Nokia

Company report

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This report is a summary translation of the report “Markkinatilanne pakottaa puolustusasemiin” published on 10/20/2023 at 7:50 am EEST.

Market situation forces to defensive positions

Nokia's market situation has continued to deteriorate, and the company will have to make significant cost savings in the coming years to defend its profitability. With a declining earnings trend, it is difficult to see any material upside to the share's low valuation multiples and future restructuring costs will erode free cash flow in the coming years. The company should still be able to generate a reasonably good cash flow in the coming years, which will be returned to shareholders. However, relying on this alone does not provide a sufficiently attractive expected return. Hence, we lower Nokia's recommendation to Reduce (was Accumulate) and target price to EUR 3.2 (was 4.0 EUR).

Clearly weaker-than-expected Q3 result and major efficiency program

Nokia's Q3 figures for both net sales (5.0 BEUR) and comparable EBIT (424 MEUR) were well below expectations (consensus 5.7 BEUR and 550 MEUR). The slowdown in operators' investments and the decline in inventory levels, especially in North America, led to an even steeper than expected decline in Mobile Networks and Network Infrastructure revenues, which was also reflected in earnings. In response to the weakened near-term outlook, Nokia announced that it is launching an efficiency program with annual savings of EUR 800-1,200 million (by 2026) to defend its profitability. Measures include increasing the autonomy of business units and simplifying the operating model (e.g. separate sales teams for each unit). The adjustment of the cost structure will focus in particular on Mobile Networks, Cloud and Network Services for group-wide operations.

Free cash flow forecasts for the coming years clearly down, guidance calls for good performance in Q4

Our forecast for 2023 puts us at the lower end of Nokia's unchanged guidance for both net sales (23.2 BEUR) and profitability (11.7%). This will require a good performance in all business units in Q4 and the resolution of the patent disputes with Oppo and Vivo, with the risk of a profit warning hanging over the rest of the year. At this point, all eyes are already on next year, for which there is considerable uncertainty over the outlook. The significant savings program announced naturally indicates that the company is preparing for a difficult year on the assumption that the market situation will not yet start to ease substantially. We revised our net sales estimates for the coming years downwards by 7%, the effects of which are also reflected in the profit margins, despite the cost savings that we assume. One-off restructuring charges will weigh on Nokia's cash flow in the coming years and our FCF forecasts for 2024-2026 were slashed by over 20%.

Valuation is low, but with a downward earnings trend, short-term upside drivers are few and far between

Nokia's adjusted earnings multiples (2024e P/E 9x, EV/EBIT 5.5x) look low, as has been the case for some time. With earnings growth going in the wrong direction when looking at next year, it is difficult to see a material correction in the multiples without a general pick-up in stock market sentiment. At reported earnings (2024e-2025e P/E 14-11x), the valuation is rather neutral, and now a significant part of the adjustments in the coming years have a cash flow impact. If the weakening market situation no longer materially erodes Nokia's still strong net cash position, the company should be able to distribute virtually all free cash flow back to shareholders starting next year. Based on our projections, Nokia will generate around EUR 1.4-1.6 billion in FCF per annum between 2024 and 2026, which implies a cash flow yield of around 9% at the current share price. This is still a fairly high level, but in a falling stock market its relative attractiveness has declined. Thus, without earnings growth and a substantial increase in valuation multiples, the expected return on the share relies on the capital returned to shareholders.

Recommendation

Reduce
(previous Accumulate)

EUR 3.20
(previous EUR 4.00)

Share price:
3.05

Key figures

	2022	2023e	2024e	2025e
Revenue	24,911	23,215	22,403	22,603
growth-%	12%	-7%	-3%	1%
EBIT adj.	3,109	2,724	2,523	2,738
EBIT-% adj.	12.5 %	11.7 %	11.3 %	12.1 %
Net Income	4,201	1,455	1,216	1,509
EPS (adj.)	0.44	0.35	0.33	0.36

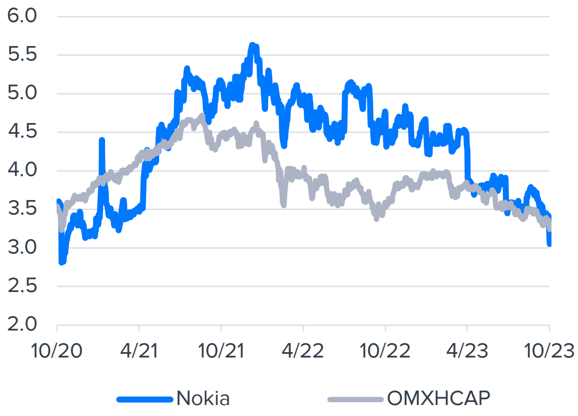
P/E (adj.)	9.9	8.8	9.2	8.4
P/B	1.1	0.8	0.8	0.7
Dividend yield-%	2.8 %	5.2 %	5.9 %	7.2 %
EV/EBIT (adj.)	7.0	5.3	5.5	4.9
EV/EBITDA	6.3	4.4	5.1	4.4
EV/S	0.9	0.6	0.6	0.6

Source: Inderes

Guidance (Unchanged)

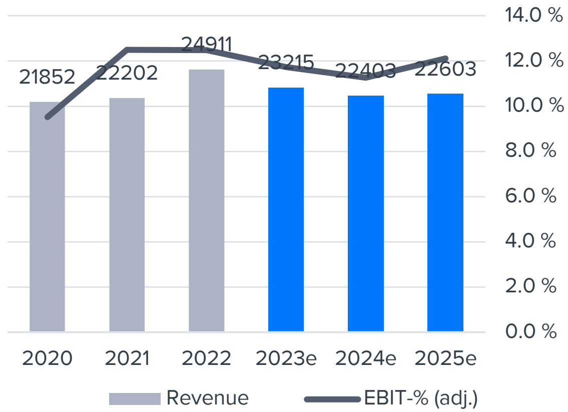
2023 Net sales EUR 23.2-24.6 billion and comparable operating profit 11.5-13.0%

Share price



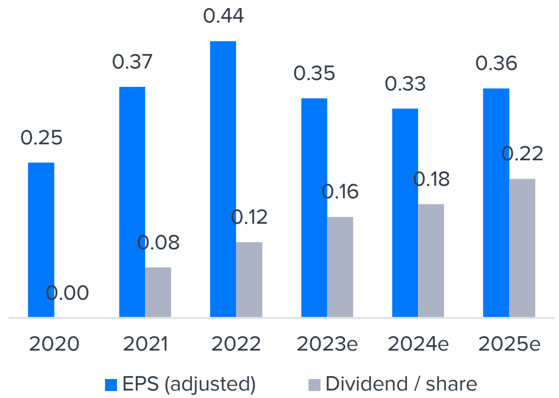
Source: Millistream Market Data AB

Revenue and EBIT-%



Source: Inderes

EPS and dividend



Source: Inderes

Value drivers

- Carrying out cost savings measures to defend profitability in a declining market
- Normalization of difficult market conditions
- Strong net cash position and improving cash flow profile will allow for increased profit distribution in the coming years
- Huawei sanctions open up opportunities
- Strategic value of Nokia’s technologies

Risk factors

- Fierce competitive pressure on the market and price erosion
- The impact of the worsening economic outlook and rising interest rates on operators' investments
- Prolongation of patent disputes and timing of license fees in Nokia Technologies
- The size of Nokia's target market has remained relatively stable over the long term, limiting earnings growth potential

Valuation	2023e	2024e	2025e
Share price	3.05	3.05	3.05
Number of shares, million:	5540.3	5540.3	5540.3
Market cap	16898	16898	16898
EV	14330	13848	13341
P/E (adj.)	8.8	9.2	8.4
P/E	11.6	13.9	11.2
P/B	0.8	0.8	0.7
P/S	0.7	0.8	0.7
EV/Sales	0.6	0.6	0.6
EV/EBITDA	4.4	5.1	4.4
EV/EBIT (adj.)	5.3	5.5	4.9
Payout ratio (%)	61%	82%	81%
Dividend yield-%	5.2 %	5.9 %	7.2 %

Source: Inderes

Q3 result clearly below expectations

Net sales down clearly more than expected

Nokia Q3 net sales fell 20% to EUR 5.0 billion, well below the consensus forecast of EUR 5.7 billion. In constant currency, net sales fell by 15%.

In Mobile Networks, currency-adjusted net sales fell by 19%, reflecting a slowdown in operators' investments and lower inventory levels, particularly in North America, which were not fully offset by large 5G projects in India. The effect was even more pronounced than expected, with growth in India already starting to slow down a little from the levels seen earlier in the year. Nokia's group-wide revenue in India grew 121% in Q3, while North America saw a 40% decline, similar to Q2. Despite the current soft development of Mobile Networks, Nokia has been able to increase its market share outside China by almost 4 percentage points to 27% from the beginning of 2022. We believe this reflects not only the improved competitiveness of the company, but also the benefits of the Huawei sanctions.

In Network Infrastructure, net sales declined by 14% from a strong comparison period as de-stocking and economic uncertainty affected investments. The decline was particularly marked in Fixed Networks (-14%) and IP Networks (-24%), while sales in Optical Networks grew by 4%, driven by India.

In Cloud and Network Services, currency-adjusted net sales fell 2%, which was a slightly softer-than-expected result.

Nokia Technologies' net sales (Q3'23: 258 MEUR, -14%) were down, as expected, as patent disputes with Oppo and Vivo are still pending. In its outlook, the company expects a settlement to be reached in Q4, but again commented that it is putting the value of its IPR rights ahead of time pressure. The unit's annualized net sales now stands at EUR 1.0 billion and would rise back to the EUR 1.4-1.5 billion range once the smartphone license renewal cycle is completed and some growth is achieved in certain new areas.

Profit weakened with net sales

Nokia's comparable EBIT decreased by 36% to EUR 424 million (Q3'22: 658 MEUR), well below our (527 MEUR) and consensus (550 MEUR) expectations. Reflecting this, adjusted EPS was also below expectations.

In Mobile Networks, the change in geographic focus and the sharp decline in net sales were strongly reflected in the EBIT margin (Q3'23: 4.6% vs. Q3'22: 9.8%).

Profitability in Network Infrastructure (EBIT Q3'23: 9.5%) was at a reasonably good level, but clearly down from the strong level of H1 (13-15%). As a result, profitability fell short of our forecast (12.3%), which still expected a year-on-year improvement.

In Cloud and Network Services, EBIT (4.9%) improved by 2.9 percentage points, but profitability remains unsatisfactory.

As expected, the lack of patent revenues was reflected in the weak performance of Nokia Technologies (Q3'23: 181 MEUR), which was nevertheless slightly better than expected.

Nokia's free cash flow (Q3'23: -412 MEUR) was weak still with major Indian projects tying up working capital. With this and the dividend payment, net cash had fallen to EUR 3.0 billion (Q2'23: 3.7 BEUR). Based on Nokia's outlook, cash flow should clearly strengthen in Q4.

Estimates	Q3'22	Q3'23	Q3'23e	Q3'23e	Consensus			Difference (%)	2023e
MEUR / EUR	Comparison	Actualized	Inderes	Consensus	Low		High	Act. vs. inderes	Inderes
Revenue	6242	4982	5612	5672	5410	-	5980	-11%	23215
EBIT (adj.)	658	424	527	550	432	-	752	-20%	2724
EBIT	518	241	407	438	323	-	662	-41%	2156
PTP	509	179	399	430	301	-	643	-55%	1983
EPS (adj.)	0.10	0.05	0.07	0.07	0.06	-	0.10	-25%	0.35
EPS (reported)	0.08	0.02	0.05	0.06	0.04	-	0.09	-53%	0.26
Revenue growth-%	15.6 %	-20.2 %	-10.1 %	-9.1 %	-13.3 %	-	-4.2 %	-10.1 pp	-6.8 %
EBIT-% (adj.)	10.5 %	8.5 %	9.4 %	9.7 %	8.0 %	-	12.6 %	-0.9 pp	11.7 %

Source: Inderes & Infront (consensus)

Major efficiency program to defend profitability in a weak market

Nokia's efficiency program announced on the morning of the Q3 results day is based on accelerated execution of strategy, streamlining of the operating model and adjustment of the cost structure.

Nokia said it will increase the autonomy and agility of its four business groups to accelerate the execution of its strategy. The change will allow business groups to better seize the opportunities they see in their markets, both with existing and new customers. They can also be more agile in expanding their operations, building partnerships, adopting new business models and investing in technology leadership.

Streamlining the business model involves building own sales teams within the business groups. Own sales teams have better product knowledge, and they strengthen the link between business teams and customers. At the same time, the aim is to streamline group-level functions.

Nokia intends to adjust its cost structure and aims to achieve annual gross cost savings of EUR 800-1,200 million by the end of 2026 compared to 2023. This means a 10-15% reduction in personnel costs. Nokia aims to implement the program quickly and achieve savings of at least EUR 400 million in 2024 and a further EUR 300 million in 2025. The planned restructuring is expected to lead to an organization of 72,000-77,000 employees, instead of the current 86,000. The final need for reductions will ultimately depend on how the market situation develops. The savings are mainly in Mobile Networks and Cloud and Network Services, as well as in group-wide operations.

The restructuring will result in a one-off accounting and cash impact charge, which Nokia expects to be equivalent to the targeted annual savings. We have provisionally added additional one-off items of around EUR 1,000 million to the forecasts for 2024-2026, which weigh on the reported result figures and cash flow.

Nokia continues to target an EBIT margin of over 14% by 2026. In our view, cost savings alone will not be enough to achieve this goal, but significant net sales growth is also required. In light of Nokia's historical performance and the market environment, the target currently seems very ambitious, and our profitability estimates are well below the target level.

Free cash flow projections for the coming years down by over 20%

Risk of a profit warning hangs over the rest of the year

Nokia reiterated the outlook downgraded in the July profit warning, anticipating net sales of EUR 23.2-24.6 billion and a comparable operating profit of 11.5-13.0% for this year. The company commented that the current net sales outlook closer to the lower end of the guidance range and comparable EBIT outlook to be in the middle of the range, assuming the patent disputes in Nokia Technologies will be resolved this year.

Following the Q3 results, we slightly lowered our forecast for the current year, which puts us at the lower end of the guidance range for both revenue (23.2 BEUR) and profitability (11.7%). This will require a good performance in all business units in Q4 and the resolution of the patent disputes. Thus, the timing of patent income in particular means that there is a risk of a profit warning hanging over the rest of the year. Moreover, in a weaker market environment the performance of other units may also fall short of expectations. However, Nokia has already reported earlier this year that earnings will be more heavily weighted towards Q4 than in previous years, and the company's forecast for Q4, based on customers' investment plans and an unchanged outlook, still seems to hold.

2024 still shrouded in fog

At this point, the focus is already on next year, for which there is considerable uncertainty over the outlook, and Nokia did not yet comment much on the outlook for next year in the earnings call. The savings program announced naturally indicates that the company is preparing for a difficult year on the assumption that the market situation will not yet start to ease substantially. On Network Infrastructure, the company commented that it can already see small positive signs in some places, but in the big picture the investment outlook is unclear. If the economic outlook starts to brighten and/or interest rates start to fall, operators' investment taps would probably start to open again. Nokia's view also remains that the 5G cycle has not been fully completed, and that the continued growth in data traffic will force operators to continue upgrading their networks sooner or later.

We revised our net sales estimates for the coming years downwards by 7%, the effects of which are also reflected in the profit margins, despite the cost savings that we assume. Restructuring one-offs will weigh on Nokia's cash flow in the coming years, and we now expect Nokia's free cash flow in 2024-2026 to be around EUR 1.4-1.6 billion (was 1.9-2.0 BEUR). Calculated from comparable EBIT, the cash flow ratio would therefore be 54-57%, while Nokia's long-term target is 55-85%.

Estimate revisions MEUR / EUR	2023e Old	2023e New	Change %	2024e Old	2024e New	Change %	2025e Old	2025e New	Change %
Revenue	23877	23215	-3%	24034	22403	-7%	24293	22603	-7%
EBITDA	3399	3222	-5%	3332	2710	-19%	3473	3043	-12%
EBIT (exc. NRIs)	2785	2724	-2%	2743	2523	-8%	2816	2738	-3%
EBIT	2339	2156	-8%	2343	1723	-26%	2516	2088	-17%
PTP	2230	1983	-11%	2273	1628	-28%	2446	2018	-18%
EPS (excl. NRIs)	0.36	0.35	-3%	0.36	0.33	-9%	0.37	0.36	-3%
DPS	0.18	0.16	-11%	0.20	0.18	-10%	0.24	0.22	-8%

Source: Inderes

Estimate changes by division

Estimate revisions	2023e	2023e	Change	2024e	2024e	Change	2025e	2025e	Change
EUR million / EUR	**Old**	**New**	**%**	**Old**	**New**	**%**	**Old**	**New**	**%**
Revenue	**23877**	**23215**	**-3%**	**24034**	**22403**	**-7%**	**24293**	**22603**	**-7%**
Mobile Networks	10392	10041	-3%	10496	9645	-8%	10601	9636	-9%
Network Infrastructure	8515	8269	-3%	8599	8175	-5%	8685	8339	-4%
Nokia Technologies	1476	1524	3%	1373	1290	-6%	1373	1367	0%
Cloud and Network Services	3343	3250	-3%	3411	3168	-7%	3480	3136	-10%
Others	164	146	-11%	170	140	-18%	170	140	-18%
NRIs/non-IFRS adjustments	-13.0	-15.0	15%	-15.0	-15.0	0%	-15.0	-15.0	0%
EBITDA	**3399**	**3222**	**-5%**	**3332**	**2710**	**-19%**	**3473**	**3043**	**-12%**
EBIT excluding NRIs	**2785**	**2724**	**-2%**	**2743**	**2523**	**-8%**	**2816**	**2738**	**-3%**
EBIT	**2339**	**2156**	**-8%**	**2343**	**1723**	**-26%**	**2516**	**2088**	**-17%**
Mobile Networks	736	701	-5%	811	748	-8%	861	817	-5%
Network Infrastructure	1143	1062	-7%	1092	975	-11%	1096	1017	-7%
Nokia Technologies	1082	1154	7%	985	927	-6%	985	995	1%
Cloud and Network Services	224	205	-9%	225	243	8%	244	259	6%
Others	-402	-399	-1%	-370	-370	0%	-370	-350	-5%
NRIs/non-IFRS adjustments	-446	-568	27%	-400	-800	100%	-300	-650	117%
PTP	**2230**	**1983**	**-11%**	**2273**	**1628**	**-28%**	**2446**	**2018**	**-18%**
EPS (adjusted)	**0.36**	**0.35**	**-3%**	**0.36**	**0.33**	**-9%**	**0.37**	**0.36**	**-3%**
DPS	0.18	0.16	-11%	0.20	0.18	-10%	0.24	0.22	-8%

Source: Inderes

Summary of estimates

Mobile Networks	2021	2022	2023e	2024e	2025e	2026e
Revenue	**9718**	**10672**	**10041**	**9645**	**9636**	**9732**
growth %	*-6.5%*	*9.8%*	*-5.9%*	*-3.9%*	*-0.1%*	*1.0%*
Gross margin	**3638**	**4095**	**3440**	**3453**	**3517**	**3581**
Gross margin	37.4%	38.4%	34.3%	35.8%	36.5%	36.8%
EBIT	**764**	**941**	**702**	**748**	**817**	**851**
EBIT-%	7.9%	8.8%	7.0%	7.8%	8.5%	8.7%

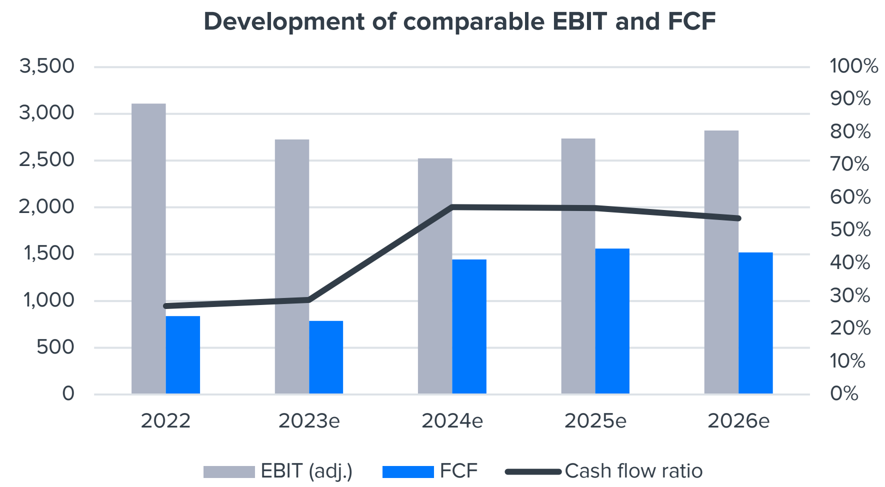
Network Infrastructure	2021	2022	2023e	2024e	2025e	2026e
Revenue	**7674**	**9047**	**8268**	**8175**	**8339**	**8505**
growth %	*13.9%*	*17.9%*	*-8.6%*	*-1.1%*	*2.0%*	*2.0%*
Gross margin	**2684**	**3309**	**3072**	**3020**	**3077**	**3130**
Gross margin	*35.0%*	*36.6%*	*37.2%*	*36.9%*	*36.9%*	*36.8%*
EBIT	**784**	**1101**	**1062**	**975**	**1017**	**1050**
EBIT-%	*10.2%*	*12.2%*	*12.8%*	*11.9%*	*12.2%*	*12.3%*

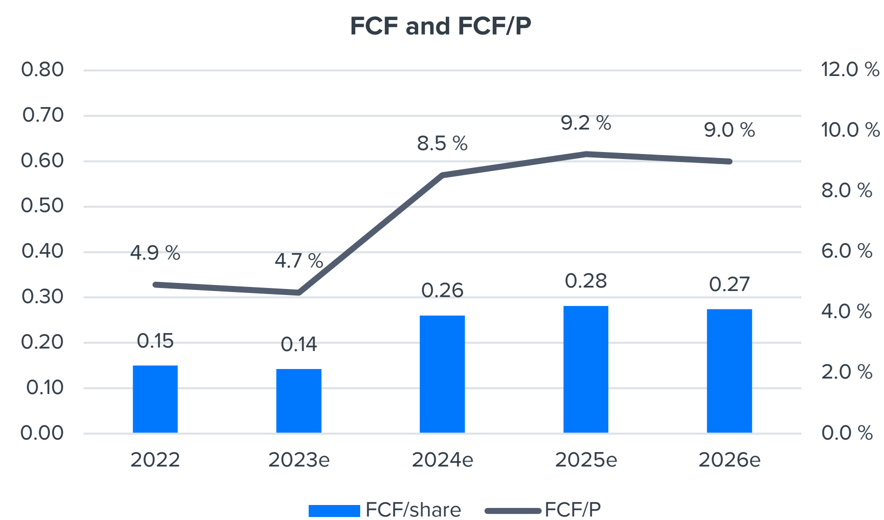
Cloud and Network Services	2021	2022	2023e	2024e	2025e	2026e
Revenue	**3089**	**3350**	**3251**	**3168**	**3136**	**3136**
growth %	*0.1%*	*8.4%*	*-3.0%*	*-2.5%*	*-1.0%*	*0.0%*
Gross margin	**1160**	**1340**	**1254**	**1263**	**1289**	**1292**
Gross margin	*37.6%*	*40.0%*	*38.6%*	*39.9%*	*41.1%*	*41.2%*
EBIT	**166**	**178**	**205**	**243**	**259**	**261**
EBIT-%	*5.4%*	*5.3%*	*6.3%*	*7.7%*	*8.3%*	*8.3%*

Nokia Technologies	2021	2022	2023e	2024e	2025e	2026e
Revenue	**1501**	**1595**	**1524**	**1290**	**1367**	**1381**
growth %	*7.1%*	*6.3%*	*-4.5%*	*-15.4%*	*6.0%*	*1.0%*
EBIT	**1185**	**1208**	**1155**	**927**	**995**	**1008**
EBIT-%	*78.9%*	*75.7%*	*75.8%*	*71.9%*	*72.7%*	*73.0%*

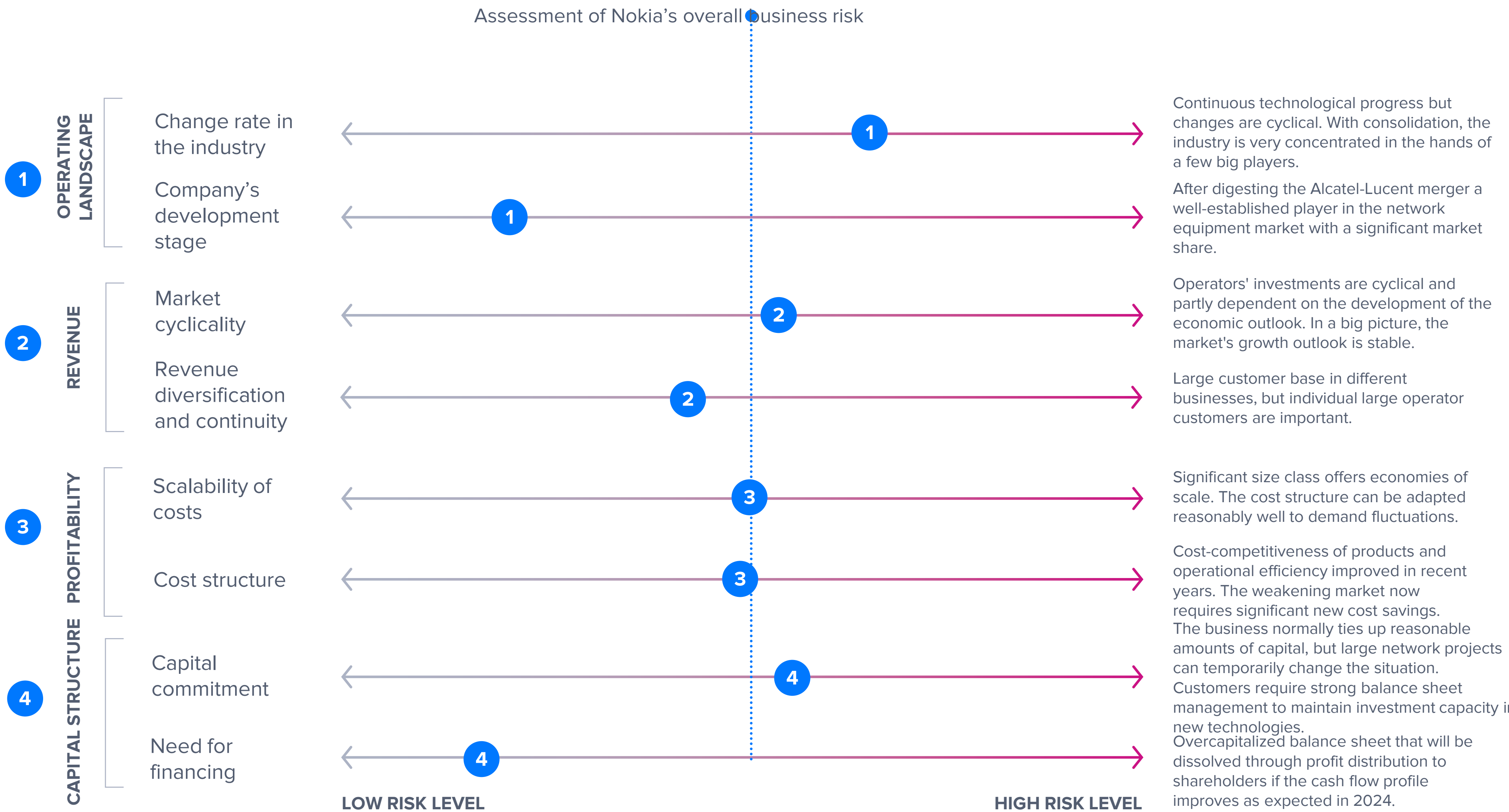
Share group functions and other	2021	2022	2023e	2024e	2025e	2026e
Revenue	**257**	**296**	**145**	**140**	**140**	**140**
growth %	*-4.3%*	*15.2%*	*-51.0%*	*-3.4%*	*0.0%*	*0.0%*
EBIT	**-124**	**-318**	**-400**	**-370**	**-350**	**-350**

Source: Inderes





Risk profile of the business model



Source: Inderes

Valuation

SOTP indicates upside, but in a weak market the drivers are missing

We approach the valuation of Nokia partly through SOTP. We price each company's business unit separately based on our 2024 estimates. In addition, we have tried to take into account the cash flow impact of restructuring, net cash and the estimated present value of other businesses and group expenses.

We value Nokia Technologies at 6x-8x EV/EBIT. The value of the unit is thus EUR 5.6-7.4 billion. The growth outlook for Nokia Technologies is modest, but in the medium term, stable cash flows support value.

We price Network Infrastructure, which is performing very well, at an earnings multiple of 7x-9x and expect the unit to deliver a solid good performance in the medium term. The value of the unit is thus EUR 6.8-8.8 billion. The unit has grown very strongly in recent years and profitability has already reached a very good level. Thus, it will be challenging to generate earnings growth in a declining market.

Cloud and Network Services, which are currently still underperforming, are valued at an EV/EBIT multiple of 6.0-7.0x, resulting in a unit value of EUR 1.5-1.7 billion. In addition to weak profitability, the current sluggish growth supports moderate multiples.

For Mobile Networks, we have assumed a 6.0-8.0x EV/EBIT, making the unit worth EUR 4.5-6.0 billion. Our 2024 estimate now expects an EBIT margin of 7.8% from the unit and we do not consider reaching the long-term profitability target (>10%) realistic in a weakening market, despite the upcoming cost savings.

Under these assumptions, the total amount of the SOTP is EUR 20 billion (EUR 3.7/share) with a range of EUR 17-24 billion (EUR 3.1-4.3/share). Thus, the SOTP thus indicates that the stock would have clear upside, although we do not see the multiples recovering to the level of the neutral scenario in a weakening market. Thus, we do not see SOTP as a driver of valuation in the short term. To some extent, however, it is a reminder of Nokia's latent potential if the company's strategy goes well and uncertainty about its earnings growth prospects somewhat dissipates, e.g., when the market recovers.

Less excess to distribute to shareholders with lowered cash flow projections

In light of Nokia's current net cash position and its target level (10-15%), the company should start distributing most of its earnings back to shareholders in the future if free cash flow starts to improve in line with the company's targets from next year. The weakened market situation has contributed to the uncertainty in this respect. This means that the additional dividend the company had planned to pay in the spring may also remain a pipe dream. If Nokia decided to distribute its entire free cash flow back to shareholders, this would mean a dividend yield of around 8.5-9.2% with our 2024-2026 estimates. Some of the profits will probably be returned through share buybacks, so the dividend yield will not be quite this high. The company may also make smaller complementary acquisitions, in which case part of the capital would be allocated to these. With our current estimates, the cash flow yield is no longer as attractive as we previously assumed, but still offers a reasonable return. However, in a falling stock market its relative attractiveness has declined.

Sum-of-the-parts calculation

Nokia Technologies	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	0.9	0.9	0.9
X valuation multiple	6.0	7.0	8.0
EV	**5.6**	**6.5**	**7.4**
Per share (EUR)	*1.0*	*1.2*	*1.3*

Network Infrastructure	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	1.0	1.0	1.0
X valuation multiple	7.0	8.0	9.0
EV	**6.8**	**7.8**	**8.8**
Per share (EUR)	*1.2*	*1.4*	*1.6*

Cloud and Network Services	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	0.2	0.2	0.2
X valuation multiple	6.0	6.5	7.0
EV	**1.5**	**1.6**	**1.7**
Per share (EUR)	*0.3*	*0.3*	*0.3*

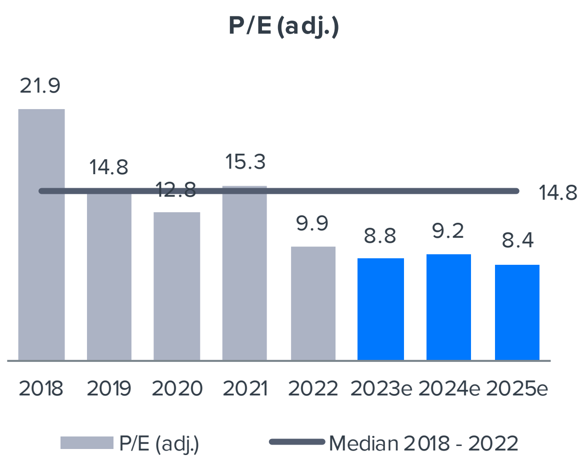
Mobile Networks	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	0.7	0.7	0.7
X valuation multiple	6.0	7.0	8.0
EV	**4.5**	**5.2**	**6.0**
Per share (EUR)	*0.8*	*0.9*	*1.1*

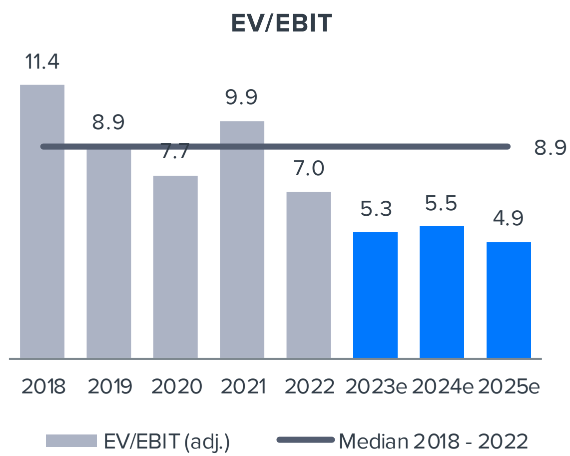
Total	Lower end	Neutral	Upper end
Aggregate EV	18.3	21.1	23.9
Other operating and group costs (NPV)	-3.0	-2.5	-2.0
Net cash at the end of Q3'23	3.0	3.0	3.0
Costs for restructuring	-1.4	-1.2	-1.0
SOTP total	17	20	24
Per share (EUR)	*3.1*	*3.7*	*4.3*

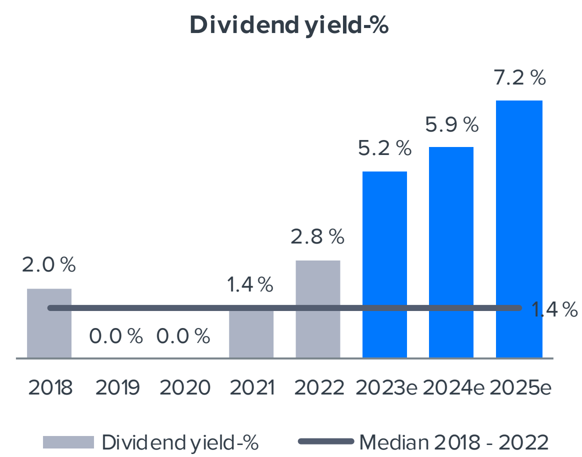
Valuation table

Valuation	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Share price	5.03	3.30	3.15	5.57	4.33	**3.05**	**3.05**	**3.05**	**3.05**
Number of shares, millions	5593	5606	5617	5629	5590	**5540**	**5540**	**5540**	**5540**
Market cap	28133	18476	17701	31378	24189	**16898**	**16898**	**16898**	**16898**
EV	24912	17799	15938	27543	21648	**14330**	**13848**	**13341**	**13078**
P/E (adj.)	21.9	14.8	12.8	15.3	9.9	**8.8**	**9.2**	**8.4**	**8.1**
P/E	neg.	>100	neg.	19.3	5.7	**11.6**	**13.9**	**11.2**	**9.7**
P/B	1.8	1.2	1.4	1.8	1.1	**0.8**	**0.8**	**0.7**	**0.7**
P/S	1.2	0.8	0.8	1.4	1.0	**0.7**	**0.8**	**0.7**	**0.7**
EV/Sales	1.1	0.8	0.7	1.2	0.9	**0.6**	**0.6**	**0.6**	**0.6**
EV/EBITDA	17.9	8.3	7.9	8.5	6.3	**4.4**	**5.1**	**4.4**	**4.3**
EV/EBIT (adj.)	11.4	8.9	7.7	9.9	7.0	**5.3**	**5.5**	**4.9**	**4.6**
Payout ratio (%)	neg.	0.0 %	0.0 %	27.7 %	15.8 %	**61.0 %**	**82.0 %**	**80.8 %**	**76.4 %**
Dividend yield-%	2.0 %	0.0 %	0.0 %	1.4 %	2.8 %	**5.2 %**	**5.9 %**	**7.2 %**	**7.9 %**

Source: Inderes







Peer group valuation

Peer group valuation	Market cap	EV	EV/EBIT		EV/EBITDA		EV/S		P/E		Dividend yield-%		P/B
Company	**MEUR**	**MEUR**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**	**2024e**	**2023e**
Qualcomm	117525	123990	11.9	10.9	10.0	9.8	3.7	3.5	13.4	12.1	2.8	2.9	6.0
Ciena	5951	6233	11.7	9.9	9.9	8.4	1.5	1.4	16.0	13.0			2.2
Cisco	206669	189640	10.7	10.3	9.8	9.5	3.5	3.5	14.1	13.2	2.9	3.0	5.0
Juniper Networks	7785	8120	9.2	8.7	7.6	7.4	1.5	1.5	11.5	10.9	3.4	3.5	1.9
Motorola	45679	50727	20.6	19.1	17.9	16.6	5.4	5.1	25.1	23.1	1.2	1.2	54.9
ZTE	17786	17688	12.4	11.3	9.0	8.2	1.0	1.0	9.6	8.4	2.6	2.9	1.4
Ericsson	14410	15192	1764.1	6.9	6.6	5.0	0.7	0.7	14.5	8.7	5.6	5.6	1.5
Amdocs	9187	9088	11.1	10.4	9.2	8.5	2.0	1.8	13.8	12.4	2.1	2.1	2.7
CommScope	473	10039	10.1	9.2	9.0	8.1	1.3	1.3	2.0	1.4			
Oracle	281385	354769	17.9	16.4	14.6	13.3	7.5	7.0	21.5	19.5	1.2	1.4	
Viavi	1602	1803	11.2	10.4	8.4	8.5	1.7	1.7	14.4	13.1			2.3
Nokia (Inderes)	**16898**	**14330**	**5.3**	**5.5**	**4.4**	**5.1**	**0.6**	**0.6**	**8.8**	**9.2**	**5.2**	**5.9**	**0.8**
Average			**171.9**	**11.2**	**10.2**	**9.4**	**2.7**	**2.6**	**14.2**	**12.4**	**2.7**	**2.8**	**8.6**
Median			**11.7**	**10.4**	**9.2**	**8.5**	**1.7**	**1.7**	**14.1**	**12.4**	**2.7**	**2.9**	**2.3**
Diff-% to median			***-55%***	***-47%***	***-52%***	***-40%***	***-64%***	***-64%***	***-38%***	***-26%***	***94%***	***105%***	***-67%***

Source: Refinitiv / Inderes

Income statement

Income statement	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23	Q2'23	Q3'23	Q4'23e	2023e	2024e	2025e	2026e
Revenue	**22202**	**5348**	**5872**	**6242**	**7449**	**24911**	**5859**	**5710**	**4982**	**6664**	**23215**	**22403**	**22603**	**22880**
Mobile Networks	9717	2268	2592	2851	2960	10671	2567	2623	2157	2694	10041	9645	9636	9732
Network Infrastructure	7674	1974	2153	2211	2709	9047	2248	1979	1807	2235	8269	8175	8339	8505
Nokia Technologies	1502	306	305	305	679	1595	242	334	258	690	1524	1290	1367	1381
Cloud and Network Services	3089	736	754	801	1060	3351	760	741	742	1007	3250	3168	3136	3136
Other	257	76	76	84	59	295	48	36	22	40	146	140	140	140
NRIs/non-IFRS adjustments	-37	-12	-8	-10	-18	-48	-6	-3	-4	-2	-15	-15	-15	-15
EBITDA	**3253**	**628**	**847**	**806**	**1178**	**3458**	**692**	**746**	**508**	**1276**	**3222**	**2710**	**3043**	**3077**
Depreciation	-1095	-274	-282	-288	-296	-1140	-266	-272	-267	-261	-1066	-987	-955	-706
EBIT (excl. NRI)	**2775**	**583**	**714**	**658**	**1155**	**3109**	**479**	**626**	**424**	**1195**	**2724**	**2523**	**2738**	**2821**
EBIT	**2158**	**354**	**565**	**518**	**882**	**2318**	**426**	**474**	**241**	**1015**	**2156**	**1723**	**2088**	**2371**
Mobile Networks	765	171	291	277	201	940	137	205	99	260	701	748	817	851
Network Infrastructure	784	195	247	228	432	1102	344	260	171	287	1062	975	1017	1050
Nokia Technologies	1185	220	217	207	564	1208	149	236	180	589	1154	927	995	1008
Nokia Technologies	166	20	-6	16	147	177	-20	16	36	173	205	243	259	261
Other	-125	-23	-36	-71	-189	-318	-131	-91	-63	-115	-399	-370	-350	-350
NRIs/non-IFRS adjustments	-617	-229	-149	-140	-273	-791	-53	-153	-183	-180	-568	-800	-650	-450
Net financial items	-241	-72	-18	12	-30	-108	-19	-55	-38	-20	-131	-100	-75	-50
PTP	**1926**	**256**	**541**	**509**	**878**	**2184**	**401**	**407**	**179**	**996**	**1983**	**1628**	**2018**	**2326**
Taxes	-272	-79	-74	-93	2271	2026	-111	-116	-45	-249	-522	-406	-503	-580
Minority interest	-22	-7	-3	-1	2	-9	-10	1	5	-2	-6	-6	-6	-6
Net earnings	**1623**	**212**	**457**	**427**	**3154**	**4250**	**279**	**290**	**139**	**745**	**1453**	**1216**	**1509**	**1740**
EPS (adj.)	**0.37**	**0.07**	**0.10**	**0.10**	**0.17**	**0.44**	**0.06**	**0.07**	**0.05**	**0.16**	**0.35**	**0.33**	**0.36**	**0.38**
EPS (rep.)	**0.29**	**0.04**	**0.08**	**0.08**	**0.56**	**0.76**	**0.05**	**0.05**	**0.02**	**0.13**	**0.26**	**0.22**	**0.27**	**0.31**

Key figures	2021	Q1'22	Q2'22	Q3'22	Q4'22	2022	Q1'23	Q2'23	Q3'23	Q4'23e	2023e	2024e	2025e	2026e
Revenue growth-%	1.6 %	5.4 %	10.5 %	15.6 %	16.1 %	12.2 %	9.6 %	-2.8 %	-20.2 %	-10.5 %	-6.8 %	-3.5 %	0.9 %	1.2 %
Adjusted EBIT growth-%	33.4 %	5.8 %	4.5 %	3.9 %	27.1 %	12.0 %	-17.8 %	-12.2 %	-35.5 %	3.4 %	-12.4 %	-7.4 %	8.5 %	3.0 %
EBITDA-%	14.7 %	11.7 %	14.4 %	12.9 %	15.8 %	13.9 %	11.8 %	13.1 %	10.2 %	19.1 %	13.9 %	12.1 %	13.5 %	13.4 %
Adjusted EBIT-%	12.5 %	10.9 %	12.2 %	10.5 %	15.5 %	12.5 %	8.2 %	11.0 %	8.5 %	17.9 %	11.7 %	11.3 %	12.1 %	12.3 %
Net earnings-%	7.3 %	4.0 %	7.8 %	6.8 %	42.3 %	17.1 %	4.8 %	5.1 %	2.8 %	11.2 %	6.3 %	5.4 %	6.7 %	7.6 %

Source: Inderes

Balance sheet

Assets	2021	2022	2023e	2024e	2025e
Non-current assets	**22174**	**23886**	**23503**	**23001**	**22510**
Goodwill	5431	5667	5667	5667	5667
Intangible assets	3342	2472	2123	1784	1418
Tangible assets	2808	2944	2869	2705	2581
Associated companies	243	199	150	150	150
Other investments	758	828	802	802	802
Other non-current assets	8320	7942	7942	7942	7942
Deferred tax assets	1272	3834	3950	3950	3950
Current assets	**19597**	**20266**	**19686**	**18931**	**18851**
Inventories	2392	3265	3204	3002	2984
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	7601	7839	8125	7864	7956
Cash and equivalents	9604	9162	8357	8065	7911
Balance sheet total	**40049**	**42943**	**42038**	**40946**	**40561**

Source: Inderes

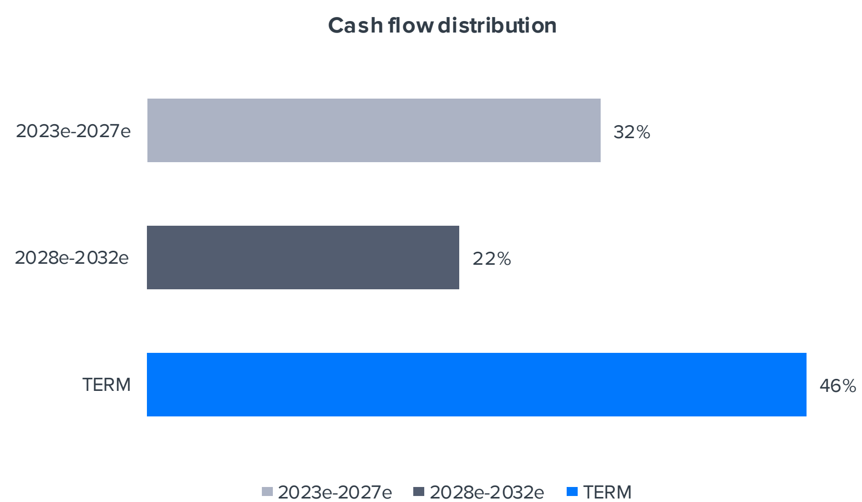
Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	**17462**	**21426**	**22208**	**22537**	**23049**
Share capital	246	246	246	246	246
Retained earnings	-2537	1375	2157	2486	2998
Hybrid bonds	0.0	0.0	0.0	0.0	0.0
Revaluation reserve	4219	3905	3905	3905	3905
Other equity	15432	15807	15807	15807	15807
Minorities	102	93	93	93	93
Non-current liabilities	**11410**	**9556**	**8639**	**7760**	**6965**
Deferred tax liabilities	282	332	332	332	332
Provisions	1569	1435	1200	1000	800
Interest bearing debt	5361	5107	4525	3946	3451
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	4198	2682	2582	2482	2382
Current liabilities	**11177**	**11961**	**11191**	**10649**	**10547**
Interest bearing debt	301	1450	1208	1015	850
Payables	10876	10511	9982	9633	9697
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	**40049**	**42943**	**42038**	**40946**	**40561**

DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	TERM
Revenue growth-%	12.2 %	-6.8 %	-3.5 %	0.9 %	1.2 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %
EBIT-%	9.3 %	9.3 %	7.7 %	9.2 %	10.4 %	10.4 %	9.8 %	9.5 %	9.3 %	9.0 %	8.8 %	8.8 %
EBIT (operating profit)	**2318**	**2156**	**1723**	**2088**	**2371**	**2403**	**2287**	**2239**	**2214**	**2164**	**2137**	
+ Depreciation	1140	1066	987	955	706	689	676	667	660	656	653	
- Paid taxes	-486	-638	-406	-503	-580	-588	-559	-494	-488	-479	-476	
- Tax, financial expenses	-27	-34	-25	-19	-13	-13	-13	-66	-66	-62	-58	
+ Tax, financial income	0	0	0	0	0	0	0	0	0	0	0	
- Change in working capital	-1476	-753	114	-11	-15	-59	-60	-61	-62	-39	-40	
Operating cash flow	**1469**	**1797**	**2393**	**2510**	**2469**	**2432**	**2332**	**2286**	**2259**	**2240**	**2216**	
+ Change in other long-term liabilities	-1650	-335	-300	-300	-300	-300	-300	-300	-100	-100	-100	
- Gross CAPEX	-847	-674	-650	-650	-650	-650	-650	-650	-650	-650	-655	
Free operating cash flow	**-1028**	**788**	**1443**	**1560**	**1519**	**1482**	**1382**	**1336**	**1509**	**1490**	**1461**	
+/- Other	49	33	0	0	0	0	0	0	0	0	0	
FCFF	-979	821	1443	1560	1519	1482	1382	1336	1509	1490	1461	18105
Discounted FCFF		**807**	**1299**	**1287**	**1148**	**1026**	**876**	**776**	**803**	**727**	**653**	**8091**
Sum of FCFF present value		17494	16687	15387	14101	12953	11927	11050	10274	9471	8744	8091
Enterprise value DCF		**17494**										
- Interest bearing debt		-6557										
+ Cash and cash equivalents		9162										
-Minorities		-71										
-Dividend/capital return		-671										
Equity value DCF		**19373**										
Equity value DCF per share		**3.5**										

WACC	
Tax-% (WACC)	25.0 %
Target debt ratio (D/(D+E)	0.0 %
Cost of debt	4.0 %
Equity Beta	1.4
Market risk premium	4.75%
Liquidity premium	0.00%
Risk free interest rate	2.5 %
Cost of equity	**9.2 %**
Weighted average cost of capital (WACC)	**9.2 %**

Source: Inderes



Summary

Income statement	2020	2021	2022	2023e	2024e
Revenue	21852	22202	24911	**23215**	**22403**
EBITDA	2017	3253	3458	**3222**	**2710**
EBIT	885	2158	2318	**2156**	**1723**
PTP	743	1926	2184	**1983**	**1628**
Net Income	-2523	1623	4250	**1453**	**1216**
Extraordinary items	-1196	-617	-791	**-568**	**-800**

Balance sheet	2020	2021	2022	2023e	2024e
Balance sheet total	36191	40049	42943	**42038**	**40946**
Equity capital	12545	17462	21426	**22208**	**22537**
Goodwill	5074	5431	5667	**5667**	**5667**
Net debt	-1789	-3942	-2605	**-2623**	**-3104**

Cash flow	2020	2021	2022	2023e	2024e
EBITDA	2017	3253	3458	**3222**	**2710**
Change in working capital	225	608	-1476	**-753**	**114**
Operating cash flow	2118	4127	1469	**1797**	**2393**
CAPEX	-22	-4111	-847	**-674**	**-650**
Free cash flow	1599	-911	-979	**821**	**1443**

Valuation multiples	2020	2021	2022	2023e	2024e
EV/S	0.7	1.2	0.9	**0.6**	**0.6**
EV/EBITDA (adj.)	7.9	8.5	6.3	**4.4**	**5.1**
EV/EBIT (adj.)	7.7	9.9	7.0	**5.3**	**5.5**
P/E (adj.)	12.8	15.3	9.9	**8.8**	**9.2**
P/B	1.4	1.8	1.1	**0.8**	**0.8**
Dividend-%	0.0 %	1.4 %	2.8 %	**5.2 %**	**5.9 %**

Lähde: Inderes

Per share data	2020	2021	2022	2023e	2024e
EPS (reported)	-0.45	0.29	0.76	**0.26**	**0.22**
EPS (adj.)	0.25	0.37	0.44	**0.35**	**0.33**
OCF / share	0.38	0.73	0.26	**0.32**	**0.43**
FCF / share	0.28	-0.16	-0.18	**0.15**	**0.26**
Book value / share	2.22	3.08	3.82	**3.99**	**4.05**
Dividend / share	0.00	0.08	0.12	**0.16**	**0.18**

Growth and profitability	2020	2021	2022	2023e	2024e
Revenue growth-%	-6%	2%	12%	**-7%**	**-3%**
EBITDA growth-%	-6%	61%	6%	**-7%**	**-16%**
EBIT (adj.) growth-%	4%	33%	12%	**-12%**	**-7%**
EPS (adj.) growth-%	10%	49%	20%	**-21%**	**-5%**
EBITDA-%	9.2 %	14.7 %	13.9 %	**13.9 %**	**12.1 %**
EBIT (adj.)-%	9.5 %	12.5 %	12.5 %	**11.7 %**	**11.3 %**
EBIT-%	4.0 %	9.7 %	9.3 %	**9.3 %**	**7.7 %**
ROE-%	-18.2 %	10.9 %	22.0 %	**6.7 %**	**5.5 %**
ROI-%	4.6 %	10.3 %	9.0 %	**7.6 %**	**6.2 %**
Equity ratio	34.7 %	43.6 %	49.9 %	**52.8 %**	**55.0 %**
Gearing	-14.3 %	-22.6 %	-12.2 %	**-11.8 %**	**-13.8 %**

ESG

Taxonomy eligibility

Nokia estimates that its products are not generally included in taxonomy industries as of yet. As the taxonomy legislation is assumed to expand to cover new industries in the future, we will wait for the possible impact this will have on Nokia's taxonomy eligibility.

When determining the taxonomy eligibility, Nokia reports that it has followed strict interpretations regarding eligibility. This means, e.g., that in case of activities related to climate change mitigation, Nokia has only accepted solutions that are designed primarily to reduce greenhouse gas emissions.

Because taxonomy is still in its early stages, we do not see the low taxonomy eligibility percentages to have any direct short-term economic impact on, e.g., the availability of Nokia's financing or financing costs.

Climate targets

Of the 6 climate targets set by Nokia, 5 have already been achieved or are developing in the right direction. However, in 2020-2022, the target of halving emissions throughout the value chain in scope 1, scope 2 and scope 3 emissions during 2019-2030 has not developed along the expected paths in linear terms. According to Nokia, there is no reason to expect linear development in reducing emissions, which is also justified in our view. As a whole, Nokia still considers achieving this target by 2030 possible.

Nokia's connectivity and digitalization solutions enable increased efficiency in other industries, which supports the reduction of emissions. At the same time, the company's own products have features that enable energy saving, e.g., for operators. Thus, in our view, the company's current business supports the achievement of set climate targets. We do, however, consider the reduction of scope 3 emissions challenging if the green transition in the energy sector is not achieved in line with underlying assumptions.

Taxonomy eligibility	2021*	2022
Revenue	-	0%
OPEX	-	0%
CAPEX	-	2%

Taxonomy alignment	2021*	2022
Revenue	-	0%
OPEX	-	0%
CAPEX	-	0%

Climate		
Climate target	Yes	Yes
Target according to Paris agreement (1.5°C warming scenario)	Yes	Yes

*the figures are not comparable due to taxonomy development

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Inderes' recommendation policy is based on the following distribution relative to the 12-month risk-adjusted expected total shareholder return.

Buy	The 12-month risk-adjusted expected shareholder return of the share is very attractive
Accumulate	The 12-month risk-adjusted expected shareholder return of the share is attractive
Reduce	The 12-month risk-adjusted expected shareholder return of the share is weak
Sell	The 12-month risk-adjusted expected shareholder return of the share is very weak

The assessment of the 12-month risk-adjusted expected total shareholder return based on the above-mentioned definitions is company-specific and subjective. Consequently, similar 12-month expected total shareholder returns between different shares may result in different recommendations, and the recommendations and 12-month expected total shareholder returns between different shares should not be compared with each other. The counterpart of the expected total shareholder return is Inderes' view of the risk taken by the investor, which varies considerably between companies and scenarios. Thus, a high expected total shareholder return does not necessarily lead to positive performance when the risks are exceptionally high and, correspondingly, a low expected total shareholder return does not necessarily lead to a negative recommendation if Inderes considers the risks to be moderate.

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Recommendation history (>12 mo)

Date	Recommendation	Target	Share price
7/29/2021	Accumulate	5.80 €	5.18 €
10/29/2021	Accumulate	5.90 €	5.02 €
1/12/2022	Accumulate	6.20 €	5.44 €
2/4/2022	Accumulate	6.00 €	5.17 €
3/8/2022	Buy	5.20 €	4.33 €
4/29/2022	Accumulate	5.40 €	4.66 €
7/22/2022	Accumulate	5.70 €	5.01 €
10/21/2022	Accumulate	5.30 €	4.39 €
1/11/2023	Accumulate	5.30 €	4.56 €
1/27/2023	Accumulate	5.30 €	4.38 €
4/21/2023	Buy	4.80 €	3.90 €
7/5/2023	Buy	4.80 €	3.91 €
7/17/2023	Accumulate	4.10 €	3.54 €
7/21/2023	Accumulate	4.00 €	3.53 €
10/20/2023	Reduce	3.20 €	3.05 €

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Antti Viljakainen
2014, 2015, 2016, 2018, 2019, 2020

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