

# Report for Q4 and full year 2022

## A solid end to a year of acceleration

- Q4 net sales grew 11% y-o-y in constant currency (16% reported). Full year net sales grew 6% (12% reported).
- In Q4 Network Infrastructure grew net sales 14% in constant currency with all units contributing. Mobile Networks grew 3% with a meaningful shift in regional mix in the quarter while Cloud and Network Services grew 5%. Nokia Technologies grew 82% as a long-term licensee exercised an option leading to higher revenue recognition in Q4.
- Enterprise net sales grew 49% y-o-y in constant currency in Q4 (55% reported); 21% in full year 2022 (27% reported).
- Q4 comparable gross margin +340bps y-o-y to 43.5% (reported +330bps to 42.8%), with 240bps of expansion related to the Nokia Technologies option exercise. Comparable operating margin +130bps to 15.5% (reported +30bps to 11.8%).
- Q4 operating margin improved y-o-y due to the combination of the exercised option in Nokia Technologies and stronger margin in Network Infrastructure offsetting declines in Mobile Networks (regional mix shift) and greater losses in Group Common and Other primarily related to the strong venture fund performance in the prior year.
- Re-recognized deferred tax asset of EUR 2.5bn in Q4 which boosted reported net profit and EPS.
- Q4 comparable diluted EPS of EUR 0.16; reported diluted EPS of EUR 0.56. Full year EUR 0.44 and EUR 0.75 respectively.
- Q4 free cash flow positive EUR 0.4bn, net cash balance of EUR 4.8bn. Full year free cash flow EUR 0.8bn.
- Board proposes dividend authorization of EUR 0.12 per share.
- Nokia expects 2023 full year net sales of between EUR 24.9bn to 26.5bn, comparable operating margin between 11.5 to 14.0% and Free Cash Flow conversion from comparable operating profit of 20 to 50%.

EUR million (except for EPS in EUR)	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
<b>Reported results</b>								
Net sales	7 449	6 414	16%	11%	24 911	22 202	12%	6%
Gross margin %	42.8%	39.5%	330bps		41.0%	39.8%	120bps	
Research and development expenses	(1 222)	(1 118)	9%		(4 550)	(4 214)	8%	
Selling, general and administrative expenses	(838)	(758)	11%		(3 013)	(2 792)	8%	
Operating profit	882	740	19%		2 318	2 158	7%	
Operating margin %	11.8%	11.5%	30bps		9.3%	9.7%	(40)bps	
Profit for the period	3 152	680	364%		4 259	1 645	159%	
EPS, diluted	0.56	0.12	367%		0.75	0.29	159%	
Net cash and interest-bearing financial investments	4 767	4 615	3%		4 767	4 615	3%	
<b>Comparable results</b>								
Net sales	7 449	6 414	16%	11%	24 911	22 202	12%	6%
Gross margin %	43.5%	40.1%	340bps		41.4%	40.4%	100bps	
Research and development expenses	(1 189)	(1 092)	9%		(4 449)	(4 084)	9%	
Selling, general and administrative expenses	(727)	(659)	10%		(2 604)	(2 379)	9%	
Operating profit	1 154	908	27%		3 109	2 775	12%	
Operating margin %	15.5%	14.2%	130bps		12.5%	12.5%	0bps	
Profit for the period	929	731	27%		2 481	2 109	18%	
EPS, diluted	0.16	0.13	23%		0.44	0.37	19%	
ROIC <sup>1</sup>	17.5%	20.1%	(260)bps		17.5%	20.1%	(260)bps	

<sup>1</sup> Comparable ROIC = Comparable operating profit after tax, last four quarters / invested capital, average of last five quarters' ending balances. Refer to the Performance measures section in this report for details.

Business group results	Network Infrastructure		Mobile Networks		Cloud and Network Services		Nokia Technologies		Group Common and Other	
	Q4'22	Q4'21	Q4'22	Q4'21	Q4'22	Q4'21	Q4'22	Q4'21	Q4'22	Q4'21
EUR million										
Net Sales	2 709	2 254	2 960	2 761	1 060	964	679	368	59	74
YoY change	20%		7%		10%		85%		(20)%	
Constant currency YoY change	14%		3%		5 %		82%		(26)%	
Gross margin %	39.6%	34.0%	34.7%	37.6%	43.8%	41.8%	99.9%	99.7%	(10.2)%	(4.1)%
Operating profit/(loss)	431	248	201	270	147	145	564	282	(189)	(38)
Operating margin %	15.9%	11.0%	6.8%	9.8%	13.9%	15.0%	83.1%	76.6%	(320.3)%	(51.4)%



**Pekka Lundmark**  
President and CEO

We said at the start of 2022 that it would be a year of acceleration and we delivered what we promised. The Nokia team did a great job navigating geopolitical, economic and supply challenges, successfully executed our strategy and delivered a strong full year performance. Our constant currency full year net sales growth accelerated to 6% and we maintained a stable comparable operating margin of 12.5% which is a good result considering one-off benefits we had in 2021.

One of our strategic priorities is to broaden our customer base and grow in Enterprise and I'm delighted we achieved 21% net sales growth in constant currency for the full year with 49% growth in Q4. There were important webscale wins in 2022 with momentum also continuing to build in our private wireless business where we added 45 customers in Q4.

The highlight of the fourth quarter was our stellar Network Infrastructure performance, which grew net sales 14% in constant currency with significant operating margin expansion. Notably, we saw a strong acceleration in both our Optical Networks and IP Networks businesses with net sales growing 21% and 11% respectively in constant currency. Mobile Networks delivered 3% constant currency growth in Q4 with operating margin declining year-on-year, as expected due to changes in regional mix. On a full year basis, Mobile Networks' 3% net sales growth and 90bps higher operating margin is encouraging after a successful reset the previous year. We continue to see solid demand trends in Network Infrastructure and Mobile Networks as we look ahead into 2023.

In Cloud and Network Services, we saw good Q4 net sales growth of 5% in constant currency and continued improvement in gross margin, which increased 200bps year-on-year. Increased investments into private wireless and Software-as-a-Service meant operating margin was largely stable. This is evidence that the ongoing optimization of our portfolio is bearing fruit and positioning us for continued profitable growth in the future.

In Nokia Technologies, we remain in two litigation/renewal discussions. Several court rulings have validated our position giving us confidence in our approach to prioritize the value of our portfolio over achieving specific timelines. At the end of the year, a long-term licensee exercised an option to extend its license in effect into perpetuity. This meant we recognized all outstanding revenue for this license in the fourth quarter. More recently, I was pleased to see us enter into a new multi-year patent license agreement with Samsung, which underscores Nokia Technologies' strong patent portfolio and supports its ability to deliver stable operating profit over the long-term.

Looking forward to 2023, while we are mindful of the uncertain economic outlook, demand remains robust. We expect another year of growth and we are targeting full year net sales of between EUR 24.9bn and EUR 26.5bn which implies between 2% and 8% growth in constant currency. We are also targeting a comparable operating margin in the range of 11.5% to 14.0%. Whilst this growth means we have another year of working capital build constraining our free cash flow conversion from comparable operating profit to a range of 20% to 50%, we expect significantly stronger cash flow in 2024. Due to our confidence in our long-term outlook and strong balance sheet position the Board is proposing an increase in the dividend to EUR 0.12 per share.

I would like to thank the whole Nokia team for delivering a really positive 2022 and for putting us on a strong foundation to keep delivering in 2023 and beyond.

## Shareholder distribution

### Dividend

The Board of Directors proposes that the Annual General Meeting 2023 authorizes the Board to resolve on the distribution of an aggregate maximum of EUR 0.12 per share to be paid in respect of financial year 2022. The authorization would be used to distribute dividend and/or assets from the reserve for invested unrestricted equity in four installments during the authorization period, in connection with the quarterly results, unless the Board decides otherwise for a justified reason.

Nokia's 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.

Under the authorization by the Annual General Meeting held on 5 April 2022, the Board of Directors may resolve an aggregate maximum distribution of EUR 0.08 per share. The authorization will be used to distribute dividend and/or assets from the reserve for invested unrestricted equity in four installments during the authorization period, in connection with the quarterly results, unless the Board decides otherwise for a justified reason.

Under the authorization, dividends of EUR 0.02 per share were paid in Q2 2022 totaling EUR 113 million; in Q3 2022 totaling EUR 112 million and in Q4 2022 totaling EUR 112 million.

On 26 January 2023, the Board resolved to distribute a dividend of EUR 0.02 per share. The dividend record date is on 31 January 2023 and the dividend will be paid on 9 February 2023. The actual dividend payment date outside Finland will be determined by the

practices of the intermediary banks transferring the dividend payments.

Following this announced distribution of the fourth installment and executed payments of the previous installments, the Board has no remaining distribution authorization.

The payment of the fourth installment of the distribution is expected to total approximately EUR 112 million in Q1 2023.

### Share buyback program

In 2020 and 2021, Nokia 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 initiated a share buyback program under the authorizations from the Annual General Meetings 2021 and 2022 to repurchase shares to return up to EUR 600 million of cash to shareholders in tranches over a period of two years.

The first phase of the share buyback program with a maximum aggregate purchase price of EUR 300 million started in February 2022 and ended in November 2022. Under the first phase of the buyback program, Nokia repurchased 63 963 583 of its own shares at an average price per share of approximately EUR 4.69. The repurchases reduced the Company's unrestricted equity by EUR 300 million and the repurchased shares were cancelled in December 2022.

The second EUR 300 million phase of the share buyback program started in January 2023 and it will end at the latest by 21 December 2023.

# Outlook

## Full Year 2023

Net sales <sup>1</sup>	EUR 24.9 billion to EUR 26.5 billion <sup>1</sup> (2 to 8% growth in constant currency)
Comparable operating margin <sup>2</sup>	11.5 to 14.0%
Free cash flow <sup>2</sup>	20 to 50% conversion from comparable operating profit

<sup>1</sup>Assuming the rate 1 EUR = 1.07 USD as of 31 December 2022 through 2023.

<sup>2</sup>Please refer to Performance measures section in this report for a full explanation of how these terms are defined.

The outlook, long-term targets and all of the underlying outlook assumptions described below are forward-looking statements subject to a number of risks and uncertainties as described or referred to in the Risk Factors section later in this report. Along with Nokia's official outlook targets provided above, below are outlook assumptions by business group that support the group level outlook. The comments for relative growth by business group are provided to give a reference on how we expect each to perform relative to the overall group.

	2023 total addressable market		Nokia business group assumptions	
	Size (EUR bn) <sup>1</sup>	Constant currency growth	Net sales growth	Operating margin
Network Infrastructure <sup>2</sup>	48	4%	In-line to below group	11.0 to 14.0%
Mobile Networks <sup>3</sup>	53	5%	Faster than group	7.0 to 10.0%
Cloud and Network Services	29	4%	In-line to below group	5.5 to 8.5%

<sup>1</sup>Total addressable market forecasts assume the currency rate of 1 EUR = 1.07 USD as of 31 December 2022 through 2023. The addressable market is excluding Russia and Belarus.

<sup>2</sup>Excluding Submarine Networks.

<sup>3</sup>Excluding China.

Nokia provides the following approximate outlook assumptions for additional items concerning 2023:

	Full year 2023	Comment
Nokia Technologies operating profit	Largely stable	Assuming closure of outstanding litigation / renewal discussions we expect largely stable operating profit in Nokia Technologies in 2023. Nokia currently assumes free cash flow slightly greater than operating profit in Nokia Technologies.
Group Common and Other operating profit	Negative EUR 300-350 million	This includes central function costs largely stable at below EUR 200 million and an increase in investment in long-term research now above EUR 100 million. This line also accounts for Radio Frequency Systems (RFS) and could be impacted by any positive or negative revaluations in Nokia's venture funds in 2023.
Comparable financial income and expenses	EUR 0 million	As interest rates have increased we now expect financial income and expenses to be approximately balanced.
Comparable income tax rate	~25%	Following the re-recognition of deferred tax assets at the end of 2022 we now provide an assumption based on a % tax rate instead of an absolute amount.
Cash outflows related to income taxes	EUR 700 million	Cash outflows related to income taxes are expected to increase due to mandatory capitalization of R&D costs under U.S. tax laws as well as evolving regional mix.
Capital Expenditures	EUR 650 million	

## Long-term targets

Nokia's long-term targets remain unchanged from those introduced with its Q4 2021 financial results. The targets had an associated timeline of 3-5 years which remains unchanged and implies by 2024-2026. These targets remain intended to show Nokia's ambition to deliver continuous improvement in the business over the time period.

Net sales	Grow faster than the market
Comparable operating margin <sup>1</sup>	≥ 14%
Free cash flow <sup>1</sup>	55 to 85% conversion from comparable operating profit

<sup>1</sup>Please refer to Performance measures section in this report for a full explanation of how these terms are defined.

# Financial Results

## Q4 2022 compared to Q4 2021

### Net sales

In Q4 2022, reported net sales increased 16%, benefiting from foreign exchange rate fluctuations along with the following drivers.

On a constant currency basis, Nokia net sales growth accelerated to 11% as all four business groups grew year-on-year. Network Infrastructure grew 14% driven by strong demand across all businesses and Nokia Technologies increased 82% mainly reflecting a long-term licensee exercising an option. Mobile Networks net sales grew 3% reflecting a shift in regional demand trends while Cloud and Network Services increased 5%.

### Gross margin

Reported gross margin increased 330 basis points to 42.8% in Q4 2022 and comparable gross margin increased 340 basis points to 43.5%. The option being exercised in Nokia Technologies accounted for approximately 240bps of the total expansion. Network Infrastructure gross margin expanded due to favorable mix along with improved indirect cost of sales, while Mobile Networks declined as it witnessed a meaningful shift in regional mix in the quarter.

### Operating profit and margin

Reported operating profit in Q4 2022 was EUR 882 million, or 11.8% of net sales, up from 11.5% in the year-ago quarter. Comparable operating profit increased to EUR 1 154 million, while comparable operating margin was 15.5%, up from 14.2% in the year-ago quarter. Higher overall gross profit in Q4 2022 was partly offset by a net negative impact from Nokia's venture fund investments and the impact of hedging, both of which are recorded in other operating income and expenses, as well as higher operating expenses. In addition to the negative impact from foreign exchange fluctuations and salary inflation, higher R&D expenses reflected continued investments to build or maintain technology leadership across our portfolio, while higher SG&A expenses reflected investments in broadening our go-to-market approach. Additionally, operating profit benefited year-on-year from lower variable pay accruals.

Nokia's venture fund investments generated a loss of approximately EUR 90 million in Q4 2022 compared to a benefit of approximately EUR 60 million in Q4 2021. The impact of hedging in Q4 2022 was negative EUR 33 million, compared to a benefit of EUR 1 million in Q4 2021.

In Q4 2022, the difference between reported and comparable operating profit was primarily related to the amortization of acquired intangible assets, the impairment and write-off of assets, net of reversals along with restructuring and associated charges. 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.

### Profit for the period

Reported net profit was EUR 3 152 million, compared to EUR 680 million in Q4 2021. Comparable net profit was EUR 929 million, compared to EUR 731 million in Q4 2021. The improvement in comparable net profit reflects the increase in comparable operating profit, as well as a net positive fluctuation in financial income and expenses which was primarily driven by higher interest income reflecting recent interest rate increases, as well as higher share of results of associated companies and joint ventures. These were partly offset by higher income taxes, related to regional profit evolution.

In addition to the items impacting comparability included in operating profit (and their associated tax effects), in Q4 2022, the difference between reported and comparable net profit was related to changes in the recognition of deferred tax assets (see "Finnish Deferred Tax Asset" below), loss allowances and impairments on customer financing loans and a deferred tax expense due to tax rate changes. In Q4 2021, the difference between reported and comparable net profit was related to a tax benefit related to past operating model integration, changes in the recognition of deferred tax assets and a loss allowance on customer financing loan.

### Earnings per share

Reported diluted EPS was EUR 0.56 in Q4 2022, compared to EUR 0.12 in Q4 2021. Comparable diluted EPS was EUR 0.16 in Q4 2022 compared to EUR 0.13 in Q4 2021.

### Comparable return on Invested Capital (ROIC)

Q4 2022 comparable ROIC was 17.5%, compared to 20.1% in Q4 2021. The decrease reflected higher average invested capital for the rolling four quarters, partly offset by higher operating profit after tax for the rolling four quarters. The higher average invested capital reflected growth in average total equity, partially offset by increase in average total cash and interest-bearing financial investments and a decrease in average total interest-bearing liabilities.

### Cash performance

During Q4 2022, net cash increased EUR 112 million, resulting in an end-of-quarter net cash balance of approximately EUR 4.8 billion. Total cash was largely flat sequentially at approximately EUR 9.2 billion. Free cash flow was positive EUR 364 million in Q4 2022, largely generated from operating profit, partly offset by net working capital outflows.

### Deferred Tax Assets in Finland

In 2020, Nokia de-recognized deferred tax assets in Finland, as required, due to a regular assessment of our ability to utilize deferred tax assets in Finland in the foreseeable future, which was done primarily based on our historical performance. At 31 December 2022, Nokia concluded, based on its latest assessment, that it is probable that it will be able to utilize the unused tax losses and deductible temporary differences in Finland and re-recognized deferred tax assets of EUR 2.5 billion in the consolidated statement of financial position. For further details on the re-recognition of deferred tax assets in Finland, please refer to note 5, Deferred taxes in the Financial statement information section in this report.

## Segment Details

### Network Infrastructure

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Net sales	2 709	2 254	20%	14%	9 047	7 674	18%	10%
- IP Networks	896	755	19%	11%	3 063	2 679	14%	6%
- Optical Networks	639	506	26%	21%	1 891	1 708	11%	4%
- Fixed Networks	855	747	14%	8%	2 943	2 358	25%	15%
- Submarine Networks	319	246	30%	32%	1 150	929	24%	25%
Gross profit	1 074	767	40%		3 308	2 684	23%	
Gross margin %	39.6%	34.0%	560bps		36.6%	35.0%	160bps	
Operating profit	431	248	74%		1 102	784	41%	
Operating margin %	15.9%	11.0%	490bps		12.2%	10.2%	200bps	

Network Infrastructure net sales remained on a strong growth trajectory with 20% growth on a reported basis and 14% on a constant currency basis.

**IP Networks** net sales grew 11% on a constant currency basis, primarily reflecting strength in North America (including webscale), Asia Pacific and Middle East & Africa, while Greater China declined. In Q4 2022 we also saw the first commercial shipments of the new FP5-based IP Routing products. FP5-based orders continue to ramp up and we expect a gradual transition to the new platform in the coming years.

**Optical Networks** net sales grew 21% on a constant currency basis as we continue to benefit from strong demand and customer engagement of our PSE-V solutions. We also saw supply constraints continue to ease and our diversified supply base helped to meet customer demand. Growth was driven primarily by Europe, Asia Pacific and India in the quarter. With earlier supply constraints easing we also expect a strong start to 2023.

**Fixed Networks** grew 8% on a constant currency basis against a tough year-ago comparison with growth driven by on-going strong fiber deployments. Regionally, growth was particularly strong in

Europe and Latin America. Net sales in North America declined, as continued growth in fiber deployments were offset by a slowdown in fixed wireless access which remains sensitive to a small number of customers.

**Submarine Networks** net sales grew 32% on a constant currency basis, as webscale-driven project deployments continued to drive growth.

**Gross margin** increased strongly year-on-year primarily due to positive mix shift and lower indirect cost of sales such as logistics costs compared to the year-ago period offsetting foreign exchange rate fluctuations.

**Operating profit** and operating margin improved year-on-year as the gross margin expansion was only partly offset by higher operating expenses largely due to increased R&D investment, inflation and foreign exchange rate fluctuations. Operating profit was also negatively impacted by hedging and a loss allowance on certain trade receivables, both recorded in other operating income and expenses.

### Mobile Networks

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Net sales	2 960	2 761	7%	3%	10 671	9 717	10%	3%
Gross profit	1 028	1 037	(1)%		4 096	3 637	13%	
Gross margin %	34.7%	37.6%	(290)bps		38.4%	37.4%	100bps	
Operating profit	201	270	(26)%		940	765	23%	
Operating margin %	6.8%	9.8%	(300)bps		8.8%	7.9%	90bps	

In Q4 2022, Mobile Networks **net sales** grew 7% on a reported basis and 3% on a constant currency basis. Mobile Networks delivered on its ambition to return to growth in 2022 with 3% constant currency growth for the full year driven by its improved portfolio competitiveness and strong demand.

Within Mobile Networks, product net sales increased on a constant currency basis while services declined slightly. From a regional perspective, on a constant currency basis Mobile Networks saw strong net sales growth in India and Europe, while Latin America and Asia Pacific also grew. North America declined in the quarter as had been expected following significant strength in the first three quarters of 2022.

The change in regional mix led to a year-on-year decline in **gross margin** in the fourth quarter.

Operating margin declined year-on-year in Q4 2022 due to regional mix impacting gross margin. On an absolute basis, **operating profit** was impacted by higher R&D, as we continued to invest for technology leadership, and SG&A expenses. There was also a negative impact in the quarter from hedging. Additionally, operating profit benefited year-on-year from lower variable pay accruals.

In Q4 2022, our System-on-Chip based **5G Powered by ReefShark** product portfolio accounted for 97% of shipments. Given that we have delivered on our target to reach ~100% of product shipments by the end of 2022, we will no longer report this KPI going forward.

## Cloud and Network Services

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Net sales	1 060	964	10%	5%	3 351	3 089	8%	2%
Gross profit	464	403	15%		1 340	1 160	16%	
Gross margin %	43.8%	41.8%	200bps		40.0%	37.6%	240bps	
Operating profit	147	145	1%		177	166	7%	
Operating margin %	13.9%	15.0%	(110)bps		5.3%	5.4%	(10)bps	

Cloud and Network Services **net sales** grew 10% on a reported basis and 5% on a constant currency basis. From a product perspective, there was strong growth in Enterprise Solutions which was driven by ongoing momentum in campus wireless. Business Applications and Cloud and Cognitive Services also grew and were offset by a slight decline in Core Networks. From a regional perspective, on a constant currency basis Cloud and Network Services saw strong growth in North America, Asia Pacific and Middle East & Africa whilst Europe was flat and there were declines in Latin America and India.

**Gross margin** expanded, benefiting from operational improvements in project delivery that have been made across the business.

**Operating margin** declined year-on-year as the higher gross profit was offset by increased SG&A and R&D expenses, reflecting continued investments to strengthen leadership in campus wireless. Operating profit was also negatively impacted by hedging and a loss allowance on certain trade receivables, both recorded in other operating income and expenses. Additionally, operating profit benefited year-on-year from lower variable pay accruals.

## Nokia Technologies

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Net sales	679	368	85%	82%	1 595	1 502	6%	5%
Gross profit	678	367	85%		1 590	1 497	6%	
Gross margin %	99.9%	99.7%	20bps		99.7%	99.7%	0bps	
Operating profit	564	282	100%		1 208	1 185	2%	
Operating margin %	83.1%	76.6%	650bps		75.7%	78.9%	(320)bps	

Nokia Technologies **net sales** grew 85% on a reported basis and 82% on a constant currency basis reflecting an option exercised within a long-term license. Q4 2022 net sales also benefited from new deals signed that also included some catch-up net sales and one-time transactions while Q4 2021 benefited from one-time transactions. In the full year 2022 we signed over 50 new patent license agreements across our smartphone, automotive, consumer electronics, and IoT licensing programs.

As outlined in Nokia's 2021 Annual Financial Statements, Nokia has been recognizing revenue each quarter related to a 10-year patent license agreement entered into in April 2014. Under the terms of the agreement the licensee had an option to extend the license agreement for the remaining life of the licensed patents (in effect becoming a perpetual license). In Q4 2022 they exercised this right. Under the applied accounting policies, the notice triggered revenues of EUR 305 million in Q4 2022 that would otherwise have been recognized in future periods. Nokia will therefore no longer recognize revenue in relation to this agreement in future periods.

Additionally, net sales were negatively impacted by two licensing agreements that ended during 2021 which are in the process of litigation/renewal, along with the impact of market share changes in the smartphone industry, including a company that has exited the smartphone market.

The previously discussed two litigation/renewal situations remain outstanding with no net sales recognized in 2022. Nokia will continue to prioritize protecting the value of its portfolio over achieving specific timelines. Nokia continues to expect to return to a run-rate of EUR 1.4-1.5bn of revenue when these discussions conclude.

**Operating margin** expanded year-on-year reflecting the inclusion of the aforementioned option exercised in Q4 2022. Operating expenses increased slightly as a result of increased legal fees. Operating profit was also negatively impacted by a loss allowance on certain trade receivables, recorded in other operating income and expenses.

## Group Common and Other

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Net sales	59	74	(20)%	(26)%	295	257	15%	8%
Gross profit/(loss)	(6)	(3)			(12)	(13)		
Gross margin %	(10.2)%	(4.1)%	(610)bps		(4.1)%	(5.1)%	100bps	
Operating profit/(loss)	(189)	(38)			(318)	(125)		
Operating margin %	(320.3)%	(51.4)%	(26 890)bps		(107.8)%	(48.6)%	(5 920)bps	

Group Common and Other **net sales** decreased 20% on a reported basis and 26% on a constant currency basis as Radio Frequency Systems declined in North America.

The decrease in **operating result** was primarily driven by losses from Nokia's venture fund investments, which amounted to approximately EUR 90 million in Q4 2022, and related to the net

impact of foreign exchange fluctuations and revaluations, compared to profits of approximately EUR 60 million in Q4 2021, as well as higher operating expenses.

## Net sales by region<sup>1</sup>

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Asia Pacific	801	684	17%	17%	2 648	2 472	7%	5%
Europe	2 351	1 836	28%	27%	6 662	6 313	6%	4%
Greater China	356	393	(9)%	(10)%	1 581	1 512	5%	(2)%
India	568	248	129%	116%	1 290	1 035	25%	15%
Latin America	387	325	19%	10%	1 223	983	24%	12%
Middle East & Africa	595	554	7%	3%	1 969	1 771	11%	5%
North America	2 070	2 128	(3)%	(12)%	8 388	7 187	17%	4%
Submarine Networks	319	246	30%	32%	1 150	929	24%	25%
<b>Total</b>	<b>7 449</b>	<b>6 414</b>	<b>16%</b>	<b>11%</b>	<b>24 911</b>	<b>22 202</b>	<b>12%</b>	<b>6%</b>

<sup>1</sup>In Q2 2022, Nokia changed how it presents net sales information on a regional basis. Nokia determined that providing net sales of its Submarine Networks business separately from the net sales by region information for the rest of the Group improves the usefulness of regional net sales information by removing volatility caused by the specific nature of the Submarine Networks business. The comparative information for net sales by region has been recast accordingly.

Reported changes are disclosed in the table above. The regional commentary below focuses on constant currency results, to exclude the impact of foreign exchange rate fluctuations. The commentary is based on regions excluding Submarine Networks, given the nature of that business leads to significant regional volatility between periods.

The strong performance in **Asia Pacific** reflected double-digit growth across Network Infrastructure, Mobile Networks and Cloud and Network Services.

**Europe** net sales growth benefited from Nokia Technologies (which is entirely reported in Europe), as a long-term licensee exercised an option leading to higher revenue recognition in Q4. Net sales in Europe increased at a double-digit rate in both Network Infrastructure and Mobile Networks. Growth in Network Infrastructure was driven by Fixed Networks and Optical Networks.

Within **Greater China**, net sales decreased due to Network Infrastructure, particularly in IP Networks.

The strong growth in net sales in **India** was related to Mobile Networks, as 5G deployments started to ramp in the fourth quarter. Network Infrastructure also saw strong growth driven by both Optical Networks and Fixed Networks.

Net sales in **Latin America** increased primarily due to Network Infrastructure and Mobile Networks.

**Middle East & Africa** growth was driven by Cloud and Network Services.

The double-digit decline in **North America** reflected lower net sales in Mobile Networks following significant strength in the first three quarters of 2022, as expected. This was somewhat offset by growth in Network Infrastructure and Cloud and Network Services.

## Net sales by customer type

EUR million	Q4'22	Q4'21	YoY change	Constant currency YoY change	Q1-Q4'22	Q1-Q4'21	YoY change	Constant currency YoY change
Communications service providers (CSP)	5 640	5 238	8%	3%	19 911	17 977	11%	3%
Enterprise	769	495	55%	49%	2 007	1 575	27%	21%
Licensees	679	368	84%	82%	1 595	1 502	6%	5%
Other <sup>1</sup>	361	312	16%	16%	1 398	1 148	22%	21%
<b>Total</b>	<b>7 449</b>	<b>6 414</b>	<b>16%</b>	<b>11%</b>	<b>24 911</b>	<b>22 202</b>	<b>12%</b>	<b>6%</b>

<sup>1</sup>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. Submarine Networks and RFS net sales also include revenue from enterprise customers and communications service providers.

Continued strong demand from CSPs led to robust sales growth of 3% in constant currency in Q4 2022.

Growth in Enterprise net sales accelerated to 49% in constant currency, as we continued to execute on our strong order book. Net sales to webscale customers more than doubled in the quarter, as we continued to build traction with these customers. Private wireless continued to grow strongly double-digit and now has more than 560 customers. Customer engagement also remains positive as we added 97 new Enterprise customers in the quarter.

Refer to the Nokia Technologies section of this report for a discussion on net sales to Licensees.

The growth in 'Other' was due to the strength of Submarine Networks.

## Q4 2022 to Q4 2021 bridge for net sales and operating profit

EUR million	Q4'22	Volume, price, mix and other	Foreign exchange impact	Items affecting comparability	Q4'21
Net sales	7 449	734	301	—	6 414
Operating profit	882	269	(23)	(104)	740
Operating margin %	11.8%				11.5%

The table above shows the change in net sales and operating profit compared to the year-ago quarter. Net sales benefited strongly from both the impact of foreign exchange rate fluctuations, as well as improvements from an operational standpoint. Operating profit saw a positive impact from an operational standpoint, a negative impact from foreign exchange rate fluctuations, as well as a negative impact from larger items affecting comparability largely

due to the impairment and write-off of assets, net of reversals, and restructuring and associated charges. The negative impact to operating profit seen from foreign exchange rate fluctuations is a combination of an underlying benefit to operating profit related to our mix of currency exposures, which was more than offset by our hedging program.

## Reconciliation of reported operating profit to comparable operating profit

EUR million	Q4'22	Q4'21	YoY change	Q1-Q4'22	Q1-Q4'21	YoY change
<b>Reported operating profit</b>	<b>882</b>	740	19%	<b>2 318</b>	2 158	7%
Amortization of acquired intangible assets	106	99		411	391	
Impairment and write-off of assets, net of reversals	84	13		97	45	
Restructuring and associated charges	80	52		177	263	
Costs associated with country exit	(6)	—		98	—	
Gain on sale of fixed assets	—	(30)		—	(53)	
Settlement of legal disputes	—	—		—	(80)	
Other, net	7	34		8	51	
<b>Comparable operating profit</b>	<b>1 154</b>	908	27%	<b>3 109</b>	2 775	12%

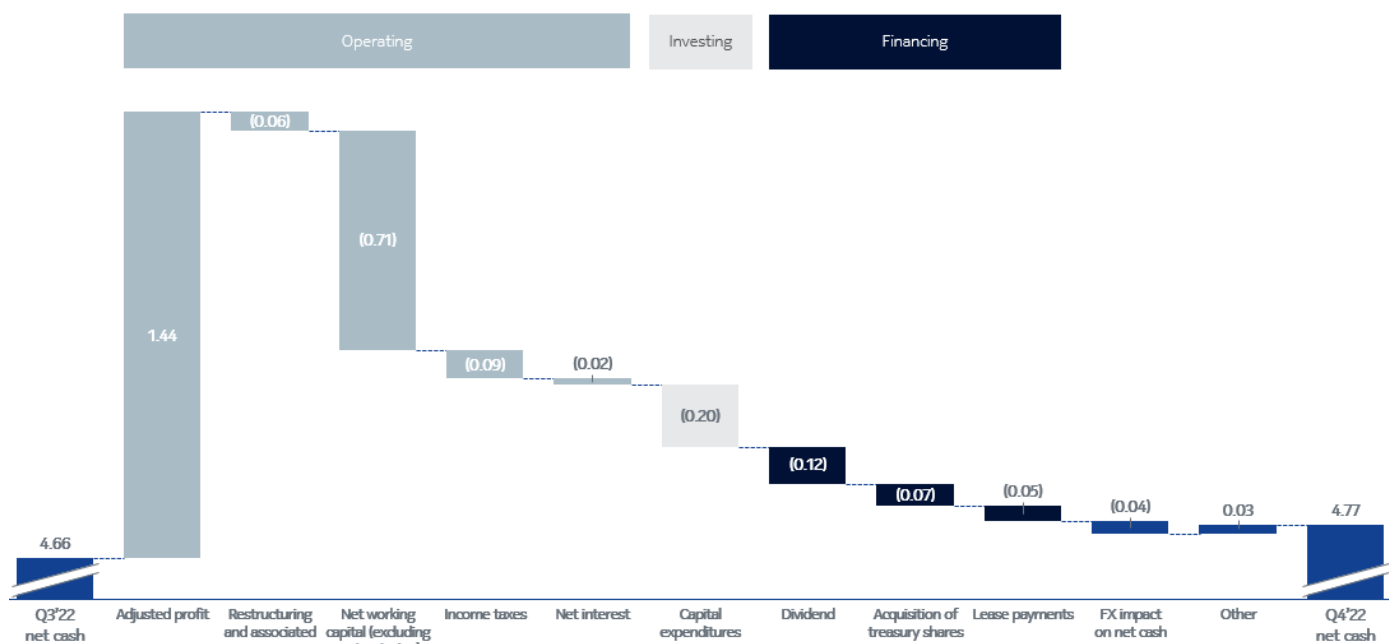
The comparable operating profit that Nokia discloses is intended to provide meaningful supplemental information to both management and investors regarding Nokia's underlying business performance by excluding certain items of income and expenses that may not be indicative of Nokia's business operating results. Comparable operating profit is used also in determining management remuneration.

In Q4 2022 the main adjustments related to the amortization of acquired intangible assets which is primarily related to purchase price allocation of the Alcatel-Lucent acquisition, the impairment and write-off of assets, net of reversals along with restructuring charges mainly related to the ongoing restructuring program (discussed later in this interim report).



## Cash and cash flow in Q4 2022

EUR billion



EUR million, at end of period	Q4'22	Q3'22	QoQ change	Q4'21	YTD change
Total cash and interest-bearing financial investments	9 244	9 251	0%	9 268	0%
Net cash and interest-bearing financial investments <sup>1</sup>	4 767	4 655	2%	4 615	3%

<sup>1</sup>Net cash and interest-bearing financial investments does not include lease liabilities. For details, please refer to the Performance measures section in this report.

### Free cash flow

During Q4 2022, Nokia's free cash flow was positive EUR 364 million, generated from operating profit, partly offset by cash outflows related to net working capital, as well as capital expenditures, restructuring and income taxes.

### Net cash from operating activities

Net cash from operating activities was driven by:

- Nokia's adjusted profit of EUR 1 443 million.
- Approximately EUR 60 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 710 million, as follows:
  - The increase in receivables was approximately EUR 580 million, primarily related to seasonality, partly offset by an increase in the balance sheet impact of the sale of receivables in the quarter.
  - The increase in inventories was approximately EUR 60 million, as normal seasonality was offset by inventory builds related to upcoming deployments in India.
  - The decrease in liabilities was approximately EUR 70 million, primarily related to a decrease in contract liabilities and deferred revenues, partly related to the exercise of an option related to a long-term license in Nokia Technologies, offset by an increase in accounts payable, as well as accruals for 2022 performance-related employee variable pay.

- An outflow related to cash taxes of approximately EUR 90 million.
- An outflow related to net interest of approximately EUR 20 million.

### Net cash used in investing activities

- Net cash used in investing activities was related primarily to capital expenditures of approximately EUR 200 million.

### Net cash used in financing activities

- Net cash used in financing activities was related primarily to dividend payments of approximately EUR 120 million, the acquisition of treasury shares of approximately EUR 70 million and lease payments of approximately EUR 50 million.

### Change in total cash and net cash

In Q4 2022, the approximately EUR 120 million difference between the change in total cash and net cash was primarily due to changes in the carrying amounts of certain issued bonds, as a result of both foreign exchange rate and interest rate fluctuations.

Foreign exchange rates had an approximately EUR 40 million negative impact on net cash.

## January-December 2022 compared to January-December 2021

### Net sales

In full year 2022, reported net sales increased 12%, benefiting from foreign exchange rate fluctuations along with the following drivers.

On a constant currency basis, Nokia net sales increased 6% in full year 2022. Supply chain disruptions and semiconductor supply constraints impacted the timing of revenue through the year but following meaningful improvements in the second half of 2022, the year ended with minimal impact from this. Performance was driven by growth across all four business groups, with particular strength in Network Infrastructure, which grew 10%. Mobile Networks and Cloud and Network Services both grew at a low-single digit rate and Nokia Technologies increased 5%, although benefited from an option exercised in a long-term license that led to higher revenue recognition in Q4 2022.

### Gross margin

Both reported and comparable gross margin improved year-on-year in full year 2022. Reported gross margin increased 120 basis points to 41.0% and comparable gross margin increased 100 basis points to 41.4%. The gross margin expansion was primarily driven by margin expansion in Network Infrastructure, as well as ongoing improvements in cost competitiveness and favorable regional mix in Mobile Networks. Additionally, gross margin benefited from the higher revenue recognition in Nokia Technologies in Q4 2022.

### Operating profit and margin

Reported operating profit in full year 2022 was EUR 2 318 million, or 9.3% of net sales, down from 9.7% in the year-ago period. Comparable operating profit increased to EUR 3 109 million, while comparable operating margin was flat year-on-year at 12.5%. While gross profit increased in full year 2022, this was largely offset by higher operating expenses, which were negatively impacted by foreign exchange fluctuations, as well as a significant swing in other operating income and expenses. R&D expenses increased year-on-year, reflecting our commitment to build or maintain technology leadership across our portfolio. The net negative fluctuation in other operating income and expenses reflected lower profits from Nokia's venture funds, the impact of hedging, higher loss allowances on certain trade receivables and the absence of certain other operating income items that benefited the year-ago period. SG&A expenses increased related to higher salary expenses and investments we are making in areas such as private wireless. Additionally, operating expenses benefited year-on-year from lower variable pay accruals. Nokia's venture fund investments generated a benefit of approximately EUR 20 million in full year 2022 compared to a benefit of approximately EUR 190 million in full year 2021. The impact of hedging was negative EUR 107 million in full year 2022, compared to a benefit of EUR 45 million in full year 2021.

In 2021, Nokia benefited from approximately 150bps of one-offs 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 2022, the difference between reported and comparable operating profit was related to the amortization of acquired intangible assets, restructuring and associated charges, costs associated with a country exit and the impairment and write-off of assets, net of reversals. 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 the fair value changes of 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.

### Profit for the period

Reported net profit in full year 2022 was EUR 4 259 million, compared to EUR 1 645 million in the year-ago period. Comparable net profit was EUR 2 481 million, compared to EUR 2 109 million in the year-ago period. The improvement in comparable net profit reflects an increase in comparable operating profit and lower net financial income and expenses, which primarily reflected the impact of higher interest rates on pension plans and interest income, as well as a positive revaluation of embedded derivatives related to foreign currency orders. This was partly offset by higher income tax expenses and lower share of results of associated companies and joint ventures.

In full year 2022, 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 changes in the recognition of deferred tax assets (for more information see "Finnish Deferred tax Asset" in the Q4 2022 Compared to Q4 2021 section above), loss allowances and impairments on customer financing loans, the release of cumulative exchange differences related to abandonment of foreign operations, a deferred tax expense due to tax rate changes and by the change in financial liability to acquire Nokia Shanghai Bell non-controlling interest. In the 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 was related to tax benefit related to past operating model integration, a benefit related to a change in the recognition of deferred tax assets, a change in financial liability to acquire Nokia Shanghai-Bell non-controlling interest, a loss allowance on customer financing loan and a deferred tax benefit due to tax rate changes.

### Earnings per share

Reported diluted EPS in full year 2022 was EUR 0.75, compared to EUR 0.29 in full year 2021. Comparable diluted EPS in full year 2022 was EUR 0.44 compared to EUR 0.37 in full year 2021.

### Cash performance

At the end of full year 2022, Nokia had a net cash balance of approximately EUR 4.8 billion, an increase of EUR 0.2 billion compared to the end of full year 2021. Total cash of EUR 9.2 billion at the end of 2022 was largely flat compared to last year. Free cash flow was EUR 840 million in 2022, representing approximately 27% conversion of comparable operating profit. Free cash flow conversion was negatively impacted by net working capital outflows during the year, a large part of which was related to the free cash flow performance of Nokia Technologies being approximately EUR 800 million lower than its operating profit, primarily due to prepayments we received from certain licensees in previous years and the higher revenue recognition that benefited Q4 2022 operating profit.

# Sustainability

## Our strategy and focus areas

At Nokia, we create technology that helps the world act together. Connectivity and digitalization play a critical role in helping to solve many of the world's greatest challenges.

On 31 October 2022, we announced our enhanced Environmental, Social and Governance (ESG) strategy, designed to maximize Nokia's impact. Combining its technology, solutions and capabilities to address some of the biggest global challenges, the strategy also aims to create increased value. The ESG strategy builds on five strategic focus areas outlined below. The ESG strategy is aligned with the topics that are most material to Nokia and its stakeholders. Sustainability is a core component of Nokia business and technology strategies.

Our ambition is to build new competitive opportunities while also creating tangible environmental and social benefits. The five key focus areas of the ESG strategy are:

**Environment** which includes climate and circularity topics. We look to reduce our environmental footprint and help our operator customers reduce their footprint. Our ambition is to be the leader in energy efficiency and circular practices.

**Industrial Digitalization** focuses on the role of enhanced connectivity and digitalization in unlocking value and making organizations more productive, adaptable, sustainable and resilient. Our connectivity and digital solutions provide new 5G use cases, automation and smart resilient networking that sustainably transform physical industries.

**Security & Privacy:** Security and privacy are part of everything we do. We aim to deliver security and privacy by design, with the goal to ensure the network is seamlessly secure. Our ambition is that security and privacy become the cornerstone of our reputation and product proposition.

**Bridging the digital divide:** The pandemic highlighted many inequalities including the extent of the digital divide. Our aim is to be a bridge for digital inclusion through our connectivity and digital skill building solutions.

**Responsible Business:** Our business is built on the foundation of trust. Our Code of Conduct expresses our personal commitment to earn this trust every day. It provides clear and simple direction for all employees and business partners. Our ambition is to take a proactive and values-driven role in driving responsible business practices internally and in our value chain.

### Environment

During the last quarter of 2022, we took some initial steps in our environmental impact related to biodiversity as well as actions that contribute to the further development and strengthening of our circular approach. We also again received an A- leadership result on CDP for our carbon disclosure and related activities.

Biodiversity appeared for the first time in our 2022 materiality assessment top quartile of most material issues. In December we announced our inaugural three-year collaboration with the John Nurminen Foundation to protect the Baltic Sea and support the regeneration of a healthy biodiverse ecosystem. The partnership will also explore the potential role of digital technology to monitor and support restoration of the ecosystem. During the quarter we also took the opportunity to conclude the protection of 5.64 hectares of Nokia land in Northern Finland to create a nature conservation area. The Finnish Government also protected an equivalent area of land as part of the state gift of nature campaign.

In relation to circular practices, we also announced the opening of a new regional maintenance hub in Riyadh in the Kingdom of Saudi Arabia during the quarter. The hub will support customers across the Middle East and Africa region, providing repair and support services for Nokia's 5G and legacy telecoms network equipment as well as training to local engineers. The move supports Nokia's efforts to extend the lifespan of its network equipment through the adoption of circular practices that enable greater material efficiency, reduced waste and more sustainable networks.

### Industrial Digitalization

During December Nokia announced the results of a survey commissioned with Global Data on the impact of deploying private wireless on enterprise operations. Key findings show more than half of the survey respondents have seen cost reductions since introducing the technology and over 79% have seen or would expect to see a return on investment (ROI) within six months. 82% of the companies surveyed stated that the most important or one of the most important factors in their strategy and decision-making processes is sustainability. Cybersecurity and business efficiency are key transformation drivers for early adopters of private wireless.

In December 2022, our Submarine Networks business inaugurated the deployment of a private 5G network on its submarine systems production and assembly site based in Calais. More than 2 years of development and integration were necessary to deploy the largest

private industrial 5G network in Europe to date, and to provide coverage to the 50,000 square meters of the Calais site. Eleven buildings as well as the loading docks will be covered by 59 5G small cell antennas.

In November, Nokia announced that it will deploy the first industrial-grade LTE private network, the San Antonio Terminal Internacional S.A. (STI), the main port in Chile and a key port in South America.

### Responsible Business

During Q4 2022 we implemented events and campaigns to remind our employees about the importance of ethics and speaking up. We hosted a global Integrity Day which included senior leader engagement and recognition of ethical role models as well as learning and celebratory activities. We recently launched a new Ethics Helpline tool, making it even easier for reporting suspected compliance breaches. The new tool offers a more agile and user-friendly interface, enhanced reporting and data analytics capabilities for investigators and enhanced case management features, leading to increased efficiency in investigations.

During the quarter, we received recognition from the 2022 Workplace Pride Global Benchmark which awarded Nokia for the third time with an ambassador status for its LGBT+ work. In addition, Nokia's OUT Leaders program, showcasing LGBT+ leaders as role models in the organization, was recognized as a best practice by the World Economic Forum's Global Parity Alliance, a cross-industry group of global organizations focusing on accelerating diversity, equality and inclusion in the workplace.

Finally, two new 'Action for Leadership' programs were launched in partnership with 'UN Women' and two operator customers, Saudi Telecom Company, and e&, headquartered in Dubai. The program invites women talent from Nokia and our customers to innovate on business solutions to address social sustainability.

### Our people

Nokia also held its annual Global Day of Learning for all employees in November with more than 58 000 participants. The focus was on strategy, technology, and people with the aim to emphasize Nokia as the company of choice. During the day 13 different topics were presented including Nokia Environmental, Social and Governance strategy, Nokia Technology Vision 2030 and specific skills development.

## Additional information

### 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, the pace of restructuring 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.

We continue to expect these cost savings to result in approximately EUR 500-600 million of restructuring and associated charges by the end of 2023.

We continue to expect total restructuring and associated cash outflows to be approximately EUR 1 050-1 150 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 <sup>1</sup>
	2021	2022	2023	Beyond 2023	
Recurring gross cost savings	150	250	100	100	600
- cost of sales	50	100	50	50	250
- operating expenses	100	150	50	50	350
Restructuring and associated charges related to our most recent cost savings program	250	150	150		500-600
Restructuring and associated cash outflows <sup>2</sup>	350	300	300	150	1 050-1 150

<sup>1</sup>Savings expected by end of 2023.

<sup>2</sup>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
<b>Total restructuring and associated charges</b>	<b>500-600</b>

### Significant events

#### January – December 2022

On 3 February 2022, Nokia announced that its Board of Directors is initiating a share buyback program to return up to EUR 600 million of cash to shareholders in tranches over a period of two years. Nokia launched the first phase of the program on 11 February 2022 with repurchases starting on 14 February 2022.

On 5 April 2022, Nokia held its Annual General Meeting (AGM) at its headquarters in Espoo under special arrangements due to the COVID-19 pandemic. Approximately 59 300 shareholders representing approximately 3 063 million shares and votes were represented at the meeting. The following resolutions were made:

- The financial statements were adopted and the Board and President and CEO were discharged from liability for financial year 2021.
- The AGM decided that no dividend is distributed by a resolution of the Annual General Meeting and authorized the Board of Directors to resolve in its discretion on the distribution of an aggregate maximum of EUR 0.08 per share as dividend from the retained earnings and/or as assets from the reserve for invested unrestricted equity (equity repayment).
- Sari Baldauf, Bruce Brown, Thomas Dannenfeldt, Jeanette Horan, Edward Kozel, Søren Skou and Carla Smits-Nusteling were reelected as members of the Board of Directors for a term ending at the close of the next AGM. In addition, the AGM resolved to elect Lisa Hook, Thomas Saueressig and Kai Öistämö as new members of the Board of Directors for the same term of office. In an assembly meeting that took place after the AGM, the Board elected Sari Baldauf as Chair of the Board, and Søren Skou as new Vice Chair of the Board.
- The annual fees of the Board members were increased by EUR 10 000 except for the Board Chair.

- Remuneration Report of the company's governing bodies was supported.
- Deloitte Oy was re-elected as the auditor for Nokia for the financial year 2023.
- 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 4 October 2023 and they terminated the corresponding authorizations granted by the AGM on 8 April 2021.

On 12 April 2022, Nokia announced its intention to exit the Russian market. Nokia will aim to provide the necessary support to maintain the networks already present as it exits the market. Nokia sees this as the most responsible course of action to take. Nokia recognized a provision of EUR 104 million in Q1 2022 in relation to Russia. Russia accounted for less than 2% of Nokia's net sales in 2021. Net sales in Russia declined approximately EUR 80 million year-on-year in Q4 2022 and approximately EUR 260 million in full year 2022, however, the impact was mitigated by strong demand from other regions, considering the supply constraints.

On 6 May 2022, Nokia announced that its Chief People Officer, Stephanie Werner-Dietz, had informed the company that she will leave and step down from the Group Leadership Team to take up a position in another company. Werner-Dietz left the company on 26 August 2022.

On 13 September 2022, Nokia announced that it has appointed Amy Hanlon-Rodemich as Chief People Officer and member of the Group

Leadership Team, effective 24 October 2022. Hanlon-Rodemich joined Nokia from GlobalLogic, a leading company in digital product engineering, where she was Chief People Officer.

On 6 October 2022, Nokia announced that its Chief Legal Officer, Nassib Abou-Khalil, has decided to leave Nokia and step down from its Group Leadership Team.

On 11 November 2022, Nokia announced it has completed the first phase of the share buyback program announced in February 2022. On 8 December 2022, it was announced that Nokia has decided to launch the second phase of the share buyback program and it had cancelled the shares repurchased under the first phase of the

program. Repurchases under the second phase of the program resumed on 2 January 2023. For more information on the share buyback program, refer to the Shareholder distribution section in this report.

#### After December 2022

On 25 January 2023, Nokia announced it had appointed Esa Niinimäki as Chief Legal Officer and member of the Group Leadership Team. Niinimäki has worked at Nokia for more than 15 years where he has held multiple positions, most recently Interim Chief Legal Officer.

## Shares

The total number of Nokia shares on 31 December 2022, equaled 5 632 297 576. On 31 December 2022, Nokia and its subsidiary companies held 45 281 539 Nokia shares, representing

approximately 0.8% 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;
- Accelerating inflation, increased global macro-uncertainty, major currency fluctuations and higher interest rates;
- Scope and duration of the COVID-19 pandemic, and its economic impact;
- War or other geopolitical conflicts, disruptions and potential costs thereof;
- Other macroeconomic, industry and competitive developments;
- Timing and value of new, renewed 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; on-going litigation with respect to licensing and regulatory landscape for patent licensing;
- The outcomes of on-going and potential disputes and litigation;
- 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 business mix, the timing of patent licensing cash flow and changes in tax legislation, including potential tax reforms in various countries 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 the risk factors specified under Forward-looking statements of this report, and our 2021 annual report on Form 20-F published on 3 March 2022 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, operational key performance indicators and decisions on market exits; B) expectations, plans or benefits related to future performance of our businesses (including the expected impact, timing and duration of COVID-19 and the general macroeconomic conditions 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 and results of operations, including market share, prices, net sales, income, margins, cash flows, the timing of receivables, operating expenses, provisions, impairments, taxes, currency exchange rates, hedging, investment funds, inflation, product cost reductions, competitiveness, revenue generation in any specific

region, and licensing income and payments; D) ability to execute, expectations, plans or benefits related to changes in organizational structure and operating model; E) impact on revenue with respect to litigation/renewal discussions; and F) 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			
	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21
<b>Net sales (Notes 2, 3)</b>	7 449	6 414	24 911	22 202	7 449	6 414	24 911	22 202
Cost of sales	(4 262)	(3 880)	(14 689)	(13 368)	(4 212)	(3 843)	(14 589)	(13 237)
<b>Gross profit (Note 2)</b>	3 187	2 534	10 222	8 834	3 237	2 571	10 322	8 965
Research and development expenses	(1 222)	(1 118)	(4 550)	(4 214)	(1 189)	(1 092)	(4 449)	(4 084)
Selling, general and administrative expenses	(838)	(758)	(3 013)	(2 792)	(727)	(659)	(2 604)	(2 379)
Other operating income and expenses	(244)	82	(341)	330	(168)	88	(160)	273
<b>Operating profit (Note 2)</b>	882	740	2 318	2 158	1 154	908	3 109	2 775
Share of results of associated companies and joint ventures	26	21	(26)	9	39	21	(13)	9
Financial income and expenses	(30)	(68)	(108)	(241)	1	(38)	(38)	(176)
<b>Profit before tax</b>	878	693	2 184	1 926	1 194	891	3 058	2 609
Income tax benefit/(expense) (Note 5)	2 272	(11)	2 026	(272)	(265)	(159)	(577)	(500)
<b>Profit from continuing operations</b>	3 150	682	4 210	1 654	929	731	2 481	2 109
Profit/(loss) from discontinued operations	2	(1)	49	(9)	—	—	—	—
<b>Profit for the period</b>	3 152	680	4 259	1 645	929	731	2 481	2 109
<b>Attributable to</b>								
Equity holders of the parent	3 154	676	4 250	1 623	931	727	2 472	2 087
Non-controlling interests	(2)	4	9	22	(2)	4	9	22
<b>Earnings per share, EUR (for profit attributable to equity holders of the parent)</b>								
<b>Basic</b>								
Continuing operations	0.56	0.12	0.75	0.29	0.17	0.13	0.44	0.37
Profit for the period	0.56	0.12	0.76	0.29	0.17	0.13	0.44	0.37
<b>Diluted</b>								
Continuing operations	0.56	0.12	0.74	0.29	0.16	0.13	0.44	0.37
Profit for the period	0.56	0.12	0.75	0.29	0.16	0.13	0.44	0.37
<b>Average number of shares ('000 shares)</b>								
<b>Basic</b>								
Continuing operations	5 590 250	5 634 946	5 614 182	5 630 025	5 590 250	5 634 946	5 614 182	5 630 025
Profit for the period	5 590 250	5 634 946	5 614 182	5 630 025	5 590 250	5 634 946	5 614 182	5 630 025
<b>Diluted</b>								
Continuing operations	5 651 112	5 713 089	5 670 020	5 684 235	5 651 112	5 713 089	5 670 020	5 684 235
Profit for the period	5 651 112	5 713 089	5 670 020	5 684 235	5 651 112	5 713 089	5 670 020	5 684 235

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

Consolidated statement of comprehensive income (condensed)

EUR million	Reported			
	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21
<b>Profit for the period</b>	3 152	680	4 259	1 645
<b>Other comprehensive income</b>				
Items that will not be reclassified to profit or loss				
Remeasurements of defined benefit plans	(377)	98	(424)	3 040
Income tax related to items that will not be reclassified to profit or loss	99	(22)	77	(755)
Items that may be reclassified subsequently to profit or loss				
Translation differences	(1 481)	374	710	1 153
Net investment hedges	349	(95)	(127)	(249)
Cash flow and other hedges	71	10	83	—
Financial assets at fair value through other comprehensive income	(15)	(2)	(46)	7
Other changes, net	—	(1)	(3)	—
Income tax related to items that may be reclassified subsequently to profit or loss	(22)	1	(21)	2
<b>Other comprehensive (loss)/income, net of tax</b>	(1 376)	363	249	3 198
<b>Total comprehensive income for the period</b>	1 776	1 043	4 508	4 843
<b>Attributable to:</b>				
Equity holders of the parent	1 782	1 037	4 500	4 814
Non-controlling interests	(6)	6	8	29

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 2022	31 December 2021
<b>ASSETS</b>		
Goodwill	5 667	5 431
Other intangible assets	1 263	1 620
Property, plant and equipment	2 015	1 924
Right-of-use assets	929	884
Investments in associated companies and joint ventures	199	243
Other non-current financial investments (Note 6)	828	758
Deferred tax assets (Note 5)	3 834	1 272
Other non-current financial assets (Note 6)	252	325
Defined benefit pension assets (Note 4)	6 754	7 740
Other non-current receivables	239	255
Non-current interest-bearing financial investments (Note 6)	697	—
<b>Non-current assets</b>	<b>22 677</b>	<b>20 452</b>
Inventories	3 265	2 392
Trade receivables (Note 6)	5 549	5 382
Contract assets	1 203	1 146
Other current receivables	934	859
Current income tax assets	153	214
Other current financial and firm commitment assets (Note 6)	615	336
Current interest-bearing financial investments (Note 6)	3 080	2 577
Cash and cash equivalents (Note 6)	5 467	6 691
<b>Current assets</b>	<b>20 266</b>	<b>19 597</b>
<b>Total assets</b>	<b>42 943</b>	<b>40 049</b>
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>		
Share capital	246	246
Share issue premium	503	454
Treasury shares	(352)	(352)
Translation differences	169	(396)
Fair value and other reserves	3 905	4 219
Reserve for invested unrestricted equity	15 487	15 726
Retained earnings/(accumulated deficit)	1 375	(2 537)
<b>Total capital and reserves attributable to equity holders of the parent</b>	<b>21 333</b>	<b>17 360</b>
Non-controlling interests	93	102
<b>Total equity</b>	<b>21 426</b>	<b>17 462</b>
Long-term interest-bearing liabilities (Notes 6, 8)	4 249	4 537
Long-term lease liabilities	858	824
Deferred tax liabilities	332	282
Defined benefit pension and post-employment liabilities (Note 4)	2 459	3 408
Contract liabilities	120	354
Deferred revenue and other non-current liabilities	103	436
Provisions (Note 7)	622	645
<b>Non-current liabilities</b>	<b>8 743</b>	<b>10 486</b>
Short-term interest-bearing liabilities (Notes 6, 8)	228	116
Short-term lease liabilities	184	185
Other financial and firm commitment liabilities (Note 6)	1 038	762
Current income tax liabilities	185	202
Trade payables (Note 6)	4 730	3 679
Contract liabilities	1 977	2 293
Deferred revenue and other current liabilities (Note 6)	3 619	3 940
Provisions (Note 7)	813	924
<b>Current liabilities</b>	<b>12 774</b>	<b>12 101</b>
<b>Total shareholders' equity and liabilities</b>	<b>42 943</b>	<b>40 049</b>
Shareholders' equity per share, EUR	3.82	3.08
Number of shares (1 000 shares, excluding treasury shares)	5 587 016	5 634 994

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



## Consolidated statement of cash flows (condensed)

EUR million	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21
<b>Cash flow from operating activities</b>				
Profit for the period	3 152	680	4 259	1 645
Adjustments	(1 709)	321	(446)	1 713
Depreciation and amortization	297	277	1 140	1 095
Restructuring charges	53	14	125	183
Financial income and expenses	(34)	69	28	240
Income tax (benefit)/expense	(2 271)	12	(2 030)	273
Loss/(gain) from other non-current financial investments	88	(53)	(27)	(188)
Impairment charges	139	15	152	40
Other	19	(13)	166	70
Cash flows from operations before changes in net working capital	1 443	1 001	3 813	3 358
Change in net working capital	(767)	(373)	(1 843)	(268)
(Increase)/decrease in receivables	(577)	(718)	(451)	239
(Increase)/decrease in inventories	(57)	132	(991)	(48)
(Decrease)/increase in non-interest-bearing liabilities	(133)	213	(401)	(459)
Cash flows from operations	676	628	1 970	3 090
Interest received	19	6	65	41
Interest paid	(36)	(42)	(180)	(192)
Income taxes paid, net	(92)	(107)	(381)	(314)
Net cash flows from operating activities	567	485	1 474	2 625
<b>Cash flow from investing activities</b>				
Purchase of property, plant and equipment and intangible assets	(195)	(159)	(601)	(560)
Proceeds from sale of property, plant and equipment and intangible assets	—	47	33	103
Acquisition of businesses, net of cash acquired	—	—	(20)	(33)
Purchase of interest-bearing financial investments	(1 004)	(251)	(3 595)	(1 845)
Proceeds from maturities and sale of interest-bearing financial investments	1 260	148	2 397	398
Purchase of other non-current financial investments	(13)	(22)	(115)	(77)
Proceeds from sale of other non-current financial investments	5	34	49	277
Foreign exchange hedging of cash and cash equivalents	13	(39)	(38)	(77)
Other	2	10	10	19
Net cash flows from/(used in) investing activities	68	(232)	(1 880)	(1 795)
<b>Cash flow from financing activities</b>				
Acquisition of treasury shares	(66)	—	(300)	—
Proceeds from long-term borrowings	—	—	8	17
Repayment of long-term borrowings	(1)	(445)	(2)	(927)
(Repayment of)/proceeds from short-term borrowings	(5)	(4)	27	(67)
Payment of principal portion of lease liabilities	(47)	(56)	(217)	(226)
Dividends paid	(124)	(5)	(353)	(9)
Net cash flows used in financing activities	(243)	(510)	(837)	(1 212)
Translation differences	(121)	45	19	133
<b>Net increase/(decrease) in cash and cash equivalents</b>	271	(212)	(1 224)	(249)
Cash and cash equivalents at beginning of period	5 196	6 903	6 691	6 940
Cash and cash equivalents at end of period	5 467	6 691	5 467	6 691

Consolidated statement of cash flows combines cash flows from both the continuing and the discontinued operations. In Q4'22, net cash from operating activities include cash outflows of EUR 1 million related to Nokia's discontinued operations. In Q1-Q4'22, net cash from operating activities and net cash used in investing activities include cash inflows of EUR 26 million and EUR 29 million, respectively, related to discontinued operations. Cash flows related to discontinued operations were nil in Q4'21 and Q1-Q4'21. 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	Retained earnings/ (accumulated deficit)	Attributable to equity holders of the parent	Non-controlling interests	Total equity
<b>1 January 2021</b>	246	443	(352)	(1 295)	1 910	15 656	(4 143)	12 465	80	12 545
Profit for the period	—	—	—	—	—	—	1 623	1 623	22	1 645
Other comprehensive income	—	—	—	899	2 309	—	(17)	3 191	7	3 198
<b>Total comprehensive income</b>	—	—	—	899	2 309	—	1 606	4 814	29	4 843
Share-based payments	—	108	—	—	—	—	—	108	—	108
Settlement of share-based payments	—	(97)	—	—	—	70	—	(27)	—	(27)
Dividend	—	—	—	—	—	—	—	—	(7)	(7)
<b>Total transactions with owners</b>	—	11	—	—	—	70	—	81	(7)	74
<b>31 December 2021</b>	246	454	(352)	(396)	4 219	15 726	(2 537)	17 360	102	17 462
<b>1 January 2022</b>	246	454	(352)	(396)	4 219	15 726	(2 537)	17 360	102	17 462
Profit for the period	—	—	—	—	—	—	4 250	4 250	9	4 259
Other comprehensive income	—	—	—	565	(314)	—	(1)	250	(1)	249
<b>Total comprehensive income</b>	—	—	—	565	(314)	—	4 249	4 500	8	4 508
Share-based payments	—	149	—	—	—	—	—	149	—	149
Settlement of share-based payments	—	(100)	—	—	—	73	—	(27)	—	(27)
Acquisition of treasury shares <sup>1</sup>	—	—	(300)	—	—	(12)	—	(312)	—	(312)
Cancellation of treasury shares <sup>1</sup>	—	—	300	—	—	(300)	—	—	—	—
Dividend	—	—	—	—	—	—	(337)	(337)	(17)	(354)
<b>Total transactions with owners</b>	—	49	—	—	—	(239)	(337)	(527)	(17)	(544)
<b>31 December 2022</b>	246	503	(352)	169	3 905	15 487	1 375	21 333	93	21 426

<sup>1</sup>Treasury shares are acquired as part of the share buyback program announced on 3 February 2022. Shares are repurchased using funds in the reserve for invested unrestricted equity. The repurchased shares were cancelled on 8 December 2022.

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 2021 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 2021. 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 26 January 2023.

Net sales and operating profit of the Nokia Group, particularly in Network Infrastructure, Mobile Networks 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 communications service providers.

Management has identified 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.

Nokia announced on 12 April 2022 its intention to exit the Russian market. Nokia will aim to provide the necessary support to maintain the networks already present as we exit the market. Nokia sees this as the most responsible course of action to take. Nokia recognized a provision of EUR 104 million in Q1 2022 related to Russia.

## Comparable and constant currency measures

Nokia presents financial information on a reported, comparable 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. For further details on performance measures used by Nokia and reconciliations to the closest IFRS-defined measures, refer to the Performance measures section accompanying this consolidated financial statement information.

## 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.

	Q4'22		Q4'21		Q3'22	
	Net sales	Total costs	Net sales	Total costs	Net sales	Total costs
EUR	~25%	~25%	~25%	~25%	~20%	~25%
USD	~50%	~50%	~50%	~50%	~55%	~50%
CNY	~5%	~5%	~5%	~5%	~5%	~5%
Other	~20%	~20%	~20%	~20%	~20%	~20%
Total	~100%	~100%	~100%	~100%	~100%	~100%

End of Q4'22 balance sheet rate 1 EUR = 1.07 USD, end of Q4'21 balance sheet rate 1 EUR = 1.13 USD and end of Q3'22 balance sheet rate 1 EUR = 0.97 USD

## New and amended standards and interpretations

The amendments to IFRS standards that became effective on 1 January 2022, 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) Network Infrastructure, (2) Mobile Networks, (3) Cloud and Network Services and (4) Nokia Technologies. Nokia also presents segment-level information for Group Common and Other. 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. For detailed segment descriptions, please refer to Note 5, Segment Information, in the consolidated financial statements for 2021.

Accounting policies of the segments are the same as those described in Note 2, Significant accounting policies, in the consolidated financial statements for 2021, except that items affecting comparability are not allocated to the segments. For more information on comparable measures and items affecting comparability, refer to Note 1, Basis of preparation and to the Performance Measures section accompanying this consolidated financial statement information. Inter-segment revenues and transfers are accounted for as if the revenues were to third parties, that is, at current market prices.

<b>Q4'22</b>								
EUR million	Network Infrastructure <sup>1</sup>	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items		Nokia Group
<b>Net sales</b>	2 709	2 960	1 060	679	59	(18)		7 449
<i>of which to other segments</i>	1	7	—	3	6	(18)		—
<b>Gross profit/(loss)</b>	1 074	1 028	464	678	(6)	(51)		3 187
<i>Gross margin %</i>	39.6%	34.7%	43.8%	99.9%	(10.2)%			42.8%
Research and development expenses	(365)	(585)	(148)	(56)	(35)	(33)		(1 222)
Selling, general and administrative expenses	(235)	(238)	(149)	(36)	(69)	(112)		(838)
Other operating income and expenses	(43)	(4)	(19)	(22)	(80)	(76)		(244)
<b>Operating profit/(loss)</b>	431	201	147	564	(189)	(272)		882
<i>Operating margin %</i>	15.9%	6.8%	13.9%	83.1%	(320.3)%			11.8%
Share of results of associated companies and joint ventures	—	42	2	(5)	—	(13)		26
Financial income and expenses								(30)
<b>Profit before tax</b>								878
<i>Depreciation and amortization</i>	(62)	(88)	(24)	(9)	(7)	(107)		(297)

<sup>1</sup>Includes IP Networks net sales of EUR 896 million, Optical Networks net sales of EUR 639 million, Fixed Networks net sales of EUR 855 million and Submarine Networks net sales of EUR 319 million.

<b>Q4'21</b>								
EUR million	Network Infrastructure <sup>1</sup>	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items		Nokia Group
<b>Net sales</b>	2 254	2 761	964	368	74	(7)		6 414
<i>of which to other segments</i>	—	2	—	3	3	(7)		—
<b>Gross profit/(loss)</b>	767	1 037	403	367	(3)	(37)		2 534
<i>Gross margin %</i>	34.0%	37.6%	41.8%	99.7%	(4.1)%			39.5%
Research and development expenses	(317)	(561)	(134)	(54)	(26)	(26)		(1 118)
Selling, general and administrative expenses	(217)	(223)	(126)	(27)	(66)	(98)		(758)
Other operating income and expenses	16	17	2	(4)	57	(6)		82
<b>Operating profit/(loss)</b>	248	270	145	282	(38)	(168)		740
<i>Operating margin %</i>	11.0%	9.8%	15.0%	76.6%	(51.4)%			11.5%
Share of results of associated companies and joint ventures	—	18	3	—	—	—		21
Financial income and expenses								(68)
<b>Profit before tax</b>			—	—	—			693
<i>Depreciation and amortization</i>	(53)	(87)	(23)	(8)	(6)	(99)		(277)

<sup>1</sup>Includes 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.

<b>Q1-Q4'22</b>							
EUR million	Network Infrastructure <sup>1</sup>	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
<b>Net sales</b>	9 047	10 671	3 351	1 595	295	(48)	24 911
<i>of which to other segments</i>	3	13	1	12	19	(48)	—
<b>Gross profit/(loss)</b>	3 308	4 096	1 340	1 590	(12)	(100)	10 222
<i>Gross margin %</i>	36.6%	38.4%	40.0%	99.7%	(4.1)%		41.0%
Research and development expenses	(1 307)	(2 234)	(577)	(214)	(117)	(101)	(4 550)
Selling, general and administrative expenses	(833)	(865)	(544)	(136)	(226)	(409)	(3 013)
Other operating income and expenses	(66)	(57)	(42)	(32)	37	(181)	(341)
<b>Operating profit/(loss)</b>	1 102	940	177	1 208	(318)	(791)	2 318
<i>Operating margin %</i>	12.2%	8.8%	5.3%	75.7%	(107.8)%		9.3%
Share of results of associated companies and joint ventures	—	(11)	6	(8)	—	(13)	(26)
Financial income and expenses							(108)
<b>Profit before tax</b>							2 184
<i>Depreciation and amortization</i>	(229)	(347)	(91)	(34)	(28)	(411)	(1 140)

<sup>1</sup>Includes IP Networks net sales of EUR 3 063 million, Optical Networks net sales of EUR 1 891 million, Fixed Networks net sales of EUR 2 943 million and Submarine Networks net sales of EUR 1 150 million.

<b>Q1-Q4'21</b>							
EUR million	Network Infrastructure <sup>1</sup>	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
<b>Net sales</b>	7 674	9 717	3 089	1 502	257	(37)	22 202
<i>of which to other segments</i>	2	7	1	12	17	(37)	—
<b>Gross profit/(loss)</b>	2 684	3 637	1 160	1 497	(13)	(131)	8 834
<i>Gross margin %</i>	35.0%	37.4%	37.6%	99.7%	(5.1)%		39.8%
Research and development expenses	(1 165)	(2 078)	(537)	(201)	(104)	(130)	(4 214)
Selling, general and administrative expenses	(765)	(832)	(477)	(92)	(213)	(413)	(2 792)
Other operating income and expenses	30	37	20	(18)	205	56	330
<b>Operating profit/(loss)</b>	784	765	166	1 185	(125)	(617)	2 158
<i>Operating margin %</i>	10.2%	7.9%	5.4 %	78.9 %	(48.6)%		9.7%
Share of results of associated companies and joint ventures	(1)	6	6	(2)	—	—	9
Financial income and expenses							(241)
<b>Profit before tax</b>							1 926
<i>Depreciation and amortization</i>	(208)	(338)	(95)	(33)	(30)	(392)	(1 095)

<sup>1</sup>Includes 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.

## Material reconciling items between total segment operating profit and operating profit for the Group

EUR million	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21
<b>Operating profit for the Group</b>	<b>882</b>	<b>740</b>	<b>2 318</b>	<b>2 158</b>
Amortization of acquired intangible assets	106	99	411	391
Impairment and write-off of assets, net of reversals	84	13	97	45
Restructuring and associated charges	80	52	177	263
Costs associated with country exit	(6)	—	98	—
Gain on sale of fixed assets	—	(30)	—	(53)
Settlement of legal disputes	—	—	—	(80)
Other, net	7	34	8	51
<b>Total Segment Operating profit</b>	<b>1 154</b>	<b>908</b>	<b>3 109</b>	<b>2 775</b>

### 3. NET SALES

#### Net sales by region<sup>1</sup>

EUR million	Q4'22	Q4'21	YoY change	Q1-Q4'22	Q1-Q4'21	YoY change
Asia Pacific	801	684	17%	2 648	2 472	7%
Europe	2 351	1 836	28%	6 662	6 313	6%
Greater China	356	393	(9)%	1 581	1 512	5%
India	568	248	129%	1 290	1 035	25%
Latin America	387	325	19%	1 223	983	24%
Middle East & Africa	595	554	7%	1 969	1 771	11%
North America	2 070	2 128	(3)%	8 388	7 187	17%
Submarine Networks	319	246	30%	1 150	929	24%
<b>Total</b>	<b>7 449</b>	<b>6 414</b>	<b>16%</b>	<b>24 911</b>	<b>22 202</b>	<b>12%</b>

<sup>1</sup>In Q2 2022, Nokia changed how it presents net sales information on a regional basis. Nokia determined that providing net sales of its Submarine Networks business separately from the net sales by region information for the rest of the Group improves the usefulness of regional net sales information by removing volatility caused by the specific nature of the Submarine Networks business. The comparative information for net sales by region has been recast accordingly.

#### Net sales by customer type

EUR million	Q4'22	Q4'21	YoY change	Q1-Q4'22	Q1-Q4'21	YoY change
Communications service providers (CSP)	5 640	5 238	8%	19 911	17 977	11%
Enterprise	769	495	55%	2 007	1 575	27%
Licensees	679	368	84%	1 595	1 502	6%
Other <sup>1</sup>	361	312	16%	1 398	1 148	22%
<b>Total</b>	<b>7 449</b>	<b>6 414</b>	<b>16%</b>	<b>24 911</b>	<b>22 202</b>	<b>12%</b>

<sup>1</sup>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. Submarine Networks and RFS net sales also include revenue from communications 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-employment plan assets and obligations annually, as of 31 December, through valuations performed by external actuaries. As of 31 December 2022, the weighted average discount rates used in remeasurement of the most significant plans were as follows (comparatives as of 31 December 2021): U.S. Pension 4.86% (2.40%), U.S. Opeb 4.87% (2.42%), Germany 3.70% (0.87%) and U.K. 4.76% (1.87%).

The funded status of Nokia's defined benefit plans (before the effect of the asset ceiling) decreased from EUR 5 159 million, or 126.4%, as of 30 September 2022 to EUR 4 379 million, or 123.9%, as of 31 December 2022. During the quarter the global defined benefit plan asset portfolio was invested approximately 71% in fixed income, 5% in equities and 24% in other asset classes, mainly private equity and real estate.

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

EUR million	31 December 2022			31 December 2021		
	Pensions <sup>1</sup>	US Opeb	Total	Pensions <sup>1</sup>	US Opeb	Total
<b>Net asset/(liability) recognized 1 January</b>	<b>5 588</b>	<b>(1 256)</b>	<b>4 332</b>	<b>2 572</b>	<b>(1 580)</b>	<b>992</b>
Recognized in income statement	(69)	(32)	(101)	(128)	(29)	(157)
Recognized in other comprehensive income	(694)	270	(424)	2 906	134	3 040
Contributions and benefits paid	177	9	186	177	(6)	171
Exchange differences and other movements <sup>2</sup>	271	31	302	61	225	286
<b>Net asset/(liability) recognized at the end of the period</b>	<b>5 273</b>	<b>(978)</b>	<b>4 295</b>	<b>5 588</b>	<b>(1 256)</b>	<b>4 332</b>

<sup>1</sup>Includes pensions, retirement indemnities and other post-employment plans.

<sup>2</sup>Includes Section 420 transfers, medicare subsidies, and other transfers.

### Funded status

EUR million	31 December 2022	30 September 2022	30 June 2022	31 March 2022	31 December 2021
Defined benefit obligation	(18 312)	(19 522)	(20 029)	(21 120)	(22 704)
Fair value of plan assets	22 691	24 681	25 127	25 921	27 128
<b>Funded status</b>	<b>4 379</b>	<b>5 159</b>	<b>5 098</b>	<b>4 801</b>	<b>4 424</b>
Effect of asset ceiling	(84)	(121)	(104)	(89)	(92)
<b>Net asset recognized at the end of the period</b>	<b>4 295</b>	<b>5 038</b>	<b>4 994</b>	<b>4 712</b>	<b>4 332</b>

## 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 2022, Nokia has recognized deferred tax assets of EUR 3.8 billion (EUR 1.3 billion as of 31 December 2021).

In addition, as of 31 December 2022, Nokia has unrecognized deferred tax assets of approximately EUR 5 billion (EUR 8 billion as of 31 December 2021), the majority of which relate to France (approximately EUR 4 billion). These deferred tax assets have not been recognized due to uncertainty regarding their utilization. A significant portion of the French unrecognized deferred tax assets are indefinite in nature and available against future French tax liabilities, subject to a limitation of 50% of annual taxable profits.

Nokia continually evaluates the probability of utilizing its deferred tax assets and considers both positive and negative evidence in its assessment. At 31 December 2021, Nokia concluded based on its assessment that it was not probable that it would have been able to utilize the unused tax losses, unused tax credits and deductible temporary differences in Finland. This conclusion was based on the weighting of objective negative evidence of cumulative taxable losses against more subjective positive evidence. The primary factors in this weighting were the more objective record of a pattern of historical financial performance compared to the more inherently subjective expectations regarding future financial performance in Finland.

In 2021 and 2022, Nokia generated accounting and taxable profit in Finland and there were improvements in financial performance compared to preceding periods. The changes arise from the underlying improvements in operating performance, including successful execution of new Nokia strategy and improved competitiveness in Mobile Networks. These improvements are expected to be sustained in the upcoming years, as well as over the longer term. In addition, Nokia has determined that, in 2022, a pattern of material taxable profits was re-established in Finland. Nokia's re-established pattern of profitability together with Nokia's forecasts of future taxable profit in Finland provide positive evidence about its ability to utilize the unused tax losses and deductible temporary differences in Finland. At 31 December 2022, Nokia concluded based on its assessment that it is probable that it will be able to utilize the unused tax losses and deductible temporary differences and re-recognized deferred tax assets of EUR 2.5 billion in the consolidated statement of financial position.

In performing this assessment, Nokia has not applied any cut-off period, other than expiry under the relevant tax legislation. A significant portion of Finnish deferred tax assets are indefinite in nature and available fully against future Finnish tax liabilities. Due to the non-expiry of these assets, the sensitivity of future profit projections affects mainly the period of time over which the deferred tax assets are expected to be utilized.

## 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 publicly available market information 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 22, Fair value of financial instruments, in the consolidated financial statements for 2021. 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			Total	Total
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3		
<b>31 December 2022</b>									
Other non-current financial investments	—	5	—	823	—	—	—	828	828
Other non-current financial assets	183	—	91	—	—	27	—	301	301
Non-current interest-bearing financial investments	697	—	—	—	—	—	—	697	659
Other current financial assets	296	—	—	—	—	36	—	332	332
Derivative assets	—	—	239	—	—	—	—	239	239
Trade receivables	—	—	—	—	—	5 549	—	5 549	5 549
Current interest-bearing financial investments	1 447	—	1 633	—	—	—	—	3 080	3 080
Cash and cash equivalents	4 176	—	1 291	—	—	—	—	5 467	5 467
<b>Total financial assets</b>	<b>6 799</b>	<b>5</b>	<b>3 254</b>	<b>823</b>	<b>—</b>	<b>5 612</b>	<b>—</b>	<b>16 493</b>	<b>16 455</b>
Long-term interest-bearing liabilities	4 249	—	—	—	—	—	—	4 249	4 230
Other long-term financial liabilities	—	—	—	48	—	—	—	48	48
Short-term interest-bearing liabilities	228	—	—	—	—	—	—	228	228
Other short-term financial liabilities	75	—	—	502	—	—	—	577	577
Derivative liabilities	—	—	496	—	—	—	—	496	496
Discounts without performance obligations	539	—	—	—	—	—	—	539	539
Trade payables	4 730	—	—	—	—	—	—	4 730	4 730
<b>Total financial liabilities</b>	<b>9 821</b>	<b>—</b>	<b>496</b>	<b>550</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>10 867</b>	<b>10 848</b>

EUR million	Carrying amounts							Fair value	
	Amortized cost	Fair value through profit or loss			Fair value through other			Total	Total
		Level 1	Level 2	Level 3	Level 1	Level 2	Level 3		
<b>31 December 2021</b>									
Other non-current financial investments	—	8	—	750	—	—	—	758	758
Other non-current financial assets	130	—	101	—	—	94	—	325	325
Other current financial assets	115	—	—	—	—	21	—	136	136
Derivative assets	—	—	200	—	—	—	—	200	200
Trade receivables	—	—	—	—	—	5 382	—	5 382	5 382
Current interest-bearing financial investments	526	—	2 051	—	—	—	—	2 577	2 577
Cash and cash equivalents	4 627	—	2 064	—	—	—	—	6 691	6 691
<b>Total financial assets</b>	<b>5 398</b>	<b>8</b>	<b>4 416</b>	<b>750</b>	<b>—</b>	<b>5 497</b>	<b>—</b>	<b>16 069</b>	<b>16 069</b>
Long-term interest-bearing liabilities	4 537	—	—	—	—	—	—	4 537	4 775
Other long-term financial liabilities	—	—	—	68	—	—	—	68	68
Short-term interest-bearing liabilities	116	—	—	—	—	—	—	116	116
Other short-term financial liabilities	—	—	—	522	—	—	—	522	522
Derivative liabilities	—	—	240	—	—	—	—	240	240
Discounts without performance obligations	479	—	—	—	—	—	—	479	479
Trade payables	3 679	—	—	—	—	—	—	3 679	3 679
<b>Total financial liabilities</b>	<b>8 811</b>	<b>—</b>	<b>240</b>	<b>590</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>9 641</b>	<b>9 879</b>

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
<b>Balance as of 31 December 2021</b>	750	(590)
Net gains in income statement	13	24
Additions	101	—
Deductions	(39)	20
Transfer out of level 3	(4)	—
Other movements	2	(4)
<b>Balance as of 31 December 2022</b>	823	(550)

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 23 million (net gain of EUR 85 million in 2021) related to level 3 financial instruments held at 31 December 2022 was included in the profit and loss during 2022.

## 7. PROVISIONS

EUR million	Restructuring	Warranty	Litigation	Environmental	Project losses	Divestment-related	Material liability	Other <sup>1</sup>	Total
<b>As of 1 January 2022</b>	312	254	102	149	235	46	89	382	1 569
Charged to income statement									
<i>Additions</i>	125	156	54	7	26	5	121	158	652
<i>Reversals</i>	—	(57)	(10)	(2)	(2)	—	(64)	(34)	(169)
Total charged to income statement	125	99	44	5	24	5	57	124	483
Utilized during period <sup>2</sup>	(245)	(132)	(49)	(7)	(52)	—	(33)	(101)	(619)
Translation differences and other	1	—	1	8	—	(9)	2	(1)	2
<b>As of 31 December 2022</b>	193	221	98	155	207	42	115	404	1 435
<b>Non-current</b>	63	20	17	136	138	37	12	199	622
<b>Current</b>	130	201	81	19	69	5	103	205	813

<sup>1</sup>Other provisions include provisions for various obligations such as costs associated with exiting the Russian market, indirect tax provisions, employee-related provisions other than restructuring provisions and asset retirement obligations.

<sup>2</sup>The utilization of restructuring provision includes items transferred to accrued expenses, of which EUR 58 million remained in accrued expenses as of 31 December 2022.

## 8. INTEREST-BEARING LIABILITIES

Issuer/borrower	Instrument	Currency	Nominal (million)	Final maturity	Carrying amount (EUR million)	
					31 December 2022	31 December 2021
Nokia Corporation	2.00% Senior Notes	EUR	750	March 2024	736	759
Nokia Corporation	EIB R&D Loan	EUR	500	February 2025	500	500
Nokia Corporation	NIB R&D Loan <sup>1</sup>	EUR	250	May 2025	250	250
Nokia Corporation	2.375% Senior Notes	EUR	500	May 2025	478	497
Nokia Corporation	2.00% Senior Notes	EUR	750	March 2026	716	760
Nokia Corporation	4.375% Senior Notes	USD	500	June 2027	436	464
Nokia of America Corporation	6.50% Senior Notes	USD	74	January 2028	70	66
Nokia Corporation	3.125% Senior Notes	EUR	500	May 2028	457	497
Nokia of America Corporation	6.45% Senior Notes	USD	206	March 2029	194	183
Nokia Corporation	6.625% Senior Notes	USD	500	May 2039	478	553
Nokia Corporation and various subsidiaries	Other liabilities				162	124
<b>Total</b>					4 477	4 653

<sup>1</sup>The 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 2022	31 December 2021
Revolving Credit Facility <sup>1</sup>	Committed	EUR	1 500	—	—
Finnish Commercial Paper Programme	Uncommitted	EUR	750	—	—
Euro-Commercial Paper Programme	Uncommitted	EUR	1 500	—	—
Euro Medium Term Note Programme <sup>2</sup>	Uncommitted	EUR	5 000	2 500	2 500

<sup>1</sup>The facility has its maturity in June 2026, except for EUR 88 million having its maturity in June 2024.

<sup>2</sup>All 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 2022	31 December 2021
<b>Contingent liabilities on behalf of Group companies</b>		
Guarantees issued by financial institutions		
Commercial guarantees	1 238	1 281
Non-commercial guarantees	538	442
Corporate guarantees		
Commercial guarantees	504	457
Non-commercial guarantees	32	35
<b>Financing commitments</b>		
Customer finance commitments	26	21
Venture fund commitments <sup>1</sup>	433	137

<sup>1</sup> 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.

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.

### Litigations and proceedings

Significant changes to information about litigation and proceedings presented in Nokia's consolidated financial statements for 2021:

#### Continental

In 2019, Continental Automotive Systems (Continental) brought breach of FRAND and antitrust claims against Nokia and others. The antitrust claims were dismissed with prejudice. In the third quarter of 2022, this decision became final after Continental lost on appeal and reconsideration requests. Continental also brought breach of contract and FRAND-related claims against Nokia in another US court in 2021, which Nokia has moved to dismiss. That motion is pending.

#### Oppo

In 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, China, and Finland and actions in China against Nokia relating to standard essential patent licensing issues. Nokia has had multiple patents confirmed as valid and infringed including in Germany, the Netherlands and the UK.

#### Vivo

In 2022, Nokia commenced patent infringement proceedings against Vivo in Germany and several countries in Asia. Vivo responded by filing a number of patent infringement actions against Nokia equipment in Germany and China. They also filed an action in China against Nokia relating to standard essential patent licensing issues.

# 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 below 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.

In the first quarter of 2022 Nokia replaced its performance measures total cash and current financial investments ("total cash") and net cash and current financial investments ("net cash") with total cash and interest-bearing financial investments ("total cash") and net cash and interest-bearing financial investments ("net cash"). The definitions of these performance measures were updated accordingly to reflect the changes made to Nokia's statement of financial position. The purpose for using these measures, as stated in the table below, did not change. The modifications to the performance measures were made as in the first quarter of 2022 Nokia commenced investing in highly liquid corporate bonds that are primarily classified as non-current interest-bearing financial investments based on their initial maturity.

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 interest-bearing 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 interest-bearing financial investments ("Total cash")	Total cash and interest-bearing financial investments consist of cash and cash equivalents and current interest-bearing financial investments and non-current interest-bearing financial investments.	Total cash and interest-bearing 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 interest-bearing financial investments ("Net cash")	Net cash and interest-bearing financial investments equals total cash and interest-bearing 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 interest-bearing financial investments to the amounts in the consolidated statement of financial position is presented below.	Net cash and interest-bearing 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 other non-current financial investments + proceeds from sale of other 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 and intangible assets, as well as 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.
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

Q4'22									
EUR million	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Share of results of associated companies	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
<b>Comparable</b>	<b>(4 212)</b>	<b>(1 189)</b>	<b>(727)</b>	<b>(168)</b>	<b>1 154</b>	<b>39</b>	<b>1</b>	<b>(265)</b>	<b>929</b>
Amortization of acquired intangible assets	—	(14)	(93)	—	(106)	—	—	18	(88)
Impairment and write-off of assets, net of reversals	(11)	(1)	—	(72)	(84)	(13)	—	—	(97)
Restructuring and associated charges	(40)	(18)	(19)	(3)	(80)	—	—	—	(80)
Fair value changes of legacy IPR fund	—	—	—	(7)	(7)	—	—	—	(7)
Costs associated with country exit	—	—	—	6	6	—	—	(6)	—
Loss allowances and impairments on customer financing loans	—	—	—	—	—	—	(32)	—	(32)
Change in financial liability to acquire NSB non-controlling interest	—	—	—	—	—	—	1	—	1
Changes in the recognition of deferred tax assets	—	—	—	—	—	—	—	2 500	2 500
Deferred tax expense due to tax rate changes	—	—	—	—	—	—	—	24	24
Items affecting comparability	(51)	(33)	(112)	(76)	(272)	(13)	(31)	2 537	2 221
<b>Reported</b>	<b>(4 262)</b>	<b>(1 222)</b>	<b>(838)</b>	<b>(244)</b>	<b>882</b>	<b>26</b>	<b>(30)</b>	<b>2 272</b>	<b>3 150</b>

Q4'21									
EUR million	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Share of results of associated companies	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
<b>Comparable</b>	<b>(3 843)</b>	<b>(1 092)</b>	<b>(659)</b>	<b>88</b>	<b>908</b>	<b>21</b>	<b>(38)</b>	<b>(159)</b>	<b>731</b>
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 changes of 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	—	—	—	—	—	—	(32)	—	(32)
Change in financial liability to acquire NSB non-controlling interest	—	—	—	—	—	—	2	—	2
Prior year tax benefit related to past operating model integration	—	—	—	—	—	—	—	69	69
Changes in the recognition of deferred tax assets	—	—	—	—	—	—	—	61	61
Items affecting comparability	(37)	(26)	(98)	(6)	(168)	—	(30)	148	(50)
<b>Reported</b>	<b>(3 880)</b>	<b>(1 118)</b>	<b>(758)</b>	<b>82</b>	<b>740</b>	<b>21</b>	<b>(68)</b>	<b>(11)</b>	<b>682</b>

## Q1-Q4'22

EUR million	Cost of sales	Research and development expenses	Selling, general and administrative expenses	Other operating income and expenses	Operating profit	Share of results of associated companies	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
<b>Comparable</b>	<b>(14 589)</b>	<b>(4 449)</b>	<b>(2 604)</b>	<b>(160)</b>	<b>3 109</b>	<b>(13)</b>	<b>(38)</b>	<b>(577)</b>	<b>2 481</b>
Amortization of acquired intangible assets	—	(56)	(356)	—	(411)	—	—	84	(327)
Restructuring and associated charges	(84)	(37)	(52)	(3)	(177)	—	—	—	(177)
Costs associated with country exit	—	—	—	(98)	(98)	—	—	(6)	(104)
Impairment and write-off of assets, net of reversals	(17)	(8)	—	(72)	(97)	(13)	—	—	(110)
Fair value changes of legacy IPR fund	—	—	—	(7)	(7)	—	—	—	(7)
Loss allowances and impairments on customer financing loans	—	—	—	—	—	—	(61)	—	(61)
Release of cumulative exchange differences related to abandonment of foreign operations	—	—	—	—	—	—	(20)	—	(20)
Change in financial liability to acquire NSB non-controlling interest	—	—	—	—	—	—	11	—	11
Changes in the recognition of deferred tax assets	—	—	—	—	—	—	—	2 500	2 500
Deferred tax expense due to tax rate changes	—	—	—	—	—	—	—	24	24
Items Affecting comparability	(100)	(101)	(409)	(181)	(791)	(13)	(70)	2 603	1 729
<b>Reported</b>	<b>(14 689)</b>	<b>(4 550)</b>	<b>(3 013)</b>	<b>(341)</b>	<b>2 318</b>	<b>(26)</b>	<b>(108)</b>	<b>2 026</b>	<b>4 210</b>

## Q1-Q4'21

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

## Net cash and interest-bearing financial investments

EUR million	31 December 2022	30 September 2022	30 June 2022	31 March 2022	31 December 2021
Non-current interest-bearing financial investments	697	715	473	493	—
Current interest-bearing financial investments	3 080	3 340	3 253	2 685	2 577
Cash and cash equivalents	5 467	5 196	5 457	6 341	6 691
<b>Total cash and interest-bearing financial investments</b>	<b>9 244</b>	<b>9 251</b>	<b>9 183</b>	<b>9 519</b>	<b>9 268</b>
Long-term interest-bearing liabilities <sup>1</sup>	4 249	4 364	4 424	4 489	4 537
Short-term interest-bearing liabilities <sup>1</sup>	228	232	213	126	116
<b>Total interest-bearing liabilities</b>	<b>4 477</b>	<b>4 596</b>	<b>4 637</b>	<b>4 615</b>	<b>4 653</b>
<b>Net cash and interest-bearing financial investments</b>	<b>4 767</b>	<b>4 655</b>	<b>4 546</b>	<b>4 904</b>	<b>4 615</b>

<sup>1</sup>Lease liabilities are not included in interest-bearing liabilities.

## Free cash flow

EUR million	Q4'22	Q4'21	Q1-Q4'22	Q1-Q4'21
Net cash from operating activities	567	485	1 474	2 625
Purchase of property, plant and equipment and intangible assets	(195)	(159)	(601)	(560)
Proceeds from sale of property, plant and equipment and intangible assets	—	47	33	103
Purchase of other non-current financial investments	(13)	(22)	(115)	(77)
Proceeds from sale of other non-current financial investments	5	34	49	277
<b>Free cash flow</b>	<b>364</b>	<b>385</b>	<b>840</b>	<b>2 368</b>

## Comparable return on invested capital (ROIC)

### Q4'22

EUR million	Rolling four quarters	Q4'22	Q3'22	Q2'22	Q1'22
Comparable operating profit	3 109	1 154	658	714	583
Comparable profit before tax	3 058	1 194	667	681	516
Comparable income tax expense	(577)	(265)	(116)	(95)	(101)
<b>Comparable operating profit after tax</b>	<b>2 526</b>	<b>899</b>	<b>544</b>	<b>614</b>	<b>469</b>

EUR million	Average	31 December 2022	30 September 2022	30 June 2022	31 March 2022	31 December 2021
Total equity	19 159	21 426	19 797	19 026	18 083	17 462
Total interest-bearing liabilities	4 596	4 477	4 596	4 637	4 615	4 653
Total cash and interest-bearing financial investments	9 293	9 244	9 251	9 183	9 519	9 268
<b>Invested capital</b>	<b>14 462</b>	<b>16 659</b>	<b>15 143</b>	<b>14 480</b>	<b>13 179</b>	<b>12 847</b>
<b>Comparable ROIC</b>	<b>17.5%</b>					

### Q3'22

EUR million	Rolling four quarters	Q3'22	Q2'22	Q1'22	Q4'21
Comparable operating profit	2 863	658	714	583	908
Comparable profit before tax	2 755	667	681	516	891
Comparable income tax expense	(471)	(116)	(95)	(101)	(159)
<b>Comparable operating profit after tax</b>	<b>2 374</b>	<b>544</b>	<b>614</b>	<b>469</b>	<b>746</b>

EUR million	Average	30 September 2022	30 June 2022	31 March 2022	31 December 2021	30 September 2021
Total equity	18 152	19 797	19 026	18 083	17 462	16 392
Total interest-bearing liabilities	4 716	4 596	4 637	4 615	4 653	5 080
Total cash and interest-bearing financial investments	9 320	9 251	9 183	9 519	9 268	9 381
<b>Invested capital</b>	<b>13 548</b>	<b>15 143</b>	<b>14 480</b>	<b>13 179</b>	<b>12 847</b>	<b>12 091</b>
<b>Comparable ROIC</b>	<b>17.5%</b>					

### 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)
<b>Comparable operating profit after tax</b>	<b>2 243</b>	<b>746</b>	<b>505</b>	<b>572</b>	<b>417</b>

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 interest-bearing financial investments	8 861	9 268	9 381	8 751	8 842	8 061
<b>Invested capital</b>	<b>11 145</b>	<b>12 847</b>	<b>12 091</b>	<b>10 649</b>	<b>10 082</b>	<b>10 060</b>
<b>Comparable ROIC</b>	<b>20.1%</b>					



This financial report was approved by the Board of Directors on 26 January 2023.

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- Nokia plans to publish its "Nokia in 2022" annual report, which includes the review by the Board of Directors and the audited annual accounts, during week 9 of 2023.
- Nokia's Annual General Meeting 2023 is planned to be held on 4 April 2023.
- Nokia plans to publish its first quarter 2023 results on 20 April 2023.
- Nokia plans to publish its second quarter and half year 2023 results on 20 July 2023.
- Nokia plans to publish its third quarter and January-September 2023 results on 19 October 2023.