

Report for Q4 and full year 2023

Improving order intake and cash flow at the end of a challenging year

- Net sales declined 21% y-o-y in constant currency (-23% reported) in Q4 as macroeconomic uncertainty continues to pressure operator spending. Full year net sales declined 8% y-o-y in constant currency (-11% reported).
- In Q4 the environment remained challenging however there are now signs of stabilization with improving order trends.
- Comparable gross margin in Q4 declined by 40bps y-o-y to 43.1% (reported declined 100bps to 41.8%). Significant improvements in Mobile Networks and Cloud and Network Services were offset by lower contribution from Nokia Technologies which benefited from a significant one-off in the prior year.
- Q4 comparable operating margin declined 70bps y-o-y to 14.8% (reported down 220bps to 9.6%), demonstrating the resilience of our profitability relative to the net sales decline. 2023 comparable operating margin 10.7% (reported 7.6%)
- Q4 comparable diluted EPS of EUR 0.10; reported diluted EPS of EUR -0.01. Full year EUR 0.29 and EUR 0.12 respectively. Q4 reported EPS impacted by an operating model change that led to non-cash remeasurement of deferred tax assets.
- Q4 free cash flow positive EUR 1.7bn, net cash balance EUR 4.3bn. Full year free cash flow EUR 0.8bn.
- Board proposes dividend authorization of EUR 0.13 per share and initiates two year EUR 600 million buyback program.
- Nokia expects full year 2024 comparable operating profit of between EUR 2.3 billion to 2.9 billion and free cash flow conversion from comparable operating profit of between 30% and 60%.

EUR million (except for EPS in EUR)	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Reported results								
Net sales	5 707	7 449	(23)%	(21)%	22 258	24 911	(11)%	(8)%
Gross margin %	41.8%	42.8%	(100)bps		39.0%	41.0%	(200)bps	
Research and development expenses	(1 092)	(1 222)	(11)%		(4 327)	(4 550)	(5)%	
Selling, general and administrative expenses	(787)	(838)	(6)%		(2 929)	(3 013)	(3)%	
Operating profit	547	882	(38)%		1 688	2 318	(27)%	
Operating margin %	9.6%	11.8%	(220)bps		7.6%	9.3%	(170)bps	
(Loss)/profit for the period	(33)	3 152	(101)%		679	4 259	(84)%	
EPS, diluted	(0.01)	0.56	(102)%		0.12	0.75	(84)%	
Net cash and interest-bearing financial investments	4 323	4 767	(9)%		4 323	4 767	(9)%	
Comparable results								
Net sales	5 707	7 449	(23)%	(21)%	22 258	24 911	(11)%	(8)%
Gross margin %	43.1%	43.5%	(40)bps		39.7%	41.4%	(170)bps	
Research and development expenses	(1 034)	(1 189)	(13)%		(4 190)	(4 449)	(6)%	
Selling, general and administrative expenses	(626)	(727)	(14)%		(2 490)	(2 604)	(4)%	
Operating profit	846	1 154	(27)%		2 375	3 109	(24)%	
Operating margin %	14.8%	15.5%	(70)bps		10.7%	12.5%	(180)bps	
Profit for the period	568	929	(39)%		1 623	2 481	(35)%	
EPS, diluted	0.10	0.16	(38)%		0.29	0.44	(34)%	
ROIC ¹	10.1%	17.5%	(740)bps		10.1%	17.5%	(740)bps	

¹ 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.

EUR million	Network Infrastructure		Mobile Networks		Cloud and Network Services		Nokia Technologies		Group Common and Other	
	Q4'23	Q4'22	Q4'23	Q4'22	Q4'23	Q4'22	Q4'23	Q4'22	Q4'23	Q4'22
Net sales	2 003	2 709	2 450	2 960	977	1 060	251	679	25	59
YoY change	(26)%		(17)%		(8)%		(63)%		(58)%	
Constant currency YoY change	(24)%		(14)%		(5)%		(63)%		(57)%	
Gross margin %	40.2%	39.6%	38.3%	34.7%	47.6%	43.8%	100.0%	99.9%	8.0%	(10.2)%
Operating profit/(loss)	279	431	281	201	223	147	169	564	(106)	(189)
Operating margin %	13.9%	15.9%	11.5%	6.8%	22.8%	13.9%	67.3%	83.1%	(424.0)%	(320.3)%



Pekka Lundmark
President and CEO

In 2023 we saw a meaningful shift in customer behavior impacting our industry driven by the macro-economic environment and high interest rates along with customer inventory digestion. This led to our full year net sales declining by 8% in constant currency. Proactive action across our organization meant we were able to protect our profitability while continuing to invest in R&D and we delivered a comparable operating margin of 10.7% for the full year. This was a resilient performance considering the challenging environment and lower contribution from our high margin patent licensing business as some renewals remained outstanding.

Looking specifically at the fourth quarter those same factors drove a net sales decline of 21% y-o-y in constant currency. Encouragingly we saw improvements in our gross margin across several of our businesses which, combined with continued cost discipline, helped us to deliver a strong comparable operating margin of 14.8%. In addition, we have seen a significant improvement in order intake in the fourth quarter, particularly in Network Infrastructure, indicating at least some improvement in the overall spending environment.

We delivered well in 2023 against our strategic pillar of growing in Enterprise with 16% net sales growth in constant currency and this customer segment now accounts for over 10% of our group net sales. Growth in the fourth quarter was muted at -3% in constant currency as we faced a tough comparison period. We continue to have strong momentum in this segment and expect another year of double-digit growth in 2024.

In Network Infrastructure we made important progress in a number of areas in the quarter. We received further webscale orders for our IP Routing business which supports our expectations of significant growth in webscale in 2024. In the fourth quarter we also saw good progress in the US government initiatives in Fixed Networks and we continue to expect these programs to increasingly benefit our net sales in the second half of 2024 and into 2025. The fourth quarter also saw us sign a new and significant customer in Asia for our Fixed Wireless Access products. In Optical Networks we continue to have good momentum and our new PSE-6s solutions are proving their capabilities in the field; recent live network trials set a new record of 800Gbps transmission on a single wavelength over 6 600km.

Mobile Networks net sales performance continued to be challenging in the fourth quarter, but we did see a further important improvement in gross margin which benefited from a product mix shift towards software. AT&T's announcement in December to move to a largely single-sourced RAN network was a disappointing development. It does not reflect the technological competitiveness we have achieved with our products as evidenced by our significant increase in RAN market share in recent years. I firmly believe we have the right strategy in place for Mobile Networks to create value for our shareholders into the future with opportunities to gain share, diversify our business and achieve a double-digit operating margin longer-term.

Our Cloud and Network Services business had a strong year. We had a slight decline in net sales for the full year, but we made progress on profitability with a largely stable gross margin and

improved operating margin. The business continued to rebalance its portfolio, with the divestment of its Device Management and Service Management Platform businesses in December. During 2023, we led the industry trend towards programmable networks with the launch of our Network as Code platform which now has 9 commercial agreements and we also achieved our first commercial deal for 5G Core as a service to CSPs.

In Nokia Technologies, we signed significant long-term deals with both Apple and Samsung in 2023 and we also signed a deal with Honor late in the year. I am also pleased that we have now signed a multi-year agreement with OPPO and we are close to concluding another agreement in China. After these, we are in the final stages of our smartphone license renewal cycle with only one other, recently expired, major agreement outstanding. This provides long-term stability to our Nokia Technologies business which will continue to focus on growing our licensing run-rate in new growth areas including automotive, consumer electronics, IoT and multimedia. I remain confident that with growth in these areas we can return to an annual net sales run-rate of EUR 1.4 to 1.5 billion in Nokia Technologies in the mid-term.

A clear positive in the fourth quarter was our cash flow performance. We generated EUR 1.7 billion of free cash flow as we saw a significant improvement in working capital in the quarter supported by a partial prepayment of a licensing agreement. We ended the year with a net cash position of EUR 4.3 billion. The Board is proposing a dividend of EUR 0.13 per share in respect of the financial year 2023 and considering we now hold excess cash at the end of the year, the Board is also instituting a new share buyback program of EUR 600 million to be executed in the next two years.

Looking ahead, we expect the challenging environment of 2023 to continue during the first half of 2024, particularly in the first quarter. However, we are now starting to see some green shoots on the horizon, with improving order intake for Network Infrastructure and some of the specific deals we have won. This is expected to drive a strong improvement in Network Infrastructure net sales growth in the second half of 2024 which we believe, even with a challenging first half, will drive solid growth for the full year. In Mobile Networks, we expect top line challenges in 2024 related to a more normalized pace of investment in India and the AT&T decision. We do expect further improvement in gross margin and then in the second half we will start to see more benefits from our cost savings program. At the Nokia level, we currently estimate that we will deliver comparable operating profit of between EUR 2.3 and 2.9 billion in 2024. We also target to deliver an improved free cash flow performance with conversion of between 30% and 60%.

I want to thank all our people for their resilience and determination to deliver these results and executing on our corporate strategy in what can only be described as a highly challenging market environment.

Outlook

Full Year 2024

Comparable operating profit ¹	EUR 2.3 billion to EUR 2.9 billion
Free cash flow ¹	30% to 60% conversion from comparable operating profit

¹Please 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.

Nokia business group assumptions		
	Net sales growth (constant currency)	Operating margin
Network Infrastructure	+2% to +8%	11.5% to 14.5%
Mobile Networks	-15% to -10%	1.0% to 4.0%
Cloud and Network Services	-2% to +3%	6.0% to 9.0%

Nokia provides the following approximate outlook assumptions for additional items concerning 2024:

	Full year 2024	Comment
Seasonality	H2 weighted	Nokia expects Q1 net sales in its networks businesses (consisting of Network Infrastructure, Mobile Networks and Cloud and Network Services) to show an approximately normal seasonal decline sequentially. Since 2016 the average Q1 sequential decline in sales has been -23%. Nokia expects significant seasonality in profit generation in 2024 with low sales coverage to weigh on operating profit in Q1, particularly in MN and CNS. The company then expects progressive improvement in these businesses through the year.
Nokia Technologies operating profit	at least EUR 1.4 billion	Nokia assumes operating profit in 2024 for Nokia Technologies of at least EUR 1.4 billion which assumes resolution of outstanding renewals and includes catch-up net sales related to prior periods. Nokia expects cash generation in Nokia Technologies to be EUR 700 million below operating profit in 2024 due to prepayments received in 2023. From 2025 onwards Nokia expects greater alignment between cash generation and operating profit in Nokia Technologies.
Group Common and Other operating expenses	EUR 350 million	This includes central function costs which are expected to be largely stable at approximately EUR 200 million and an increase in investment in long-term research to approximately EUR 150 million.
Comparable financial income and expenses	EUR 0 to negative EUR 100 million	
Comparable income tax rate	~25%	
Cash outflows related to income taxes	EUR 500 million	
Capital Expenditures	EUR 600 million	

2026 targets

On 12 December 2023, as a conclusion to Nokia's long-range planning process, the company decided to lower its comparable operating margin target to be achieved by 2026 from the prior at least 14% to at least 13%. Nokia still sees a path to achieving the at least 14% comparable operating margin target but considering the current market conditions in Mobile Networks, this was deemed a prudent change. Nokia sees further opportunities to increase margins beyond 2026 and believes this 14% target remains achievable over the longer term.

Net sales	Grow faster than the market
Comparable operating margin ¹	≥ 13%
Free cash flow ¹	55% to 85% conversion from comparable operating profit

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

The comparable operating margin target for Nokia Group is built on the following assumptions by business group for 2026:

Network Infrastructure	12 - 15% operating margin
Mobile Networks	6 - 9% operating margin
Cloud and Network Services	7 - 10% operating margin
Nokia Technologies	Operating profit more than EUR 1.1 billion
Group common and other	Approximately EUR 300 million of operating expenses

Shareholder distribution

Dividend

The Board of Directors proposes that the Annual General Meeting 2024 authorizes the Board to resolve on the distribution of an aggregate maximum of EUR 0.13 per share to be paid in respect of the financial year 2023. 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.

Under the authorization by the Annual General Meeting held on 4 April 2023, the Board of Directors may 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 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.

On 25 January 2024, the Board resolved to distribute a dividend of EUR 0.03 per share. The dividend record date is on 30 January 2024 and the dividend will be paid on 8 February 2024. 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.

Share buyback program

Nokia's Board of Directors is initiating a share buyback program under the current authorization from the Annual General Meeting to repurchase shares, with purchases expected to begin in Q1. The program targets to return up to EUR 600 million of cash to shareholders in tranches over a period of two years, subject to continued authorization from the Annual General Meeting.

In February 2022, Nokia's Board of Directors initiated a share buyback program to repurchase shares to return up to EUR 600 million of cash to shareholders in tranches over a period of two years. The second EUR 300 million phase of the share buyback program started in January 2023 and was completed in November 2023. Under this phase, Nokia repurchased 78 301 011 of its own shares at an average price per share of approximately EUR 3.83. The repurchases reduced the Company's unrestricted equity by EUR 300 million and the repurchased shares were cancelled in November 2023.

Additional topics

Portfolio Management

In Q4 2023, Nokia announced an agreement under which Lumine Group Inc. would buy Nokia's Device Management and Service Management Platform businesses, which are part of Cloud and Network Services. Approximately 500 Nokia Device Management and Service Management Platform employees are expected to transfer to Lumine Group as part of the deal. The deal is valued at EUR 185 million, which includes a contingent consideration of up to EUR 35 million based on the performance of the business during the first year following close. The deal is expected to close in the first quarter of 2024, subject to certain terms, conditions, and consultations with works council or other employee representative bodies where required by law.

In Q4 2023, TD Tech Holding Limited has entered into an agreement to divest the entire business of the joint venture through the sale of its operating subsidiaries to a consortium consisting of Huawei Technologies, Chengdu High-tech Investment Group and other buyers. The closing of the transaction is conditional upon receiving regulatory approvals for the transaction and is expected in 2024. Following the transaction, Nokia will exit from its 51% shareholding in TD Tech. Nokia expects to record a gain on the contemplated transactions.

Financial Results

Q4 2023 compared to Q4 2022

Net sales

In Q4 2023, reported net sales decreased 23% and were negatively impacted by foreign exchange rate fluctuations along with the following drivers.

On a constant currency basis, Nokia's net sales decreased 21% year-on-year, with declines across all business groups, particularly Network Infrastructure, Mobile Networks and Nokia Technologies. Network Infrastructure declined 24% as it continued to experience weaker demand largely related to macroeconomic uncertainty. Mobile Networks decreased 14% largely driven by North America, where customers continued to prioritize cash flow and deplete their inventories, as well as India where 5G deployments continued to normalize from elevated levels. Nokia Technologies net sales were down 63%, largely related to a benefit booked in the year-ago quarter related to a long-term licensee exercising an option. Cloud and Network Services net sales decreased 5%.

Gross margin

Reported gross margin decreased 100 basis points to 41.8% in Q4 2023 and comparable gross margin decreased 40 basis points to 43.1%. Gross margin performance mainly reflected lower Nokia Technologies net sales which was somewhat offset by improvements in Mobile Networks and Cloud and Network Services.

Operating profit and margin

Reported operating profit in Q4 2023 was EUR 547 million, or 9.6% of net sales, down from 11.8% in the year-ago quarter. Comparable operating profit decreased to EUR 846 million, while comparable operating margin was 14.8%, down from 15.5% in the year-ago quarter. This decline reflected lower gross profit, in addition to operating expenses declining at a slower rate than net sales. Operating expenses reflected lower variable pay accruals and the impact of foreign exchange fluctuations, in addition to continued cost control which helped to offset the impact of inflation. Additionally, a net positive fluctuation in other operating income and expenses benefited operating profit and was related to lower losses from Nokia's venture fund investments, in addition to the positive impacts of hedging and the sale of digital assets.

Nokia's venture fund investments generated a loss of approximately EUR 40 million in Q4 2023 compared to a loss of EUR 90 million in Q4 2022. The impact of hedging in Q4 2023 was positive EUR 18 million, compared to a negative impact of EUR 33 million in Q4 2022.

In Q4 2023, the difference between reported and comparable operating profit was primarily related to restructuring and associated charges, the amortization of acquired intangible assets and the impairment and write-off of assets. In Q4 2022, the difference between reported and comparable operating profit was related to the amortization of acquired intangible assets, the impairment and write-off of assets and restructuring and associated charges.

Profit for the period

Reported net loss in Q4 2023 was EUR 33 million, compared to net profit of EUR 3 152 million in Q4 2022. Comparable net profit in Q4 2023 was EUR 568 million, compared to EUR 929 million in Q4 2022. The decline in comparable net profit was primarily driven by the lower comparable operating profit, a lower share of results of associates and joint ventures and a net negative fluctuation in financial income and expenses, which mainly reflected unfavorable foreign exchange fluctuations. This was somewhat offset by lower income tax expense.

Apart from the items affecting comparability included in operating profit (and their associated tax effects), the difference between reported and comparable net profit in Q4 2023 was mainly due to a non-recurring tax expense of EUR 392 million related to an internal operating model change that led to a remeasurement of deferred tax assets. This has no immediate impact on our cash tax. Additionally, the difference also included a deferred tax benefit due to tax rate changes and the change in financial liability to acquire Nokia Shanghai Bell non-controlling interest. In Q4 2022, the difference between reported and comparable net profit was primarily related to the changes in the recognition of deferred tax assets in Finland, loss allowances and impairments on customer financing loans and a deferred tax expense due to tax rate changes.

Earnings per share

Reported diluted EPS was negative EUR 0.01 in Q4 2023, compared to EUR 0.56 in Q4 2022. Comparable diluted EPS was EUR 0.10 in Q4 2023 compared to EUR 0.16 in Q4 2022.

Comparable return on Invested Capital (ROIC)

Q4 2023 comparable ROIC was 10.1%, compared to 17.5% in Q4 2022. The decrease reflected higher average invested capital for the rolling four quarters, combined with lower operating profit after tax for the rolling four quarters. The higher average invested capital reflected growth in average total equity and a decrease in average total cash and interest-bearing financial investments, partially offset by a decrease in average total interest-bearing liabilities.

Cash performance

During Q4 2023, net cash increased EUR 1 363 million, resulting in an end-of-quarter net cash balance of EUR 4 323 million, benefiting from a partial prepayment related to a licensing deal signed in 2023. Total cash increased EUR 1 417 million sequentially to EUR 8 514 million. Free cash flow was positive EUR 1 744 million in Q4 2023.

Segment Details

Network Infrastructure

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Net sales	2 003	2 709	(26)%	(24)%	8 037	9 047	(11)%	(9)%
- IP Networks	650	896	(27)%	(25)%	2 606	3 063	(15)%	(13)%
- Optical Networks	478	639	(25)%	(23)%	1 942	1 891	3%	5%
- Fixed Networks	584	855	(32)%	(29)%	2 369	2 943	(20)%	(18)%
- Submarine Networks	291	319	(9)%	(10)%	1 120	1 150	(3)%	(3)%
Gross profit	805	1 074	(25)%		3 050	3 308	(8)%	
Gross margin %	40.2%	39.6%	60bps		37.9%	36.6%	130bps	
Operating profit	279	431	(35)%		1 054	1 102	(4)%	
Operating margin %	13.9%	15.9%	(200)bps		13.1%	12.2%	90bps	

Network Infrastructure **net sales** declined 26% on a reported basis and 24% on a constant currency basis in the fourth quarter, in comparison to a strong year-ago quarter. The business continued to experience headwinds which were largely related to macroeconomic uncertainty, as well as customer inventory digestion. Positively, in the fourth quarter, Network Infrastructure saw a significant improvement in order intake sequentially across its businesses, which is expected to support growth in 2024, although some of these projects are expected to ramp up in the second half of 2024 and comparisons remain challenging from a growth perspective in the first half.

IP Networks net sales declined 25% on a constant currency basis, primarily reflecting weakness in North America as CSP customers continue to evaluate their spending. To a lesser extent, IP Networks also saw declines in Latin America, Europe and Asia Pacific.

Optical Networks net sales declined 23% on a constant currency basis, in comparison to a very strong year-ago quarter which benefited from additional sales as the supply chain recovered from constraints in 2022. The decline was driven mainly by Europe and Asia Pacific, as well as smaller declines in North America and India, while Middle East & Africa grew.

Fixed Networks net sales declined 29% on a constant currency basis, in comparison to a strong year-ago quarter. The decline was mainly driven by Europe and North America, where we saw continued slower fiber investments as customers continue to evaluate their spending and digest inventories. Fixed Networks is well-positioned to benefit from upcoming government-funded projects that are expected to start to benefit the market in the second half of 2024. Through 2023 we have started to see some small orders flowing related to these programs.

Submarine Networks net sales declined 10% on a constant currency basis, mainly related to project timing as the business executes against its strong order backlog.

Gross profit declined year-on-year due to lower net sales, while **gross margin** increased reflecting favorable mix and product cost reduction.

Operating profit and **operating margin** both declined year-on-year, as the lower gross profit was only partially offset by lower operating expenses, which benefited from lower variable pay accruals. Operating profit was also positively impacted by the sale of digital assets and the positive impact from hedging, both recorded in other operating income and expenses.

Mobile Networks

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Net sales	2 450	2 960	(17)%	(14)%	9 797	10 671	(8)%	(5)%
Gross profit	938	1 028	(9)%		3 433	4 096	(16)%	
Gross margin %	38.3%	34.7%	360bps		35.0%	38.4%	(340)bps	
Operating profit	281	201	40%		723	940	(23)%	
Operating margin %	11.5%	6.8%	470bps		7.4%	8.8%	(140)bps	

Mobile Networks **net sales** declined 17% on a reported and 14% on a constant currency basis.

The decline in Q4 was driven by declines in North America, India and Europe. In North America, demand continues to be impacted by customers' depletion of inventories and prioritization of cash flow, as well as the early impact of a recently communicated customer purchasing decision. Net sales in India continued to moderate both year-on-year and sequentially, as the pace of deployment normalizes. Europe net sales reflected slower 5G deployments amidst ongoing macroeconomic uncertainty. Elsewhere, Mobile Networks saw growth in both Middle East and Africa, and Asia Pacific.

The improvement in **gross margin** in the fourth quarter primarily reflected favorable regional and product mix, as well as lower variable pay accruals, which were somewhat offset by a provision related to the write-down of inventory.

Both operating profit and operating margin improved year-on-year in Q4 2023 mainly reflecting the favorable mix that impacted gross margin, in addition to continued cost control and lower variable pay accruals year-on-year. Operating profit also benefited from the positive impact from hedging and the sale of digital assets, both recorded in other operating income and expenses.

Cloud and Network Services

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Net sales	977	1 060	(8)%	(5)%	3 220	3 351	(4)%	(1)%
Gross profit	465	464	0%		1 276	1 340	(5)%	
Gross margin %	47.6%	43.8%	380bps		39.6%	40.0%	(40)bps	
Operating profit	223	147	52%		255	177	44%	
Operating margin %	22.8%	13.9%	890bps		7.9%	5.3%	260bps	

Cloud and Network Services **net sales** declined 8% on a reported basis, and 5% on a constant currency basis reflecting lower net sales in each of its businesses, with the exception of Business Applications which grew year-on-year.

From a regional perspective, on a constant currency basis Cloud and Network Services saw growth in Latin America and India offset by declines in North America, Middle East & Africa, Europe and Asia Pacific.

The improvement in **gross margin** year-on-year mainly reflected lower variable pay accruals.

Both operating profit and operating margin showed strong improvements year-on-year. This primarily reflected higher gross margin, the benefit from the sale of digital assets and the positive impact of hedging, both recorded in other operating income, and continued discipline on operating expenses. Additionally, operating profit benefited year-on-year from lower variable pay accruals.

Nokia Technologies

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Net sales	251	679	(63)%	(63)%	1 085	1 595	(32)%	(32)%
Gross profit	251	678	(63)%		1 085	1 590	(32)%	
Gross margin %	100.0%	99.9%	10bps		100.0%	99.7%	30bps	
Operating profit	169	564	(70)%		734	1 208	(39)%	
Operating margin %	67.3%	83.1%	(1 580)bps		67.6%	75.7%	(810)bps	

Nokia Technologies **net sales** decreased 63% on both a reported and constant currency basis in the fourth quarter, as the year-ago quarter benefited from a long-term licensee exercising an option which led to all outstanding revenue being recognized in that quarter, as well as catch-up net sales related to new deals signed. Excluding these, the year-on-year net sales performance primarily reflected lower net sales from a license that expired at the end of the third quarter 2023.

Nokia Technologies annual net sales run-rate in the fourth quarter was between EUR 0.9 and 1.0 billion.

Already in Q1 2024, Nokia has signed a multi-year licensing agreement with OPPO and the company is close to renewing an agreement with another Chinese smart-phone vendor. Based on these and other prior agreements Nokia has signed, Nokia Technologies is expected to see an improved annual net sales run-rate in the first quarter and to benefit from catch-up net sales related to prior periods of non-payment.

Nokia continues to expect to return to an annual net sales run-rate of EUR 1.4-1.5 billion as we conclude the smartphone license renewal cycle and continue to grow in new focus areas such as automotive, consumer electronics, IoT and multimedia.

Operating profit decreased year-on-year due mainly to lower net sales, somewhat offset by a positive fluctuation in loss allowances of certain trade receivables recorded in other operating income. Additionally, operating profit benefited year-on-year from lower variable pay accruals.

In full year 2023 cash generation in Nokia Technologies exceeded operating profit by approximately EUR 550 million due to partial prepayments received in relation to deals signed during the year.

Group Common and Other

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Net sales	25	59	(58)%	(57)%	130	295	(56)%	(56)%
Gross profit/(loss)	2	(6)			(6)	(12)		
Gross margin %	8.0%	(10.2)%	1 820bps		(4.6)%	(4.1)%	(50)bps	
Operating (loss)/profit	(106)	(189)			(391)	(318)		
Operating margin %	(424.0)%	(320.3)%	(10 370)bps		(300.8)%	(107.8)%	(19 300)bps	

Group Common and Other **net sales** declined 58% on a reported basis and 57% on a constant currency basis due to reduced net sales from Radio Frequency Systems, mainly driven by the divested business carved out during Q2 2023.

The improvement in **operating result** was primarily driven by lower losses from Nokia's venture fund investments and lower operating expenses mainly due to the divestment of RFS and lower variable pay accruals. Venture fund losses were approximately EUR 40 million in Q4 2023 compared to EUR 90 million in Q4 2022.

Net sales by region

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Asia Pacific	683	801	(15)%	(10)%	2 291	2 648	(13)%	(8)%
Europe	1 533	2 351	(35)%	(35)%	5 873	6 662	(12)%	(11)%
Greater China	337	356	(5)%	0%	1 303	1 581	(18)%	(12)%
India	379	568	(33)%	(30)%	2 842	1 290	120%	130%
Latin America	322	387	(17)%	(14)%	1 046	1 223	(14)%	(12)%
Middle East & Africa	646	595	9%	13%	2 050	1 969	4%	8%
North America	1 518	2 070	(27)%	(23)%	5 733	8 388	(32)%	(30)%
Submarine Networks ¹	291	319	(9)%	(10)%	1 120	1 150	(3)%	(3)%
Total	5 707	7 449	(23)%	(21)%	22 258	24 911	(11)%	(8)%

¹Nokia provides net sales for the Submarine Networks business separately from the rest of the Group to improve the usefulness of disclosed information by removing volatility caused by the specific nature of the Submarine Networks business.

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 net sales performance in **Asia Pacific** reflected declines in Network Infrastructure and Cloud and Network Services partially offset by an increase in Mobile Networks.

Europe net sales were somewhat impacted by the decline in Nokia Technologies (which is entirely reported in Europe). Excluding Nokia Technologies, net sales in Europe declined in Network Infrastructure, particularly in IP Networks and Fixed Networks, as well as Mobile Networks.

Within **Greater China** net sales were largely stable in the quarter.

India saw a decline in the quarter, primarily in Mobile Networks reflecting the fact that the significant 5G deployments which started in the year-ago quarter have normalized. In addition there were declines in Network Infrastructure in both Optical Networks and Fixed Networks.

Net sales performance in **Latin America** reflected a decline in Network Infrastructure across both IP Networks and Fixed Networks. This was somewhat offset by a slight increase in Mobile Networks and strong growth in Cloud and Network Services.

Middle East & Africa growth was driven by Mobile Networks and Network Infrastructure and partially offset by Cloud and Network Services.

The strong decline in **North America** reflected weakness in both Mobile Networks and Network Infrastructure as customers continued to evaluate their spending and digest inventories. To a lesser extent, Cloud and Network Services also declined.

Net sales by customer type

EUR million	Q4'23	Q4'22	YoY change	Constant currency YoY change	Q1-Q4'23	Q1-Q4'22	YoY change	Constant currency YoY change
Communications service providers (CSP)	4 421	5 649	(22)%	(19)%	17 652	19 921	(11)%	(9)%
Enterprise	719	760	(5)%	(3)%	2 282	1 997	14%	16%
Licensees	251	679	(63)%	(63)%	1 085	1 595	(32)%	(32)%
Other ¹	316	361	(12)%	(13)%	1 239	1 398	(11)%	(11)%
Total	5 707	7 449	(23)%	(21)%	22 258	24 911	(11)%	(8)%

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

Macroeconomic uncertainty continued to impact CSP spending in Q4 2023, which drove a net sales decline of 19% in constant currency.

Enterprise net sales decreased 3% in constant currency in Q4 2023 in comparison to a very strong year-ago quarter. Growth in enterprise verticals was more than offset by a decline in net sales to webscale customers, as net sales from these customers remain lumpy. Order intake was strong, particularly in Network Infrastructure, supported by significant orders for IP Networks products from webscale customers. Overall customer

engagement also remains strong as we added 151 new Enterprise customers in the quarter. Private wireless continued to show solid growth in the quarter and now has more than 710 customers.

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

The decline in 'Other' net sales relates to a decrease in net sales in both Submarine Networks and RFS.

Q4 2023 to Q4 2022 bridge for net sales and operating profit

EUR million	Q4'23	Volume, price, mix and other	Venture fund valuation	Foreign exchange impact	Items affecting comparability	Q4'22
Net sales	5 707	(1 553)	—	(189)	—	7 449
Operating profit	547	(386)	41	37	(27)	882
Operating margin %	9.6%					11.8%

The table above shows the change in net sales and operating profit compared to the year-ago quarter. Net sales declined from an operational standpoint as described in the prior pages and were also negatively impacted by foreign exchange rate fluctuations. Operating profit saw a negative impact from an operational standpoint, a positive impact from both venture fund valuations and foreign exchange rate fluctuations, as well

as a negative impact from items affecting comparability as further described below. The positive impact to operating profit seen from foreign exchange rate fluctuations is a combination of a negative impact 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

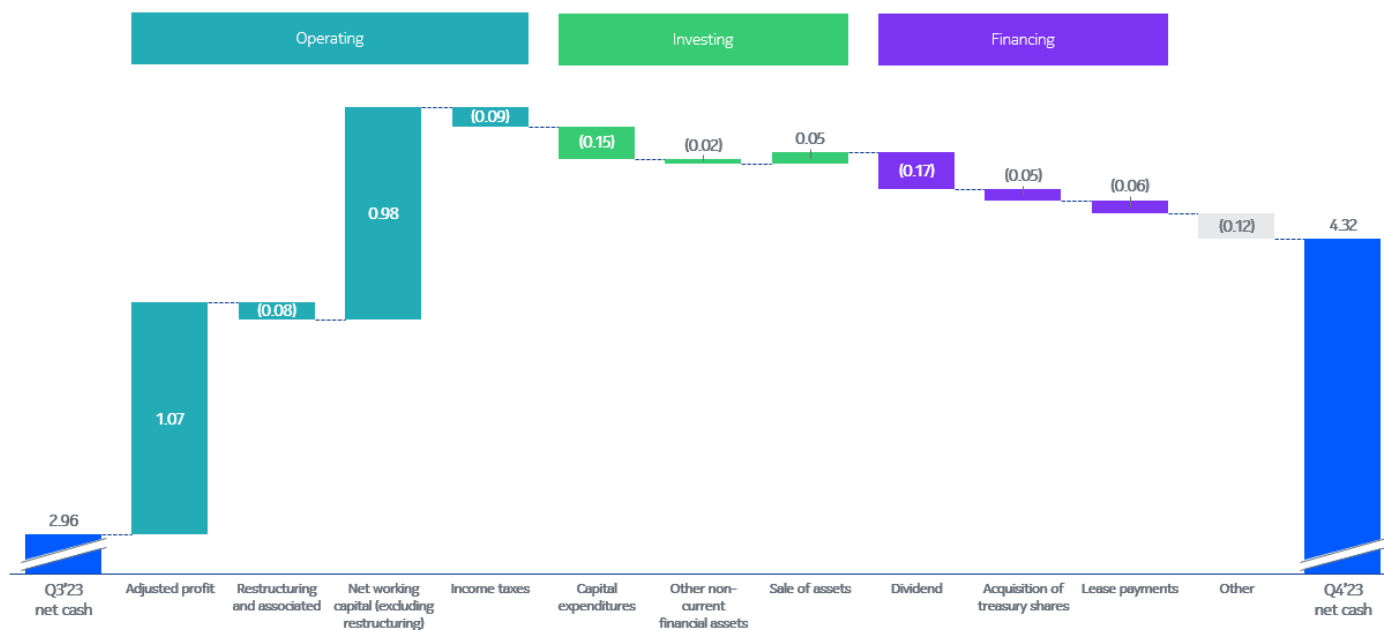
EUR million	Q4'23	Q4'22	YoY change	Q1-Q4'23	Q1-Q4'22	YoY change
Reported operating profit	547	882	(38)%	1 688	2 318	(27)%
Restructuring and associated charges	181	80		356	177	
Amortization of acquired intangible assets	88	106		352	411	
Impairment and write-off of assets, net of reversals	26	84		25	97	
Change in provisions related to past acquisitions	3	—		23	—	
Costs associated with country exit	(1)	(6)		(49)	98	
Divestment of businesses	1	—		(20)	—	
Other, net	—	7		—	8	
Comparable operating profit	846	1 154	(27)%	2 375	3 109	(24)%

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 2023 the main adjustments related to the restructuring charges which are part of the ongoing restructuring program (discussed later in this interim report), the amortization of acquired intangible assets which is primarily related to purchase price allocation of the Alcatel-Lucent acquisition and the impairment and write-off of assets.

Cash and cash flow in Q4 2023

EUR billion



EUR million, at end of period

	Q4'23	Q3'23	QoQ change	Q4'22	YTD change
Total cash and interest-bearing financial investments	8 514	7 097	20%	9 244	(8)%
Net cash and interest-bearing financial investments ¹	4 323	2 960	46%	4 767	(9)%

¹Net 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 2023, Nokia's free cash flow was positive EUR 1 744 million, as operating profit and cash inflows related to net working capital were partially offset by 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 1 073 million.
- Approximately EUR 80 million of restructuring and associated cash outflows, related to our current and previous cost savings programs.
- Excluding the restructuring and associated cash outflows, the increase in net cash related to net working capital was approximately EUR 980 million, as follows:
 - The decrease in receivables was approximately EUR 620 million primarily related to a partial prepayment related to a licensing agreement signed in 2023, cash inflows related to India 5G deployments, as well as an increase in the balance sheet impact related to the sale of receivables in the quarter.
 - The decrease in inventories was approximately EUR 570 million, reflecting seasonality and continued work to optimize inventories.
 - The decrease in liabilities was approximately EUR 210 million, primarily related to a decrease in accounts payable and contract liabilities.
- An outflow related to cash taxes of approximately EUR 90 million.

Net cash from investing activities

- Net cash used in investing activities was related primarily to capital expenditures of approximately EUR 150 million and a net cash outflow related to other non-current financial assets of approximately EUR 20 million, partly offset by net cash inflows related to the sale of assets of approximately EUR 50 million.

Net cash from financing activities

- Net cash used in financing activities was related primarily to dividend payments of approximately EUR 170 million, lease payments of approximately EUR 60 million and the acquisition of treasury shares of approximately EUR 50 million.

Change in total cash and net cash

In Q4 2023, the approximately EUR 50 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 interest rate and foreign exchange rate fluctuations.

Foreign exchange rates had a minimal impact on net cash.

January-December 2023 compared to January-December 2022

Net sales

In 2023, reported net sales decreased 11%, with a negative impact from foreign exchange rate fluctuations along with the following drivers.

On a constant currency basis, Nokia net sales decreased 8% driven by declines across all business groups, with particular weakness in Network Infrastructure, Mobile Networks and Nokia Technologies.

Gross margin

Both reported and comparable gross margin declined year-on-year in 2023. Reported gross margin decreased 200 basis points to 39.0% and comparable gross margin decreased 170 basis points to 39.7%. The gross margin decline was primarily driven by a lower contribution from Nokia Technologies along with unfavorable regional mix in Mobile Networks.

Operating profit and margin

Reported operating profit in 2023 was EUR 1 688 million, or 7.6% of net sales, down from EUR 2 318 million or 9.3% in 2022. Comparable operating profit decreased to EUR 2 375 million from EUR 3 109 million year-on-year, while comparable operating margin declined 180 basis points year-on-year to 10.7%. Comparable operating profit decreased in 2023 mainly due to lower gross profit and the impact of inflation, somewhat offset by lower variable pay accruals year-on-year and a net positive fluctuation in other operating income and expenses. The net positive fluctuation in other operating income and expenses reflected the positive impact from hedging and the sale of digital assets, which were partly offset by the impact from Nokia's venture fund investments.

In 2023, Nokia's operating profit saw an approximate EUR 400 million benefit from below target variable pay accruals given Nokia's business performance in 2023. The impact of hedging in 2023 was positive EUR 80 million, compared to a negative impact of EUR 107 million in 2022. Nokia's venture fund investments generated a loss of approximately EUR 70 million in 2023 compared to a benefit of EUR 20 million in 2022.

In 2023, the difference between reported and comparable operating profit was primarily related to restructuring and associated charges, the amortization of acquired intangible assets and the partial reversal of a provision associated with a country exit. In 2022, the difference between reported and comparable operating profit was primarily related to the amortization of acquired intangible assets, restructuring and associated charges, a provision associated with a country exit and the impairment and write-off of assets.

Profit for the period

Reported net profit in 2023 was EUR 679 million, compared to EUR 4 259 million in 2022. Comparable net profit was EUR 1 623 million, compared to EUR 2 481 million in 2022. The decrease in comparable net profit primarily reflects a decrease in comparable operating profit, a net negative fluctuation in financial income and expenses and higher income taxes.

Apart from the items affecting comparability included in operating profit (and their associated tax effects), the difference between reported and comparable net profit in 2023 was mainly due to a non-recurring tax expense related to an internal operating model change that led to a remeasurement of deferred tax assets, a deferred tax benefit due to tax rate changes, as well as an impairment of assets. In 2022, the difference between reported and comparable net profit was mainly related to changes in the recognition of deferred tax assets in Finland and loss allowances on customer financing.

Earnings per share

Reported diluted EPS in 2023 was EUR 0.12, compared to EUR 0.75 in 2022. Comparable diluted EPS in 2023 was EUR 0.29 compared to EUR 0.44 in 2022.

Cash performance

At the end of 2023, Nokia had a net cash balance of EUR 4 323 million, a decrease of EUR 444 million compared to the end of 2022. Total cash decreased EUR 730 million, resulting in total cash balance of EUR 8 514 million. Free cash flow was positive EUR 805 million in 2023 which equates to 34% conversion from comparable operating profit.

Sustainability

Our strategy and focus areas

Nokia's purpose is to create technology that helps the world act together. A key enabler of our purpose is our sustainability approach and ESG strategy. ESG as a competitive advantage is one of the six pillars of Nokia corporate strategy. Our ESG strategic approach will help us achieve this competitive advantage by focusing on five areas: environment, industrial digitalization, security and privacy, bridging the digital divide and responsible business. Below are some of our key ESG achievements from the fourth quarter of 2023.

Environment

During the quarter, Nokia expanded its work on energy efficiency, biodiversity, geodiversity and circularity.

Nokia's public target of 50% reduction of average power consumption of its 5G massive MIMO Base Station by 2023 from 2019 baseline was achieved through Nokia's AirScale 5G Base Station power consumption improvements. This was underpinned by enhanced software functionalities and new 5G products based on the latest generation Nokia ReefShark System-on-Chip (SoC).

In December, we announced the deployment of our AVA Energy Efficiency software for Safaricom Kenya. The solution helps the operator reduce the power consumption and costs of its 5G, 4G, and 3G networks. It uses artificial intelligence and machine learning algorithms to shut down idle and unused equipment automatically during low usage periods, reducing energy consumption while maintaining network performance.

In November, we announced that Nokia will deploy its fully O-RAN-compliant 5G AirScale baseband solution in NTT DOCOMO's commercial multi-vendor network. This solution, which is powered by the latest ReefShark technology, will deliver sustainability benefits as well as operational cost savings to DOCOMO due to its small physical footprint and low power consumption.

In November, working with our customer Deutsche Telekom, we announced that our Fixed Networks Lightspan portfolio would rapidly move to 100% recyclable packaging by the end of 2023. This more sustainable product packaging is expected to lead to a 60% decrease in packaging size and a 44% reduction in overall weight, enabling Nokia to ship more products per pallet and reduce CO2 emissions from transportation by up to 60%.

Nokia is also working to protect the environment and established two new nature conservation areas in Finland. The company now has six protected land areas totaling 131 hectares of natural forests and islands, and 110 hectares of the Baltic Sea coastal area. In December, Nokia announced collaboration with the University of Jyväskylä and the Finnish Innovation Fund SITRA to improve biodiversity footprint assessments.

Nokia announced its cooperation with Orange under the UNIDO (United Nations Industrial Development Organization) -run Switch to Circular Economy Value Chains (SWITCH2CE) initiative. The project aims to accelerate circularity in developing countries. Nokia will work closely with Orange to further develop circular approaches in network equipment, including setting up a new refurbishment and repair center in Egypt.

Industrial Digitalization

In the energy sector, Nokia Bell Labs and Aramco, the world's largest energy company, signed a non-binding R&D collaboration agreement to drive industrial digitalization within the Kingdom of Saudi Arabia, the Middle East, and North Africa. The collaboration seeks to leverage research and technologies from both companies to advance digital use-cases for a diverse range of industries.

The importance of the twin transitions of digital and energy was further underscored when Nokia and Ooredoo Qatar established the Middle East and Africa's first private wireless

network for the energy sector. The project will provide dedicated voice and customer data services in the most remote locations.

Security and privacy

Secure products are a critical part of the Nokia offer, supported by initiatives such as the Product Security Transformation Program and certification for essential 5G products. We have set up Service Security as a separate domain to cover the full-service lifecycle with a defined service security framework. We remain focused on the continuous certification of services teams in the ISO27001 standard. Additionally, there is a program dedicated to enhancing the security of Nokia service companies and joint ventures.

During the fourth quarter, Nokia continued its security training program that includes annual mandatory training, quarterly awareness campaigns, monthly phishing simulations, and expanded initiatives to safeguard key data such as a Zero-trust and Critical Information Protection Program.

Bridging the digital divide

Nokia renewed its partnership with UN Women. This unique collaboration will bring together UN Women and Nokia volunteers to provide on the ground support in 11 countries to execute initiatives, focused on closing the digital gender gap and addressing online violence.

Nokia and UN Women also implemented two additional Action for Leadership programs with key customers during Q4. These programs bring the joint expertise of women leaders from Nokia and its key customers to develop solutions to internal and external sustainability challenges.

Responsible business

Our value chain is a key part of how we operate as a responsible business. As such, we seek to recognize notable achievements of our suppliers. In October, the Nokia Diamond Awards celebrated our suppliers for improvements in innovation, quality and sustainability. This year Intel was selected as winner of the Sustainability Award and recognized for its collaboration with partners to reduce emissions of their products.

Other strategic ESG developments

At Nokia, we believe that there is no green without digital and that the business community has a critical role in supporting and enabling climate action. At COP28, in Dubai, at the launch event commemorating the inauguration of the Finland Pavilion, we espoused the importance of digital solutions in accelerating the response to climate change and its role in supporting hard-to-abate industries. To further underline the critical role of digital solutions in decarbonization, Nokia brought together representatives of the ICT sector together with the International Telecommunications Union (ITU) to outline commitments to accelerate the green transition. Nokia and senior industry executives also examined how the digital industry can embrace circular concepts in its own value chain and explored the role of industrial digitalization. During the conference, Nokia launched its Middle East and Africa ESG customer advisory council with several key communication service provider customers in the region.

Additional information

Cost Savings Program

On 19 October 2023, Nokia announced actions being taken across business groups to address the increasingly challenging market environment that the company faces. The company will reduce its cost base and increase operational efficiency while protecting its R&D capacity and commitment to technology leadership.

Nokia targets to lower its cost base on a gross basis (i.e. before inflation) by between EUR 800 million and EUR 1 200 million by the end of 2026 compared to 2023, assuming on-target variable pay in both periods. This represents a 10-15% reduction in personnel expenses. The program is expected to lead to a 72 000 - 77 000 employee organization compared to the 86 000 employees Nokia had when the program was announced.

The program is expected to deliver savings on a net basis but the magnitude will depend on inflation. The cost savings are expected to primarily be achieved in Mobile Networks, Cloud and Network Services and Nokia's corporate functions. One-time restructuring charges and cash outflows of the program are expected to be similar to the annual cost savings achieved.

The table below provide further detail on the current plans Nokia has in place in relation to the 2024-2026 restructuring program. The current plan envisages achieving gross cost savings of EUR 1 000 million within the 2024-2026 program although this remains subject to change depending on the evolution of end market demand. This includes the expected gross cost savings along with the associated restructuring charges and cash outflows for the program. Nokia expects approximately 70% of the savings to be achieved within operating expenses and 30% within cost of sales. By business group, approximately 60% of the savings are expected to be achieved within Mobile Networks, 30% within Cloud and Network Services and the remaining 10% between Network Infrastructure and corporate center.

The table also outlines expected savings and cash outflows related to the previous 2021-2023 program that is now essentially completed.

In EUR million, rounded to the nearest EUR 50 million	Actual	Expected amounts for				Cumulative expected amounts for 2024 and beyond		
	2023	2024	2025	2026	Beyond 2026	2021-2023 Program	2024-2026 Program	Total
Recurring gross cost savings	150	500	350	150	100	100	1 000	1 100
Restructuring and associated charges related to cost savings programs	350	400	200	200	—	—	800	800
Restructuring and associated cash outflows	300	550	250	150	150	150	950	1 100

Significant events

January – December 2023

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.

On 9 February 2023, Nokia announced it commenced an offer to purchase the outstanding EUR 750 million 2.00% notes due 15 March 2024 (the “2024 Notes”), EUR 500 million 2.375% notes due 15 May 2025 (the “2025 Notes”) and EUR 750 million 2.00% notes due 11 March 2026 (the “2026 Notes”), up to a maximum cash consideration of EUR 700 million (the “Tender Offer”). The purpose of the Tender Offer is to manage the overall indebtedness of Nokia and to extend Nokia’s debt maturity profile in an efficient manner.

Nokia accepted tenders for EUR 372 million (49.66% of the nominal amount) of the 2024 Notes, EUR 208 million (41.57% of the nominal amount) of the 2025 Notes and EUR 120 million (15.96% of the nominal amount) of the 2026 Notes. The Tender Offer was settled on 21 February 2023.

On 21 February 2023, Nokia issued EUR 500 million 4.375% sustainability-linked Notes due August 2031 under its 5 billion Euro Medium-Term Note Programme. The proceeds of the new notes are intended to fund the Tender Offer and for general corporate purposes.

On 2 March 2023, Nokia informed it had updated its capital management policy with a focus on sustaining investment grade rating and improving shareholder returns consistent with the performance of the business. Nokia now targets to maintain a net cash position in the range of 10-15% of net sales. Nokia intends to maintain a net cash position around this level to ensure it can continue to invest in the necessary R&D to maintain and further improve its technology leadership, fund working capital requirements in support of the company’s growth ambitions and to maintain some flexibility for bolt-on acquisitions. Nokia’s previous target in terms of cash management was to maintain a total cash position equivalent to at least 30% of net sales.

On 4 April 2023, Nokia held its Annual General Meeting (AGM) in Helsinki. Shareholders were also able to follow the AGM through a webcast. Approximately 108 000 shareholders representing approximately 3.2 billion shares and votes were represented at the meeting. Among others, the following resolutions were made:

- The financial statements were adopted, and the Board of Directors and President and CEO were discharged from liability for the financial year 2022.
- The AGM decided that no dividend is distributed by a resolution of the AGM and authorized the Board to decide on the distribution of an aggregate maximum of EUR 0.12 per share as dividend from the retained earnings and/or as assets from the reserve for invested unrestricted equity.
- Sari Baldauf, Thomas Dannenfeldt, Lisa Hook, Jeanette Horan, Thomas Saueressig, Søren Skou, Carla Smits-Nusteling and Kai Öistämö were re-elected as members of the Board for a term ending at the close of the next AGM. In addition, the AGM resolved to elect Timo Ahopelto and Elizabeth Crain as new members of the Board for the same term. In its assembly meeting that took place after the AGM, the Board re-elected Sari Baldauf as Chair of the Board and Søren Skou as Vice Chair of the Board.

- The annual fees of the Board members were increased by EUR 15 000 except for the Board Chair.
- The remuneration Report of the company’s governing bodies was supported in an advisory vote.
- Deloitte Oy was re-elected as the auditor for Nokia for the financial year 2024 with Authorized Public Accountant Marika Nevalainen as the auditor in charge.
- The 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 3 October 2024 and they terminated the corresponding authorizations granted by the AGM on 5 April 2022.

On 30 June 2023, Nokia announced it had signed a new long-term patent cross-license agreement with Apple replacing the previous license that expired at the end of 2023. The license covers Nokia’s fundamental inventions in 5G and other technologies. The terms of the agreement remain confidential between the parties.

On 19 October 2023, Nokia announced strategic and operational changes to its business. The actions include accelerating strategy execution by giving business groups more operational autonomy and streamlining operating model by embedding sales teams into the business groups. In addition, Nokia announced a new program designed to lower its cost base by EUR 800–1 200 million on a gross basis over a three-year period. The announced actions will better position Nokia for longer-term growth and enable it to navigate the current market uncertainty.

On 10 November 2023, Nokia announced it had completed the second phase of the share buyback program announced in December 2022. For more information on the share buyback program, refer to the Shareholder distribution section in this report.

On 5 December 2023, Nokia announced it expects its revenue from AT&T in Mobile Networks will decrease over the next 2-3 years as a result of AT&T’s plans to commit to an Open RAN deployment in collaboration with other vendors over the next five years. AT&T had accounted for 5-8% of Mobile Networks net sales in 2023 to the date of the announcement. Nokia expects Mobile Networks to remain profitable over the coming years, but AT&T’s decision would delay the timeline of achieving double digit operating margin by up to 2 years. Nokia remains a key partner for AT&T within both its Network Infrastructure and Cloud and Network Services businesses. AT&T will also continue to buy products such as microwave radio links and femto solutions from Mobile Networks.

On 12 December 2023, Nokia hosted an investor and analyst event where it provided an update on its execution against its group strategy. Nokia also revised its long-term targets for 2026 as explained in the Outlook section in this report.

After 31 December 2023

On 24 January 2024 Nokia announced that it has concluded a multi-year patent cross-license agreement with OPPO. Under the agreement OPPO will make royalty payments, along with catch-up payments to cover the periods of non-payment. The agreement resolves all pending patent litigation between the parties, in all jurisdictions.

Shares

The total number of Nokia shares on 31 December 2023, equaled 5 613 496 565. On 31 December 2023, Nokia and its subsidiary companies held 87 895 712 Nokia shares, representing approximately 1.6% 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 as some competitors seek to take share;
- 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;
- Potential economic impact and disruption of global pandemics;
- 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 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 2022 annual report on Form 20-F published on 2 March 2023 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, licenses, 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 potential global pandemics and the general or regional 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, cost savings, 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", "target", "likely", "intend", "may", "could", "would" 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	Note	Reported				Comparable			
		Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22	Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22
Net sales	2, 3	5 707	7 449	22 258	24 911	5 707	7 449	22 258	24 911
Cost of sales		(3 322)	(4 262)	(13 571)	(14 689)	(3 246)	(4 212)	(13 420)	(14 589)
Gross profit	2	2 385	3 187	8 687	10 222	2 461	3 237	8 839	10 322
Research and development expenses		(1 092)	(1 222)	(4 327)	(4 550)	(1 034)	(1 189)	(4 190)	(4 449)
Selling, general and administrative expenses		(787)	(838)	(2 929)	(3 013)	(626)	(727)	(2 490)	(2 604)
Other operating income and expenses		41	(244)	257	(341)	45	(168)	217	(160)
Operating profit	2	547	882	1 688	2 318	846	1 154	2 375	3 109
Share of results of associates and joint ventures		4	26	(39)	(26)	4	39	(11)	(13)
Financial income and expenses		(39)	(30)	(150)	(108)	(32)	1	(137)	(38)
Profit before tax		512	878	1 499	2 184	818	1 194	2 227	3 058
Income tax (expense)/benefit	5	(552)	2 272	(825)	2 026	(250)	(265)	(605)	(577)
(Loss)/profit from continuing operations		(40)	3 150	674	4 210	568	929	1 623	2 481
Profit from discontinued operations		7	2	5	49	—	—	—	—
(Loss)/profit for the period		(33)	3 152	679	4 259	568	929	1 623	2 481
Attributable to									
Equity holders of the parent		(43)	3 154	665	4 250	558	931	1 608	2 472
Non-controlling interests		11	(2)	14	9	11	(2)	14	9
Earnings per share attributable to equity holders of the parent									
Basic earnings per share, EUR									
Continuing operations		(0.01)	0.56	0.12	0.75	0.10	0.17	0.29	0.44
(Loss)/profit for the period		(0.01)	0.56	0.12	0.76	0.10	0.17	0.29	0.44
Average number of shares ('000 shares)		5 523 785	5 590 250	5 549 468	5 614 182	5 523 785	5 590 250	5 549 468	5 614 182
Diluted earnings per share, EUR									
Continuing operations		(0.01)	0.56	0.12	0.74	0.10	0.16	0.29	0.44
(Loss)/profit for the period		(0.01)	0.56	0.12	0.75	0.10	0.16	0.29	0.44
Average number of shares ('000 shares)		5 523 785	5 651 112	5 585 923	5 670 020	5 567 782	5 651 112	5 585 923	5 670 020

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

Consolidated statement of comprehensive income (condensed)

EUR million	Reported			
	Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22
(Loss)/profit for the period	(33)	3 152	679	4 259
Other comprehensive income				
Items that will not be reclassified to profit or loss				
Remeasurements of defined benefit plans	(8)	(377)	(343)	(424)
Income tax related to items that will not be reclassified to profit or loss	(19)	99	61	77
Items that may be reclassified subsequently to profit or loss				
Translation differences	(580)	(1 481)	(535)	710
Net investment hedges	116	349	135	(127)
Cash flow and other hedges	(26)	71	(61)	83
Financial assets at fair value through other comprehensive income	30	(15)	10	(46)
Other changes, net	(4)	—	(4)	(3)
Income tax related to items that may be reclassified subsequently to profit or loss	(24)	(22)	(10)	(21)
Other comprehensive (loss)/income, net of tax	(515)	(1 376)	(747)	249
Total comprehensive (loss)/income for the period	(548)	1 776	(68)	4 508
Attributable to:				
Equity holders of the parent	(557)	1 782	(78)	4 500
Non-controlling interests	10	(6)	10	8

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

Consolidated statement of financial position (condensed)

EUR million	Note	31 December 2023	31 December 2022
ASSETS			
Goodwill		5 504	5 667
Other intangible assets		1 086	1 263
Property, plant and equipment		1 951	2 015
Right-of-use assets		906	929
Investments in associated companies and joint ventures		88	199
Non-current interest-bearing financial investments	6	715	697
Other non-current financial assets	6	1 100	1 080
Defined benefit pension assets	4	6 258	6 754
Deferred tax assets	5	3 873	3 834
Other non-current receivables		213	239
Non-current assets		21 694	22 677
Inventories		2 684	3 265
Trade receivables	6	4 921	5 549
Contract assets		1 136	1 203
Current income tax assets		307	153
Other current receivables		764	934
Current interest-bearing financial investments	6	1 565	3 080
Other current financial and firm commitment assets	6	441	615
Cash and cash equivalents	6	6 234	5 467
Current assets		18 052	20 266
Assets held for sale		79	—
Total assets		39 825	42 943
SHAREHOLDERS' EQUITY AND LIABILITIES			
Share capital		246	246
Share premium		628	503
Treasury shares		(352)	(352)
Translation differences		(249)	169
Fair value and other reserves		3 605	3 905
Reserve for invested unrestricted equity		15 255	15 487
Retained earnings		1 404	1 375
Total shareholders' equity		20 537	21 333
Non-controlling interests		91	93
Total equity		20 628	21 426
Long-term interest-bearing liabilities	6, 7	3 637	4 249
Long-term lease liabilities		799	858
Defined benefit pension and post-employment liabilities	4	2 299	2 459
Deferred tax liabilities		725	332
Contract liabilities		210	120
Other non-current liabilities		111	103
Provisions	8	518	622
Non-current liabilities		8 299	8 743
Short-term interest-bearing liabilities	6, 7	554	228
Short-term lease liabilities		198	184
Other financial and firm commitment liabilities	6	830	1 038
Contract liabilities		2 157	1 977
Current income tax liabilities		203	185
Trade payables	6	3 388	4 730
Other current liabilities	6	2 824	3 619
Provisions	8	744	813
Current liabilities		10 898	12 774
Total shareholders' equity and liabilities		39 825	42 943
Shareholders' equity per share, EUR		3.72	3.82
Number of shares (1 000 shares, excluding treasury shares)		5 525 601	5 587 016

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

Consolidated statement of cash flows (condensed)

EUR million	Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22
Cash flow from operating activities				
(Loss)/profit for the period	(33)	3 152	679	4 259
Adjustments	1 106	(1 709)	2 559	(446)
Depreciation and amortization	282	297	1 087	1 140
Restructuring charges	152	53	316	125
Financial income and expenses	38	(34)	148	28
Income tax expense/(benefit)	551	(2 271)	825	(2 030)
Loss/(gain) from other non-current financial assets	40	88	56	(27)
Other	43	158	127	318
Cash flows from operations before changes in net working capital	1 073	1 443	3 238	3 813
Change in net working capital	896	(767)	(1 282)	(1 843)
Decrease/(increase) in receivables	618	(577)	304	(451)
Decrease/(increase) in inventories	565	(57)	478	(991)
Decrease in non-interest-bearing liabilities	(287)	(133)	(2 064)	(401)
Cash flows from operations	1 969	676	1 956	1 970
Interest received	55	19	178	65
Interest paid	(63)	(36)	(241)	(180)
Income taxes paid, net	(91)	(92)	(576)	(381)
Net cash flows from operating activities	1 870	567	1 317	1 474
Cash flow from investing activities				
Purchase of property, plant and equipment and intangible assets	(149)	(195)	(652)	(601)
Proceeds from sale of property, plant and equipment and intangible assets	46	—	189	33
Acquisition of businesses, net of cash acquired	—	—	(19)	(20)
Proceeds from disposal of businesses, net of cash disposed	—	—	17	—
Purchase of interest-bearing financial investments	(231)	(1 004)	(1 855)	(3 595)
Proceeds from maturities and sale of interest-bearing financial investments	450	1 260	3 382	2 397
Purchase of other non-current financial assets	(26)	(13)	(83)	(115)
Proceeds from sale of other non-current financial assets	3	5	34	49
Other	—	15	30	(28)
Net cash flows from/(used in) investing activities	93	68	1 043	(1 880)
Cash flow from financing activities				
Acquisition of treasury shares	(45)	(66)	(300)	(300)
Proceeds from long-term borrowings	—	—	496	8
Repayment of long-term borrowings	—	(1)	(798)	(2)
(Repayment of)/proceeds from short-term borrowings	(19)	(5)	(40)	27
Payment of principal portion of lease liabilities	(57)	(47)	(239)	(217)
Dividends paid	(171)	(124)	(621)	(353)
Net cash flows used in financing activities	(292)	(243)	(1 502)	(837)
Translation differences	(42)	(121)	(91)	19
Net increase/(decrease) in cash and cash equivalents	1 629	271	767	(1 224)
Cash and cash equivalents at beginning of period	4 605	5 196	5 467	6 691
Cash and cash equivalents at end of period	6 234	5 467	6 234	5 467

Consolidated statement of cash flows combines cash flows from both the continuing and the discontinued operations.

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 premium	Treasury shares	Translation differences	Fair value and other reserves	Reserve for invested unrestricted equity	Retained earnings	Total shareholders' equity	Non-controlling interests	Total equity
1 January 2022	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
Total comprehensive income	—	—	—	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 ¹	—	—	(300)	—	—	(12)	—	(312)	—	(312)
Cancellation of treasury shares ¹	—	—	300	—	—	(300)	—	—	—	—
Dividend	—	—	—	—	—	—	(337)	(337)	(17)	(354)
Total transactions with owners	—	49	—	—	—	(239)	(337)	(527)	(17)	(544)
31 December 2022	246	503	(352)	169	3 905	15 487	1 375	21 333	93	21 426

1 January 2023	246	503	(352)	169	3 905	15 487	1 375	21 333	93	21 426
Profit for the period	—	—	—	—	—	—	665	665	14	679
Other comprehensive income	—	—	—	(418)	(300)	—	(25)	(743)	(4)	(747)
Total comprehensive loss	—	—	—	(418)	(300)	—	640	(78)	10	(68)
Share-based payments	—	202	—	—	—	—	—	202	—	202
Settlement of share-based payments	—	(77)	—	—	—	59	—	(18)	—	(18)
Acquisition of treasury shares ¹	—	—	(303)	—	—	12	—	(291)	—	(291)
Cancellation of treasury shares ¹	—	—	303	—	—	(303)	—	—	—	—
Disposal of subsidiaries	—	—	—	—	—	—	—	—	(2)	(2)
Dividend	—	—	—	—	—	—	(611)	(611)	(10)	(621)
Total transactions with owners	—	125	—	—	—	(232)	(611)	(718)	(12)	(730)
31 December 2023	246	628	(352)	(249)	3 605	15 255	1 404	20 537	91	20 628

¹Treasury shares have been acquired as part of the share buyback program announced on 3 February 2022 using the reserve for invested unrestricted equity. The shares repurchased in the first phase of the program between 14 February and 11 November 2022 were cancelled on 8 December 2022. The shares repurchased in the second phase of the program between 2 January and 10 November 2023 were cancelled on 30 November 2023.

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

Notes to Financial statements

1. GENERAL INFORMATION

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 annual consolidated financial statements for 2022 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 annual consolidated financial statements for 2022. 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 25 January 2024.

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.

Nokia Shanghai Bell

In 2017, Nokia and China Huaxin Post & Telecommunication Economy Development Center (China Huaxin) commenced operations of the joint venture Nokia Shanghai Bell (NSB). The contractual arrangement provides China Huaxin with the right to fully transfer its ownership interest in NSB to Nokia and Nokia with the right to purchase China Huaxin's ownership interest in NSB in exchange for a future cash settlement. To reflect this, Nokia derecognized the non-controlling interest balance related to NSB and recognized a financial liability based on the estimated future cash settlement to acquire China Huaxin's ownership interest. Any changes in the estimated future cash settlement are recorded in financial income and expense. In 2023, the contractual arrangement was extended until 30 June 2024. If it expires unexercised, Nokia will derecognize the financial liability and record non-controlling interest equal to its share of NSB's net assets with any difference recorded within shareholders' equity.

TD Tech

In the second quarter of 2023, Nokia signed an agreement to sell its 51% ownership interest in TD Tech Holding Limited ("TD Tech HK"), a Hong Kong based joint venture holding company, to New East New Materials. In the third quarter of 2023, Nokia exercised its contractual right to terminate the Sale and Purchase Agreement with New East New Materials.

In the fourth quarter of 2023, TD Tech HK has entered into an agreement to divest the entire business of the joint venture through the sale of TD Tech HK's operating subsidiaries to a consortium consisting of Huawei Technologies, Chengdu High-tech Investment Group and other buyers. The closing of the transaction is conditional upon receiving regulatory approvals for the transaction and is expected in 2024. Following the transaction, Nokia will exit from its shareholding in TD Tech HK. Nokia expects to record a gain on the contemplated transactions. At 31 December 2023, the carrying amount of Nokia's investment in TD Tech HK is included in assets held for sale in the statement of financial position.

HMD

In 2016, Nokia entered into a strategic agreement with HMD Global Oy (HMD) granting HMD an exclusive global license to create Nokia-branded mobile phones and tablets for ten years. Under the agreement, Nokia receives royalty payments from HMD for sales of Nokia branded mobile phones and tablets, covering both brand and patent licensing. In August 2023, Nokia and HMD amended the licensing agreement so that HMD's exclusive license to create Nokia-branded devices will expire by March 2026. Nokia has held an ownership interest in HMD since 2020 which it has accounted for as an investment in associate. In the third quarter of 2023 Nokia recorded an impairment loss of EUR 28 million related to its investment in HMD in the share of results of associates and joint ventures.

Device Management and Service Management Platform businesses

In the fourth quarter of 2023, Nokia signed an agreement to sell its Device Management and Service Management Platform businesses, which are part of Cloud and Network Services, to Lumine Group Inc. The deal is valued at EUR 185 million, which includes a contingent consideration of up to EUR 35 million based on the performance of the business during the first year following close. The deal is expected to close in the first quarter of 2024, subject to certain terms, conditions, and consultations with works council or other employee representative bodies where required by law. At 31 December 2023, the assets of Device Management and Service Management Platform businesses are included in assets held for sale in the statement of financial position.

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, the Indian rupee 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.

	Q4'23		Q4'22		Q3'23	
	Net sales	Total costs	Net sales	Total costs	Net sales	Total costs
EUR	~25%	~30%	~25%	~25%	~25%	~30%
USD	~50%	~45%	~50%	~50%	~50%	~45%
INR	~0%	~5%	~5%	~5%	~5%	~5%
CNY	~5%	~5%	~5%	~5%	~5%	~5%
Other	~20%	~15%	~15%	~15%	~15%	~15%
Total	100%	100%	100%	100%	100%	100%

End of Q4'23 balance sheet rate 1 EUR = 1.11 USD, end of Q4'22 balance sheet rate 1 EUR = 1.07 USD and end of Q3'23 balance sheet rate 1 EUR = 1.06 USD

New and amended standards and interpretations

New standards and amendments to existing standards that became effective on 1 January 2023, did not have a material impact on Nokia's consolidated financial statements, however, the amendments to IAS 1, Presentation of Financial Statements, and IFRS Practice Statement 2 related to disclosure of accounting policies are expected to affect the accounting policy disclosures in Nokia's annual consolidated financial statements for 2023. These amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement to disclose 'significant' accounting policies with a requirement to disclose 'material' accounting policies and adding guidance to help entities determine when accounting policy information is material and, therefore, needs to be disclosed.

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 annual consolidated financial statements for 2022.

Accounting policies of the segments are the same as those described in Note 2, Significant accounting policies, in the annual consolidated financial statements for 2022, 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, General information, 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.

Q4'23	Network Infrastructure		Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
EUR million								
Net sales	2 003	2 450	977	251	25	1	5 707	
<i>of which to other segments</i>	(3)	1	—	—	1	1	—	
Gross profit/(loss)	805	938	465	251	2	(76)	2 385	
<i>Gross margin %</i>	40.2%	38.3%	47.6%	100.0%	8.0%		41.8%	
Research and development expenses	(334)	(480)	(143)	(55)	(22)	(58)	(1 092)	
Selling, general and administrative expenses	(206)	(220)	(115)	(34)	(51)	(161)	(787)	
Other operating income and expenses	15	43	16	6	(36)	(4)	41	
Operating profit/(loss)	279	281	223	169	(106)	(299)	547	
<i>Operating margin %</i>	13.9%	11.5%	22.8%	67.3%	(424.0)%		9.6%	
Share of results of associates and joint ventures	—	—	2	2	—	—	4	
Financial income and expenses							(39)	
Profit before tax							512	
<i>Depreciation and amortization</i>	(64)	(100)	(18)	(10)	(2)	(88)	(282)	

¹Includes IP Networks net sales of EUR 650 million, Optical Networks net sales of EUR 478 million, Fixed Networks net sales of EUR 584 million and Submarine Networks net sales of EUR 291 million.

Q4'22

EUR million	Network Infrastructure ¹	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
Net sales	2 709	2 960	1 060	679	59	(18)	7 449
<i>of which to other segments</i>	1	7	—	3	6	(18)	—
Gross profit/(loss)	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)
Operating profit/(loss)	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 associates and joint ventures	—	42	2	(5)	—	—	26
Financial income and expenses							(30)
Profit before tax							878
<i>Depreciation and amortization</i>	(62)	(88)	(24)	(9)	(7)	(107)	(297)

¹Includes 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.

Q1-Q4'23

EUR million	Network Infrastructure ¹	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
Net sales	8 037	9 797	3 220	1 085	130	(11)	22 258
<i>of which to other segments</i>	(2)	6	1	—	6	(11)	—
Gross profit/(loss)	3 050	3 433	1 276	1 085	(6)	(151)	8 687
<i>Gross margin %</i>	37.9%	35.0%	39.6%	100.0%	(4.6)%		39.0%
Research and development expenses	(1 259)	(2 010)	(577)	(224)	(120)	(137)	(4 327)
Selling, general and administrative expenses	(818)	(822)	(494)	(140)	(216)	(439)	(2 929)
Other operating income and expenses	81	122	50	13	(49)	40	257
Operating profit/(loss)	1 054	723	255	734	(391)	(687)	1 688
<i>Operating margin %</i>	13.1%	7.4%	7.9%	67.6%	(300.8)%		7.6%
Share of results of associates and joint ventures	—	(30)	7	12	—	(28)	(39)
Financial income and expenses							(150)
Profit before tax							1 499
<i>Depreciation and amortization</i>	(235)	(366)	(81)	(39)	(14)	(352)	(1 087)

¹Includes IP Networks net sales of EUR 2 606 million, Optical Networks net sales of EUR 1 942 million, Fixed Networks net sales of EUR 2 369 million and Submarine Networks net sales of EUR 1 120 million.

Q1-Q4'22

EUR million	Network Infrastructure ¹	Mobile Networks	Cloud and Network Services	Nokia Technologies	Group Common and Other	Eliminations and unallocated items	Nokia Group
Net sales	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)	—
Gross profit/(loss)	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)
Operating profit/(loss)	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 associates and joint ventures	—	(11)	6	(8)	0	—	(26)
Financial income and expenses							(108)
Profit before tax							2 184
<i>Depreciation and amortization</i>	(229)	(347)	(91)	(34)	(28)	(411)	(1 140)

¹Includes 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.

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

EUR million	Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22
Operating profit for the Group	547	882	1 688	2 318
Restructuring and associated charges	181	80	356	177
Amortization of acquired intangible assets	88	106	352	411
Impairment and write-off of assets, net of reversals	26	84	25	97
Change in provisions related to past acquisitions	3	—	23	—
Costs associated with country exit	(1)	(6)	(49)	98
Divestment of businesses	1	—	(20)	—
Other, net	—	7	—	8
Total segment operating profit	846	1 154	2 375	3 109

3. NET SALES

Management has determined that Nokia's geographic areas are considered as the primary determinants to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. Nokia's primary customer base consists of companies that operate on a country-specific or a regional basis. Although Nokia's technology cycle is similar around the world, different countries and regions are inherently in a different stage of that cycle, often influenced by macroeconomic conditions specific to those countries and regions. In addition to net sales to external customers by region, the chief operating decision maker also reviews net sales by customer type disclosed below.

Each reportable segment, as described in Note 2, Segment information, consists of customers that operate in all geographic areas. No reportable segment has a specific revenue concentration in any geographic area other than Nokia Technologies, which is included within Europe.

Net sales by region

EUR million	Q4'23	Q4'22	YoY change	Q1-Q4'23	Q1-Q4'22	YoY change
Asia Pacific	683	801	(15)%	2 291	2 648	(13)%
Europe	1 533	2 351	(35)%	5 873	6 662	(12)%
Greater China	337	356	(5)%	1 303	1 581	(18)%
India	379	568	(33)%	2 842	1 290	120%
Latin America	322	387	(17)%	1 046	1 223	(14)%
Middle East & Africa	646	595	9%	2 050	1 969	4%
North America	1 518	2 070	(27)%	5 733	8 388	(32)%
Submarine Networks ¹	291	319	(9)%	1 120	1 150	(3)%
Total	5 707	7 449	(23)%	22 258	24 911	(11)%

¹Nokia provides net sales for the Submarine Networks business separately from the rest of the Group to improve the usefulness of disclosed information by removing volatility caused by the specific nature of the Submarine Networks business.

Net sales by customer type

EUR million	Q4'23	Q4'22	YoY change	Q1-Q4'23	Q1-Q4'22	YoY change
Communications service providers (CSP)	4 421	5 649	(22)%	17 652	19 921	(11)%
Enterprise	719	760	(5)%	2 282	1 997	14%
Licensees	251	679	(63)%	1 085	1 595	(32)%
Other ¹	316	361	(12)%	1 239	1 398	(11)%
Total	5 707	7 449	(23)%	22 258	24 911	(11)%

¹Includes net sales of Submarine Networks which operates in a different market, and Radio Frequency Systems (RFS), which is being managed as a separate entity, and certain other items, such as eliminations of inter-segment revenues. 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 several 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 December 31, through valuations performed by external actuaries. At 31 December 2023, the weighted average discount rates used in remeasurement of the most significant plans were as follows (comparatives at 31 December 2022): US Pension 4.67% (4.86%), US OPEB 4.68% (4.87%), Germany 3.17% (3.70%) and UK 4.51% (4.76%).

The funded status of Nokia's defined benefit plans (before the effect of the asset ceiling) decreased from 125.2%, or EUR 4 186 million, at 30 September 2023 to 124.0% or EUR 4 046 million, at 31 December 2023. During the quarter the global defined benefit plan asset portfolio was invested approximately 72% in fixed income, 6% in equities and 22% in other asset classes, mainly private equity and real estate.

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

EUR million	31 December 2023			31 December 2022		
	Pensions ¹	US OPEB	Total	Pensions ¹	US OPEB	Total
Net asset/(liability) recognized 1 January	5 273	(978)	4 295	5 588	(1 256)	4 332
Recognized in income statement	77	(46)	31	(69)	(32)	(101)
Recognized in other comprehensive income	(409)	66	(343)	(694)	270	(424)
Contributions and benefits paid	136	7	143	177	9	186
Exchange differences and other movements ²	(322)	155	(167)	271	31	302
Net asset/(liability) recognized at the end of the period	4 755	(796)	3 959	5 273	(978)	4 295

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

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

Funded status

EUR million	31 December 2023	30 September 2023	30 June 2023	31 March 2023	31 December 2022
Defined benefit obligation ¹	(16 868)	(16 632)	(17 712)	(18 054)	(18 312)
Fair value of plan assets ¹	20 914	20 818	21 993	22 495	22 691
Funded status	4 046	4 186	4 281	4 441	4 379
Effect of asset ceiling	(87)	(91)	(101)	(90)	(84)
Net asset recognized at the end of the period	3 959	4 095	4 180	4 351	4 295

¹In the third quarter of 2023 Nokia transferred the assets and liabilities amounting to EUR 489 million and EUR 498 million, respectively, related to Provident Fund in India to government platform (EPFO). In the fourth quarter of 2023, the amounts of transferred assets and liabilities were adjusted based on the final valuations.

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. At 31 December 2023, Nokia has recognized deferred tax assets of EUR 3.9 billion (EUR 3.8 billion at 31 December 2022).

In addition, at 31 December 2023, Nokia has unrecognized deferred tax assets of approximately EUR 5 billion (EUR 5 billion at 31 December 2022), 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.

In the fourth quarter of 2023 Nokia recognized a deferred tax expense and a decrease in deferred tax assets of EUR 0.4 billion related to an internal operating model change that led to a remeasurement of deferred tax assets in Finland and the United States.

6. FAIR VALUE OF FINANCIAL INSTRUMENTS

Financial assets and liabilities recorded at fair value are categorized based on the amount of unobservable inputs used to measure their fair value. Three hierarchical levels are based on an increasing amount of judgment associated with the inputs used to derive fair valuation for these assets and liabilities, Level 1 being market values for exchange traded products, Level 2 being primarily based on publicly available market information and Level 3 requiring most management judgment. At the end of each reporting period, Nokia categorizes its financial assets and liabilities to the appropriate level of fair value hierarchy. Items carried at fair value in the following table are measured at fair value on a recurring basis. For more information about the valuation methods and principles, refer to note 2, Significant accounting policies, and note 21, Fair value of financial instruments, in the annual consolidated financial statements for 2022.

31 December 2023

EUR million	Carrying amounts						Fair value	
	Amortized cost	Fair value through profit or loss			Fair value through other comprehensive income ¹		Total	Total
		Level 1	Level 2	Level 3	Level 2	Total		
Non-current interest-bearing financial investments	715	—	—	—	—	715	717	
Investments in venture funds	—	5	—	779	—	784	784	
Other non-current financial assets	161	—	96	—	59	316	316	
Other current financial assets	263	—	—	—	22	285	285	
Derivative assets	—	—	134	—	—	134	134	
Trade receivables	—	—	—	—	4 921	4 921	4 921	
Current interest-bearing financial investments	874	—	691	—	—	1 565	1 565	
Cash and cash equivalents	4 791	—	1 443	—	—	6 234	6 234	
Total financial assets	6 804	5	2 364	779	5 002	14 954	14 956	
Long-term interest-bearing liabilities	3 637	—	—	—	—	3 637	3 614	
Other long-term financial liabilities	33	—	—	28	—	61	61	
Short-term interest-bearing liabilities	554	—	—	—	—	554	555	
Other short-term financial liabilities	65	—	—	471	—	536	536	
Derivative liabilities	—	—	286	—	—	286	286	
Discounts without performance obligations	404	—	—	—	—	404	404	
Trade payables	3 388	—	—	—	—	3 388	3 388	
Total financial liabilities	8 081	—	286	499	—	8 866	8 844	

31 December 2022

EUR million	Carrying amounts						Fair value	
	Amortized cost	Fair value through profit or loss			Fair value through other comprehensive income ¹		Total	Total
		Level 1	Level 2	Level 3	Level 2	Total		
Non-current interest-bearing financial investments	697	—	—	—	—	697	659	
Investments in venture funds	—	5	—	823	—	828	828	
Other non-current financial assets	183	—	91	—	27	301	301	
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	
Total financial assets	6 799	5	3 254	823	5 612	16 493	16 455	
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	
Total financial liabilities	9 821	—	496	550	—	10 867	10 848	

¹No financial instruments measured at fair value through other comprehensive income are categorized in fair value hierarchy level 1 or level 3.

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 consist primarily of a conditional obligation to China Huaxin related to Nokia Shanghai Bell.

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

EUR million	Level 3 Financial Assets	Level 3 Financial Liabilities
Balance at 31 December 2022	823	(550)
Net (losses)/gains in income statement	(76)	31
Additions	56	—
Deductions	(24)	19
Other movements	—	1
Balance at 31 December 2023	779	(499)

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 loss of EUR 42 million related to level 3 financial instruments held at 31 December 2023 was included in the profit and loss during 2023 (net gain of EUR 23 million related to level 3 financial instruments held at 31 December 2022 during 2022).

7. INTEREST-BEARING LIABILITIES

Issuer/borrower	Instrument	Currency	Nominal (million)	Final maturity	Carrying amount (EUR million)	
					31 December 2023	31 December 2022
Nokia Corporation	2.00% Senior Notes ¹	EUR	378	3/2024	375	736
Nokia Corporation	EIB R&D Loan	EUR	500	2/2025	500	500
Nokia Corporation	NIB R&D Loan ²	EUR	167	5/2025	167	250
Nokia Corporation	2.375% Senior Notes ¹	EUR	292	5/2025	289	478
Nokia Corporation	2.00% Senior Notes ¹	EUR	630	3/2026	614	716
Nokia Corporation	4.375% Senior Notes	USD	500	6/2027	430	436
Nokia of America Corporation	6.50% Senior Notes	USD	74	1/2028	67	70
Nokia Corporation	3.125% Senior Notes	EUR	500	5/2028	479	457
Nokia of America Corporation	6.45% Senior Notes	USD	206	3/2029	187	194
Nokia Corporation	4.375% Sustainability-linked Senior Notes ³	EUR	500	8/2031	510	—
Nokia Corporation	6.625% Senior Notes	USD	500	5/2039	463	478
Nokia Corporation and various subsidiaries	Other liabilities				110	162
Total					4 191	4 477

¹In February 2023 Nokia purchased in a tender offer EUR 372 million (49.66% of the nominal amount) of the notes due 15 March 2024, EUR 208 million (41.57% of the nominal amount) of the notes due 15 May 2025 and EUR 120 million (15.96% of the nominal amount) of the notes due 11 March 2026.

²The remaining loan from the Nordic Investment Bank (NIB) is repayable in two equal annual installments in 2024 and 2025.

³The bond has a one-time redemption premium at maturity of EUR 4 million in case Nokia does not meet its commitment to reduce its greenhouse gas (GHG) emissions (in tCO₂ e) across its value chain (Scope 1, 2, and 3) by 50% between 2019 and 2030. This target is one of Nokia's key sustainability targets and has been selected to be the Sustainability Performance Target in Nokia's Sustainable Finance Framework that enables the issuance of sustainability-linked financing instruments.

Significant credit facilities and funding programs

Financing arrangement	Committed/uncommitted	Currency	Nominal (million)	Utilized (million)	
				31 December 2023	31 December 2022
Revolving Credit Facility ¹	Committed	EUR	1 500	—	—
Finnish Commercial Paper Programme	Uncommitted	EUR	750	—	—
Euro-Commercial Paper Programme	Uncommitted	EUR	1 500	—	—
Euro Medium Term Note Programme ²	Uncommitted	EUR	5 000	2 300	2 500

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

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

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

8. PROVISIONS

EUR million	Restructuring	Warranty	Litigation and Environmental	Project losses	Other ¹	Total
At 1 January 2023	193	221	253	207	561	1 435
Charged to income statement						
<i>Additions</i>	316	177	52	10	204	759
<i>Reversals</i>	—	(51)	(13)	—	(199)	(263)
Total charged to income statement	316	126	39	10	5	496
Utilized during period ²	(254)	(147)	(29)	(107)	(109)	(646)
Translation differences and other	—	—	(12)	—	(11)	(23)
At 31 December 2023	255	200	251	110	446	1 262
Non-current	75	20	156	89	178	518
Current	180	180	95	21	268	744

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

²The utilization of restructuring provision includes items transferred to accrued expenses, of which EUR 65 million remained in accrued expenses at 31 December 2023.

9. COMMITMENTS, CONTINGENCIES AND LEGAL PROCEEDINGS

EUR million	31 December 2023	31 December 2022
Contingent liabilities on behalf of Group companies		
Guarantees issued by financial institutions		
Commercial guarantees	1 477	1 238
Non-commercial guarantees	615	538
Corporate guarantees		
Commercial guarantees	325	504
Non-commercial guarantees	35	32
Financing commitments		
Customer finance commitments	5	26
Venture fund commitments	381	433

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 annual consolidated financial statements for 2022:

Continental

In 2019, Continental Automotive Systems (Continental) brought breach of FRAND (fair, reasonable and non-discriminatory terms) and antitrust claims against Nokia and others. The antitrust claims were dismissed. In 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 2021. In the beginning of 2023, Nokia's motion to dismiss was granted in part and denied in part, and the action is proceeding on the remaining claims at this time.

OPPO

In 2021, Nokia commenced patent infringement proceedings against OPPO, OnePlus and Realme in several countries in Asia and Europe. OPPO responded by filing invalidation actions and patent infringement actions against Nokia in Germany, China and Finland and actions in China against Nokia relating to standard essential patent licensing issues. In January 2024, Nokia announced that it has concluded a multi-year patent cross-license agreement with OPPO. Under the agreement OPPO will make royalty payments, along with catch-up payments to cover the periods of non-payment. The agreement resolves all pending patent litigation between the parties, in all jurisdictions.

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. Nokia has had patents confirmed as infringed by Vivo in Germany.

Amazon

In 2023, Nokia commenced patent infringement proceedings against Amazon in Germany, the European Unified Patent Court, India, the United Kingdom, the United States (International Trade Commission/District Court) and Brazil. Across these actions, more than 30 patents are in suit, covering video-related technologies implemented in Amazon's services and devices.

HP

In 2023, Nokia commenced patent infringement proceedings against HP in the United States (International Trade Commission/District Court), Brazil, Germany and the European Unified Patent Court. Across these actions, there are 14 patents in suit, covering video coding technologies implemented in HP's products.

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.

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 flows 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 to service and repay interest-bearing financial liabilities, including lease liabilities, make investments to grow business and distribute funds to shareholders. 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

Q4'23

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 associates and joint ventures	Financial income and expenses	Income tax (expense)/benefit	Profit/(loss) from continuing operations
Comparable	(3 246)	(1 034)	(626)	45	846	4	(32)	(250)	568
Restructuring and associated charges	(76)	(19)	(85)	(1)	(181)	—	—	37	(145)
Amortization of acquired intangible assets	—	(13)	(76)	—	(88)	—	—	17	(72)
Impairment and write-off of assets, net of reversals	—	(26)	—	—	(26)	—	—	5	(21)
Change in provisions related to past acquisitions	—	—	—	(3)	(3)	—	—	1	(2)
Costs associated with country exit	—	—	—	1	1	—	—	—	1
Divestment of businesses	—	—	—	(1)	(1)	—	—	—	—
Change in financial liability to acquire NSB non-controlling interest	—	—	—	—	—	—	(7)	—	(7)
Operating model change	—	—	—	—	—	—	—	(392)	(392)
Deferred tax benefit due to tax rate changes	—	—	—	—	—	—	—	30	30
Items affecting comparability	(76)	(58)	(161)	(4)	(299)	—	(7)	(302)	(608)
Reported	(3 322)	(1 092)	(787)	41	547	4	(39)	(552)	(40)

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 associates and joint ventures	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	(4 212)	(1 189)	(727)	(168)	1 154	39	1	(265)	929
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 benefit due to tax rate changes	—	—	—	—	—	—	—	24	24
Items affecting comparability	(51)	(33)	(112)	(76)	(272)	(13)	(31)	2 537	2 221
Reported	(4 262)	(1 222)	(838)	(244)	882	26	(30)	2 272	3 150

Q1-Q4'23

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 associates and joint ventures	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	(13 420)	(4 190)	(2 490)	217	2 375	(11)	(137)	(605)	1 623
Restructuring and associated charges	(151)	(61)	(138)	(6)	(356)	—	—	69	(288)
Amortization of acquired intangible assets	—	(51)	(301)	—	(352)	—	—	79	(273)
Costs associated with country exit	—	—	—	49	49	—	—	(10)	39
Change in provisions related to past acquisitions	—	—	—	(23)	(23)	—	—	5	(18)
Divestment of businesses	(1)	—	—	21	20	—	(11)	(6)	3
Impairment and write-off of assets, net of reversals	—	(25)	—	—	(25)	(28)	—	5	(48)
Change in financial liability to acquire NSB non-controlling interest	—	—	—	—	—	—	(2)	—	(2)
Operating model change	—	—	—	—	—	—	—	(392)	(392)
Deferred tax benefit due to tax rate changes	—	—	—	—	—	—	—	30	30
Items Affecting comparability	(151)	(137)	(439)	40	(687)	(28)	(13)	(220)	(949)
Reported	(13 571)	(4 327)	(2 929)	257	1 688	(39)	(150)	(825)	674

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 associates and joint ventures	Financial income and expenses	Income tax (expense)/benefit	Profit from continuing operations
Comparable	(14 589)	(4 449)	(2 604)	(160)	3 109	(13)	(38)	(577)	2 481
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 benefit due to tax rate changes	—	—	—	—	—	—	—	24	24
Items affecting comparability	(100)	(101)	(409)	(181)	(791)	(13)	(70)	2 603	1 729
Reported	(14 689)	(4 550)	(3 013)	(341)	2 318	(26)	(108)	2 026	4 210

Net cash and interest-bearing financial investments

EUR million	31 December 2023	30 September 2023	30 June 2023	31 March 2023	31 December 2022
Non-current interest-bearing financial investments	715	794	865	898	697
Current interest-bearing financial investments	1 565	1 698	1 860	2 889	3 080
Cash and cash equivalents	6 234	4 605	5 106	4 827	5 467
Total cash and interest-bearing financial investments	8 514	7 097	7 831	8 614	9 244
Long-term interest-bearing liabilities ¹	3 637	3 562	3 584	3 704	4 249
Short-term interest-bearing liabilities ¹	554	575	587	606	228
Total interest-bearing liabilities	4 191	4 137	4 171	4 310	4 477
Net cash and interest-bearing financial investments	4 323	2 960	3 660	4 304	4 767

¹ Lease liabilities are not included in interest-bearing liabilities

Free cash flow

EUR million	Q4'23	Q4'22	Q1-Q4'23	Q1-Q4'22
Net cash flows from operating activities	1 870	567	1 317	1 474
Purchase of property, plant and equipment and intangible assets	(149)	(195)	(652)	(601)
Proceeds from sale of property, plant and equipment and intangible assets	46	—	189	33
Purchase of other non-current financial investments	(26)	(13)	(83)	(115)
Proceeds from sale of other non-current financial investments	3	5	34	49
Free cash flow	1 744	364	805	840

Comparable return on invested capital (ROIC) Q4'23

EUR million	Rolling four quarters	Q4'23	Q3'23	Q2'23	Q1'23
Comparable operating profit	2 375	846	424	626	479
Comparable profit before tax	2 228	818	384	562	464
Comparable income tax expense	(605)	(250)	(85)	(148)	(122)
Comparable operating profit after tax	1 731	587	330	461	353

EUR million	Average	31 December 2023	30 September 2023	30 June 2023	31 March 2023	31 December 2022
Total equity	21 211	20 628	21 351	21 276	21 375	21 426
Total interest-bearing liabilities	4 257	4 191	4 137	4 171	4 310	4 477
Total cash and interest-bearing financial investments	8 260	8 514	7 097	7 831	8 614	9 244
Invested capital	17 208	16 305	18 391	17 616	17 071	16 659

Comparable ROIC **10.1%**

Q3'23

EUR million	Rolling four quarters	Q3'23	Q2'23	Q1'23	Q4'22
Comparable operating profit	2 683	424	626	479	1 154
Comparable profit before tax	2 604	384	562	464	1 194
Comparable income tax expense	(620)	(85)	(148)	(122)	(265)
Comparable operating profit after tax	2 042	330	461	353	898

EUR million	Average	30 September 2023	30 June 2023	31 March 2023	31 December 2022	30 September 2022
Total equity	21 045	21 351	21 276	21 375	21 426	19 797
Total interest-bearing liabilities	4 338	4 137	4 171	4 310	4 477	4 596
Total cash and interest-bearing financial investments	8 407	7 097	7 831	8 614	9 244	9 251
Invested capital	16 976	18 391	17 616	17 071	16 659	15 143

Comparable ROIC **12.0%**

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)
Comparable operating profit after tax	2 526	899	544	614	469

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
Invested capital	14 462	16 659	15 143	14 480	13 179	12 847

Comparable ROIC **17.5%**

This financial report was approved by the Board of Directors on 25 January 2024.

Media and Investor Contacts:

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

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

- Nokia plans to publish its "Nokia in 2023" annual report, which includes the review by the Board of Directors and the audited annual accounts, during the week starting on 26 February 2024.
- Nokia's Annual General Meeting 2024 is planned to be held on 3 April 2024.
- Nokia plans to publish its first quarter 2024 results on 18 April 2024.
- Nokia plans to publish its second quarter and half year 2024 results on 18 July 2024.
- Nokia plans to publish its third quarter and January-September 2024 results on 17 October 2024.