

Q3'21

EUR million	Rolling four quarters	Q3'21	Q2'21	Q1'21	Q4'20
Comparable operating profit	2 923	633	682	551	1 056
Comparable profit before tax	2 781	580	643	495	1 063
Comparable income tax expense	(620)	(117)	(104)	(120)	(279)
Comparable operating profit after tax	2 271	505	572	417	779

EUR million	Average	30 September 2021	30 June 2021	31 March 2021	31 December 2020	30 September 2020
Total equity	14 453	16 392	14 337	13 771	12 545	15 220
Total interest-bearing liabilities	5 327	5 080	5 063	5 153	5 576	5 763
Total cash and current financial investments	8 533	9 381	8 751	8 842	8 061	7 632
Invested capital	11 247	12 091	10 649	10 082	10 060	13 351
Comparable ROIC	20.2%					

Q4'20

EUR million	Rolling four quarters	Q4'20	Q3'20	Q2'20	Q1'20
Comparable operating profit	2 081	1 056	486	423	116
Comparable profit before tax	1 918	1 063	407	403	45
Comparable income tax expense	(481)	(279)	(103)	(87)	(12)
Comparable operating profit after tax	1 559	779	363	332	85

EUR million	Average	31 December 2020	30 September 2020	30 June 2020	31 March 2020	31 December 2019
Total equity	14 898	12 545	15 220	15 319	16 004	15 401
Total interest-bearing liabilities	5 310	5 576	5 763	5 937	4 995	4 277
Total cash and current financial investments	7 100	8 061	7 632	7 487	6 315	6 007
Invested capital	13 108	10 060	13 351	13 769	14 684	13 671
Comparable ROIC	11.9%					

11. SUBSEQUENT EVENTS

Non-adjusting events after the reporting period

In January 2022, Nokia agreed on capital commitment of USD 400 million to NGP Capital's Fund V. The fund's emphasis on companies developing emerging 5G use cases for industrial and business transformation aligns closely with Nokia's technology leadership vision and its efforts to maximize the value shift towards cloud. Per industry standard practice, the capital will be called throughout the 10 year lifecycle of the fund.

This financial report was approved by the Board of Directors on 3 February 2022.

Media and Investor Contacts:

Communications, tel. +358 10 448 4900 email: press.services@nokia.com

Investor Relations, tel. +358 4080 3 4080 email: investor.relations@nokia.com

- Nokia plans to publish its "Nokia in 2021" annual report, which includes the review by the Board of Directors and the audited annual accounts, during week 9 of 2022. The annual report will be available at www.nokia.com/financials.
- Nokia's Annual General Meeting 2022 is planned to be held on 5 April 2022
- Nokia plans to publish its first quarter 2022 results on 28 April 2022.
- Nokia plans to publish its second quarter and half year 2022 results on 21 July 2022.
- Nokia plans to publish its third quarter and January-September 2022 results on 20 October 2022.