

Nokia

Company report

12/13/2023



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Turnaround of Mobile Networks will take time

We reiterate our Reduce recommendation and EUR 2.9 target price for Nokia. In our view, the modest performance of Mobile Networks in the coming years will create a drag on Nokia's valuation that the performance of the other units cannot offset. Thus, in the absence of an earnings growth driver, we see no hurry to buy the stock, even if Nokia looks cheap in the light of valuation multiples.

Clarity on AT&T situation; patent disputes could be resolved in the last weeks of the year

Nokia's investor event yesterday brought clarity to recent speculation around the company after losing the AT&T's 5G network deal. Nokia insisted that this was entirely for economic reasons, i.e., price in plain language. Nokia's share of AT&T's network was about one third, so it would have been virtually impossible for the company to match Ericsson's offer (2/3 of the network) on economically reasonable terms. So, the loss was in no way about Nokia's technology, which remains very competitive thanks to significant investments in recent years, as evidenced by winning Deutsche Telekom back as a customer, announced yesterday. Regarding patent disputes in Nokia Technologies, comments from Nokia's management indicated that agreements could still be reached in Q4.

Turnaround in Mobile Networks requires strict cost discipline and winning market share

In Network Infrastructure and Nokia Technologies, the medium-term earnings outlook appears to be fairly stable, and both have the potential to generate over a billion in EBIT annually. As a smaller unit, Cloud and Network Services' target of 7-10% EBIT by 2026 does not yet materially support Nokia's overall performance. Thus, attention is turning to Mobile Networks, where the outlook for next year's low single-digit operating profit (3.4% in our forecast) indicates that the situation is currently weak. Nokia has started to reorganize its operations in Mobile Networks to increase profitability and flexibility. These measures will focus primarily on support functions and Nokia stressed that it would continue to invest heavily in product development to ensure technology leadership. In our view, this continues to indicate that Mobile Networks will remain part of Nokia, even though the business fundamentals (extremely competitive and slow-growing market, low profitability and high investment needs) continue to provide challenging conditions for creating shareholder value. The long-term EBIT target of over 10% is also still only moderate in absolute terms, and achieving this will require not only a recovery in the market but also success in implementing major cost savings and increasing market share.

Mobile Networks weighs on valuation in our view

We made only minor changes to our group-level forecasts, with Network Infrastructure and Technology offsetting forecast decreases in Mobile Networks. Nokia's adjusted earnings multiples (2024-2025e P/E 10x-9x, EV/EBIT 6x-5x) look low, but we think the drivers for a valuation increase are currently missing. Nokia's short-term demand outlook was already soft as operators put the brakes on investment and the AT&T loss is weighing on the medium-term profitability of Mobile Networks, as reflected in Nokia's outlook for next year and updated long-term targets. Without a significant turnaround in Mobile Networks, it will be difficult for Nokia's overall results to grow substantially from current levels. Based on our projections, Nokia will generate around EUR 1.2- 1.4 billion of FCF per annum between 2024 and 2026, representing a cash flow yield of just over 7- 8%. Without earnings growth and rising multiples, the expected return on the stock also relies heavily on the capital returned to owners.

Recommendation

Reduce

(previous Reduce)

EUR 2.90

(previous EUR 2.90)

Share price:

3.01



Key figures

	2022	2023e	2024e	2025e
Revenue	24,911	23,215	22,436	22,655
growth-%	12%	-7%	-3%	1%
EBIT adj.	3,109	2,724	2,192	2,476
EBIT-% adj.	12.5 %	11.7 %	9.8 %	10.9 %
Net Income	4,201	1,455	968	1,312
EPS (adj.)	0.44	0.35	0.29	0.33

P/E (adj.)	9.9	8.7	10.5	9.2
P/B	1.1	0.8	0.7	0.7
Dividend yield-%	2.8 %	5.0 %	5.6 %	6.6 %
EV/EBIT (adj.)	7.0	5.2	6.3	5.4
EV/EBITDA	6.3	4.4	5.8	4.8
EV/S	0.9	0.6	0.6	0.6

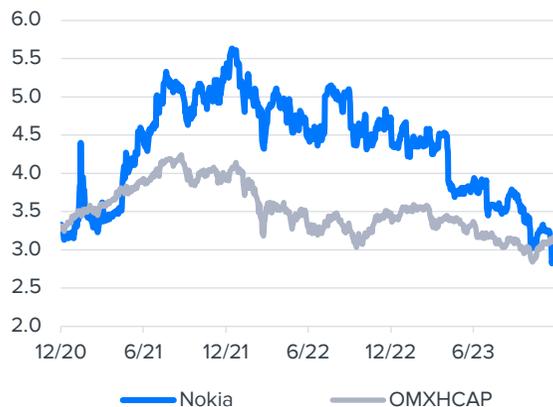
Source: Inderes

Guidance

(Unchanged)

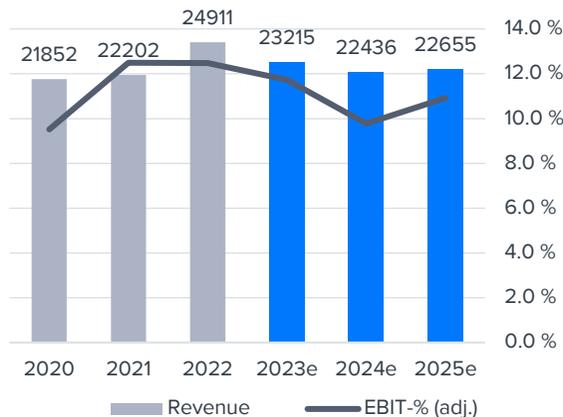
2023 Net sales EUR 23.2-24.6 billion and comparable operating profit 11.5-13.0%

Share price



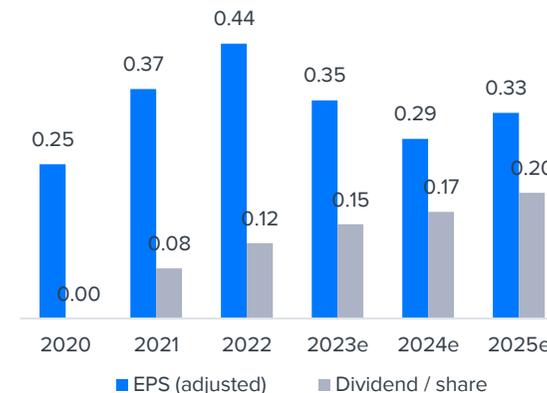
Source: Millistream Market Data AB

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 allow for increased profit distribution
- 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
- Declining market share in the important North American market
- 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	3.01	3.01	3.01
Number of shares, millions	5540.3	5540.3	5540.3
Market cap	16679	16679	16679
EV	14110	13822	13458
P/E (adj.)	8.7	10.5	9.2
P/E	11.5	17.2	12.7
P/B	0.8	0.7	0.7
P/S	0.7	0.7	0.7
EV/Sales	0.6	0.6	0.6
EV/EBITDA	4.4	5.8	4.8
EV/EBIT (adj.)	5.2	6.3	5.4
Payout ratio (%)	57%	97%	84%
Dividend yield-%	5.0 %	5.6 %	6.6 %

Source: Inderes

Preliminary outlook for next year and tweaks to long-term targets 1/2

The profitability target for 2026 was lowered one notch

Nokia is now targeting a comparable EBIT of at least 13% by 2026 (previously at least 14%). Nokia still believes that an EBIT margin of at least 14% is achievable in the long term but decided to revise its estimate to a more conservative one due to the current market situation in Mobile Networks. The profitability target for 2026 is based on the following assumptions for each business group:

- **Network Infrastructure** 12-15% operating margin
- **Mobile Networks** 6-9% operating margin
- **Cloud and Network Services** 7-10% operating margin
- **Nokia Technologies** over 1.1 BNEUR in EBIT
- **Group common functions and other expenses** around 300 MEUR

The biggest challenge will be to get Mobile Networks out of the upcoming 2024 earnings slump and back to reasonable profitability. In our view, the profitability target for Cloud and Network Services is rather modest, as there should be a scalable software business within the business group. In Network Infrastructure, Nokia must be able to at least maintain and preferably improve its current strong performance. In Nokia Technologies, the target will be achieved by renewing existing pending mobile licenses and increasing activity in new areas. According to Nokia, the annual run-rate of revenue in the new regions has now increased to around 150 MEUR from 100 MEUR a year ago.

In terms of growth, Nokia aims for both the Network Infrastructure and Cloud and Network Services

business groups to grow faster than the market until 2026. Mobile Networks will continue to face challenges in 2024 and 2025, before returning to above-market growth in 2026. Overall, we estimate that Nokia's growth will be fairly muted in the coming years under these assumptions, given the challenging situation in Mobile Networks, and the near-term outlook for other units does not foresee explosive growth either.

Nokia's preliminary outlook for 2024

Nokia will publish its group-level outlook in its Q4 report but has already given preliminary assumptions on the outlook for its business groups for next year. Overall, the profitability outlook for Mobile Networks was even weaker than our earlier downgraded forecasts, but this may be offset by good performance in other units.

Order intake for **Network Infrastructure** is growing in several businesses. In IP Networks, demand is growing from webscale operators and enterprise customers, and in Fixed Networks demand is recovering, boosted by public funding in H2'24. In addition, Optical Networks is well on track with a strong product portfolio. Nokia currently assumes that the currency-adjusted growth of Network Infrastructure in percentage terms will be in the mid-single digit range. Roughly speaking, this would mean growth of around 3-5%, a surprisingly positive estimate compared with our earlier forecast of a 2.5% decline. Nokia expects the EBIT margin to remain broadly stable, which we estimate would indicate a level of over 12%. Our forecast was previously at 11.6%, so Nokia's outlook for Network Infrastructure is also better than expected in terms of profitability. Of course, at this stage, there is still uncertainty about

the recovering growth outlook for H2 next year. However, small positive signs are already visible, and Nokia says that orders received have started to recover from the lows seen in Q3.

Mobile Networks: The demand environment remains challenging, with the target market shrinking in 2023 and the rapid pace of 5G network deployment leveling off in India in 2024. As a result, and due to AT&T's decision to centralize its radio network with another supplier, Mobile Networks' revenues are expected to decline. However, as the business group has taken steps to reduce its costs, Nokia expects Mobile Networks to achieve a low single-digit EBIT margin. Our forecast expected Mobile Networks' revenue to fall by 6% next year and EBIT margin to be 5.6%, but profitability will take an even bigger hit.

According to Nokia, **Cloud and Network Services** has performed strongly in 2023. In 2024, it expects moderate currency-adjusted revenue growth as 5G core network deployments continue steadily and its enterprise business grows steadily. The business group's EBIT margin-% is expected to remain broadly stable or increase slightly. The outlook was broadly in line with our previous expectations.

Preliminary outlook for next year and tweaks to long-term targets 2/2

Nokia Technologies continues to resolve ongoing negotiations and litigation to renew licenses with certain smartphone customers (Oppo and Vivo). If these negotiations are concluded by the end of 2023, Nokia expects the unit's EBIT for 2024 to exceed EUR 1.0 billion. If the negotiations continue until 2024, Nokia expects to benefit more from the payments related to previous periods. Yesterday, Nokia's management seemed confident that an agreement could be reached in the near future. We therefore maintained our assumption that patent disputes will be resolved in Q4 and raised our forecast for the coming years to around 1.0 BNEUR.

Group's common functions and other: Nokia expects that the group's common operating expenses will amount to roughly 350 MEUR. This was broadly in line with our forecast.

Reasonable profit level in Mobile Networks requires strict cost discipline

Nokia has started to reorganize its operations in Mobile Networks to increase profitability and flexibility. These measures will focus primarily on support functions and Nokia stressed that it would continue to invest heavily in product development to ensure technology leadership. According to Nokia, these measures, to be implemented by 2026, will enable the business group to reach a double-digit EBIT margin on a revenue of around 10 BNEUR, compared to the currently required level of around 11.5 BNEUR. This would bring the unit's profit level to around one billion, and with significant savings in the coming years, the unit's EBIT could be slightly above the 2022 level (941 MEUR). Reaching this target will also require moderate growth after the loss of AT&T. Nokia intends to achieve this by gaining market share through its competitive products and by exploiting

the opportunities offered by the Huawei sanctions. Yesterday's announcement of the ORAN contract and winning back Deutsche Telekom after a break of several years was a good example in this area.

We have long considered the double-digit EBIT margin target for Mobile Networks to be challenging to achieve, and we believe Nokia needs to show clear progress on its savings program before the stock market believes the unit can achieve this level of profitability on a sustainable basis. The patience of investors who believe in a turnaround will also be tested, as at least the next three years look modest in terms of profitability based on Nokia's targets.

Only minor tweaks to forecasts for the coming years after the slashes of last week

Network Infrastructure and Nokia Technologies can cushion the weakness of Mobile Networks in the coming years

- We lowered our Mobile Networks EBIT forecast for 2024 to 3.4% and expect profitability to rise to 6% by 2026
- We slightly increased our forecasts for Network Infrastructure and Nokia Technologies, offsetting lower forecasts for Mobile Networks
- Our forecast assumes that market conditions will recover in H2'24, which will start to be reflected in Nokia's revenue growth turnaround

Estimate revisions	2023e	2023e	Change	2024e	2024e	Change	2025e	2025e	Change
MEUR / EUR	Old	New	%	Old	New	%	Old	New	%
Revenue	23215	23215	0%	22116	22436	1%	22304	22655	2%
EBITDA	3222	3222	0%	2451	2379	-3%	2737	2781	2%
EBIT (exc. NRIs)	2724	2724	0%	2264	2192	-3%	2432	2476	2%
EBIT	2156	2156	0%	1464	1392	-5%	1782	1826	2%
PTP	1983	1983	0%	1369	1297	-5%	1712	1756	3%
EPS (excl. NRIs)	0.35	0.35	0%	0.30	0.29	-3%	0.32	0.33	2%
DPS	0.15	0.15	0%	0.17	0.17	0%	0.20	0.20	0%

Source: Inderes

Estimate changes by division

Estimate revisions	2023e	2023e	Change	2024e	2024e	Change	2025e	2025e	Change
MEUR / EUR	Old	New	%	Old	New	%	Old	New	%
Revenue	23215	23215	0%	22116	22436	1%	22304	22655	2%
Mobile Networks	10041	10041	0%	9474	9474	0%	9455	9455	0%
Network Infrastructure	8269	8269	0%	8059	8239	2%	8220	8403	2%
Nokia Technologies	1524	1524	0%	1290	1360	5%	1367	1401	2%
Cloud and Network Services	3250	3250	0%	3168	3238	2%	3136	3271	4%
Others	146	146	0%	140	140	0%	140	140	0%
NRIs/non-IFRS adjustments	-15.0	-15.0	0%	-15.0	-15.0	0%	-15.0	-15.0	0%
EBITDA	3222	3222	0%	2451	2379	-3%	2737	2781	2%
EBIT excluding NRIs	2724	2724	0%	2264	2192	-3%	2432	2476	2%
EBIT	2156	2156	0%	1464	1392	-5%	1782	1826	2%
Mobile Networks	701	701	0%	531	324	-39%	555	489	-12%
Network Infrastructure	1062	1062	0%	932	998	7%	973	1041	7%
Nokia Technologies	1154	1154	0%	927	997	8%	995	1028	3%
Cloud and Network Services	205	205	0%	243	233	-4%	259	268	4%
Others	-399	-399	0%	-370	-360	-3%	-350	-350	0%
NRIs/non-IFRS adjustments	-568	-568	0%	-800	-800	0%	-650	-650	0%
PTP	1983	1983	0%	1369	1297	-5%	1712	1756	3%
EPS (adjusted)	0.35	0.35	0%	0.30	0.29	-3%	0.32	0.33	2%
DPS	0.15	0.15	0%	0.17	0.17	0%	0.20	0.20	0%

Source: Inderes

Summary of estimates

Mobile Networks	2021	2022	2023e	2024e	2025e	2026e
Revenue	9718	10672	10041	9474	9455	9550
growth %	-6.5%	9.8%	-5.9%	-5.6%	-0.2%	1.0%
Gross margin	3638	4095	3440	3009	3149	3256
Gross margin	37.4%	38.4%	34.3%	31.8%	33.3%	34.1%
EBIT	764	941	702	324	489	576
EBIT-%	7.9%	8.8%	7.0%	3.4%	5.2%	6.0%

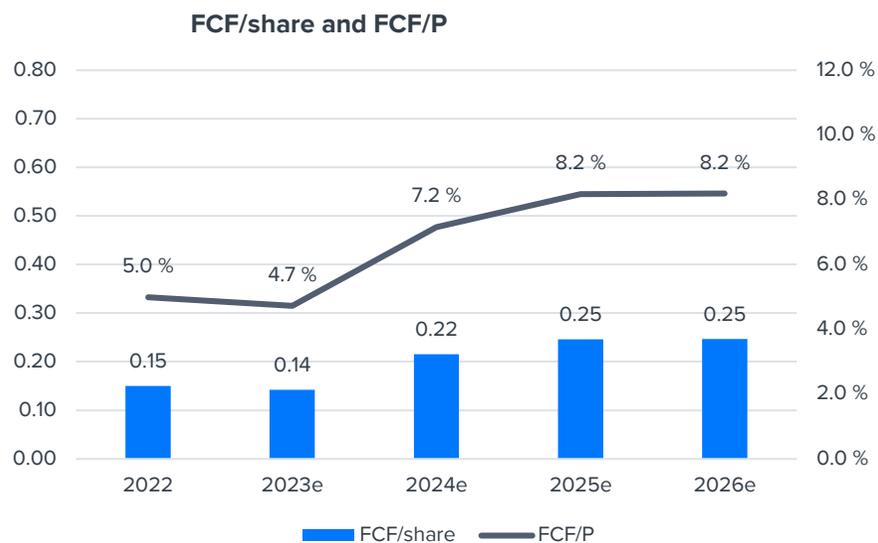
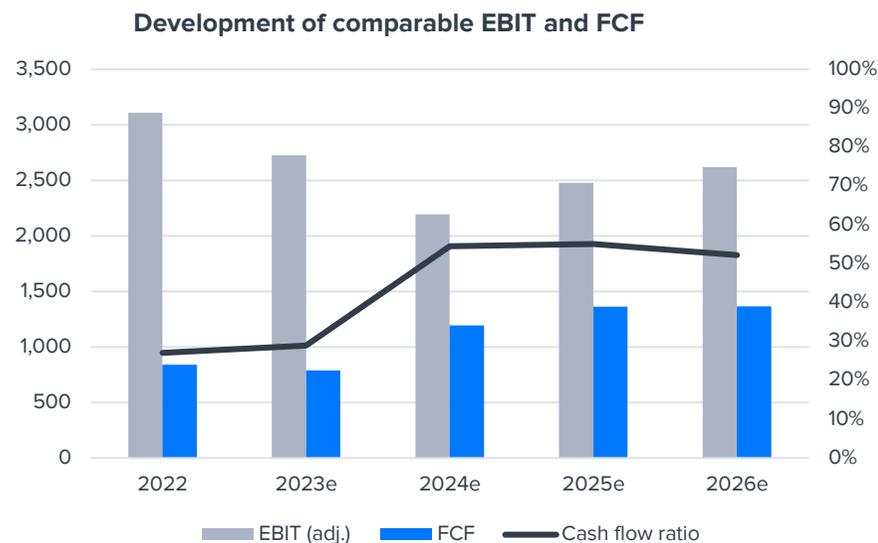
Network Infrastructure	2021	2022	2023e	2024e	2025e	2026e
Revenue	7674	9047	8268	8239	8403	8572
growth %	13.9%	17.9%	-8.6%	-0.4%	2.0%	2.0%
Gross margin	2684	3309	3072	3043	3101	3154
Gross margin	35.0%	36.6%	37.2%	36.9%	36.9%	36.8%
EBIT	784	1101	1062	998	1041	1074
EBIT-%	10.2%	12.2%	12.8%	12.1%	12.4%	12.5%

Cloud and Network Services	2021	2022	2023e	2024e	2025e	2026e
Revenue	3089	3350	3251	3238	3271	3303
growth %	0.1%	8.4%	-3.0%	-0.4%	1.0%	1.0%
Gross margin	1160	1340	1254	1263	1298	1321
Gross margin	37.6%	40.0%	38.6%	39.0%	39.7%	40.0%
EBIT	166	178	205	233	268	276
EBIT-%	5.4%	5.3%	6.3%	7.2%	8.2%	8.4%

Nokia Technologies	2021	2022	2023e	2024e	2025e	2026e
Revenue	1501	1595	1524	1360	1401	1415
growth %	7.1%	6.3%	-4.5%	-10.8%	3.0%	1.0%
EBIT	1185	1208	1155	997	1028	1042
EBIT-%	78.9%	75.7%	75.8%	73.3%	73.4%	73.6%

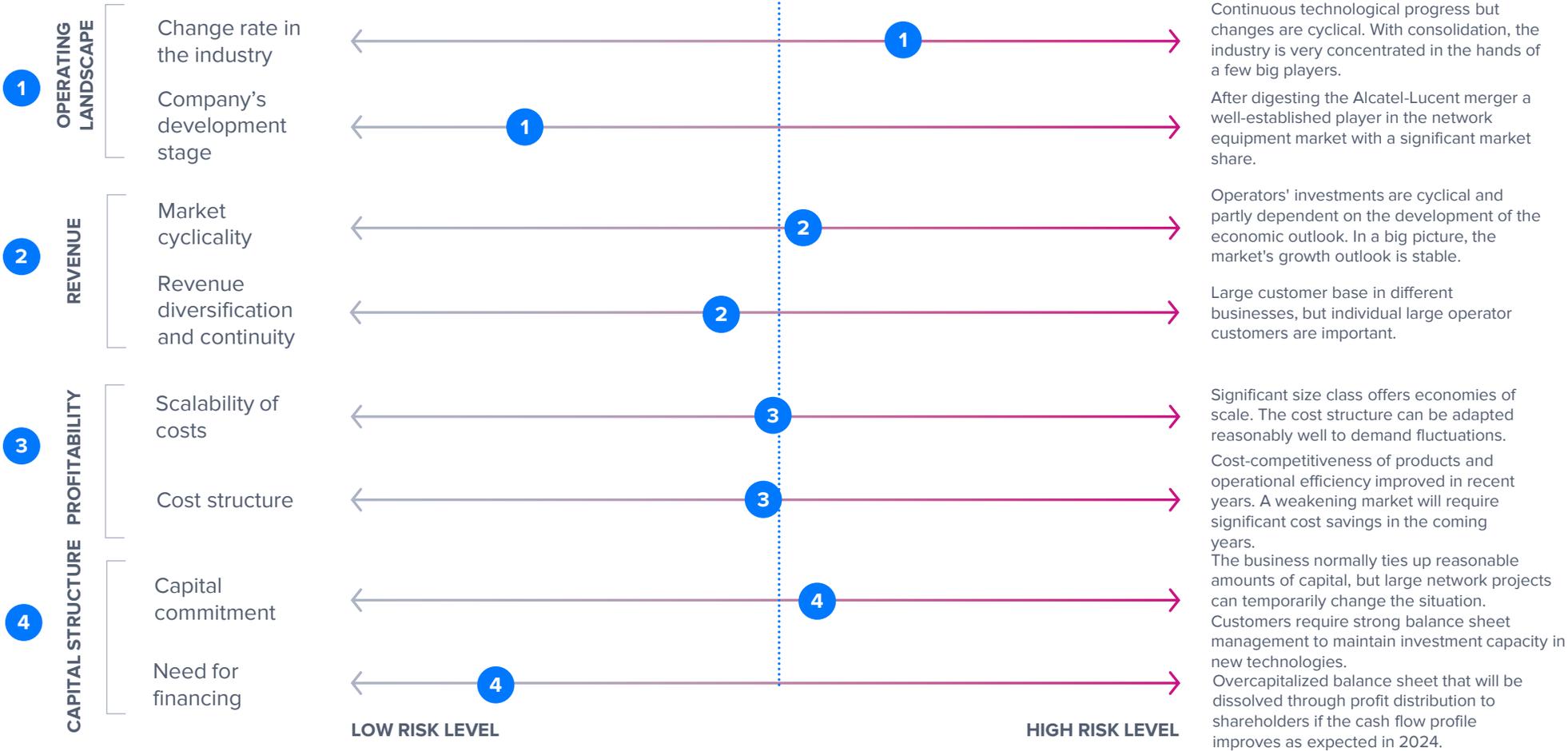
Common group functions and other	2021	2022	2023e	2024e	2025e	2026e
Revenue	257	296	145	140	140	140
growth %	-4.3%	15.2%	-51.0%	-3.4%	0.0%	0.0%
EBIT	-124	-318	-400	-360	-350	-350

Source: Inderes



Risk profile of the business model

Assessment of Nokia's overall business risk



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 6.0-8.0 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 7.0-9.0 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 is currently still underperforming, are valued at an EV/EBIT multiple of 6x-7x, resulting in a unit value of EUR 1.4-1.6 billion. In addition to weak profitability, the current sluggish growth supports moderate multiples.

For Mobile Networks, we have assumed a 5x-7x EV/EBIT, making the unit worth 1.6-2.3 BNEUR. Based on next year's lackluster results, the value is already starting to get very low, and we could see that a strategic buyer might be willing to pay more for the business. Assuming, for example, a revenue multiple of around 0.5x, the value of the transaction would rise to almost EUR 5 billion.

Under the above assumptions, the total amount of the SOTP is EUR 18 billion (EUR 3.2/share) with a range of EUR 15-21 billion (EUR 2.6-3.8/share). Thus, the SOTP indicates that the stock would have 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. However, it is partly a reminder of Nokia's latent potential, should uncertainty about the company's earnings growth prospects dissipate or in a possible restructuring scenario.

Cash flow yield at a reasonable level

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 we had estimated the company could pay in the spring may also remain a pipe dream. If Nokia were to decide to distribute its entire free cash flow back to shareholders, this would mean a dividend yield of just over 7-8% in our 2024-2026 projections. It is likely that part of the profits would be returned through share buybacks. The company may also make smaller complementary acquisitions, in which case part of the capital would be allocated to these. With our current forecasts, cash flow yields are still at a reasonable level, but their relative attractiveness has weakened as interest rates have risen. In addition, we believe there are many other stocks with a better risk/return ratio in the declined stock market.

Sum-of-the-parts calculation

Nokia Technologies	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	1.0	1.0	1.0
X valuation multiple	6.0	7.0	8.0
EV	6.0	7.0	8.0
<i>Per share (EUR)</i>	<i>1.1</i>	<i>1.3</i>	<i>1.4</i>

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	7.0	8.0	9.0
<i>Per share (EUR)</i>	<i>1.3</i>	<i>1.4</i>	<i>1.6</i>

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	1.4	1.5	1.6
<i>Per share (EUR)</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>

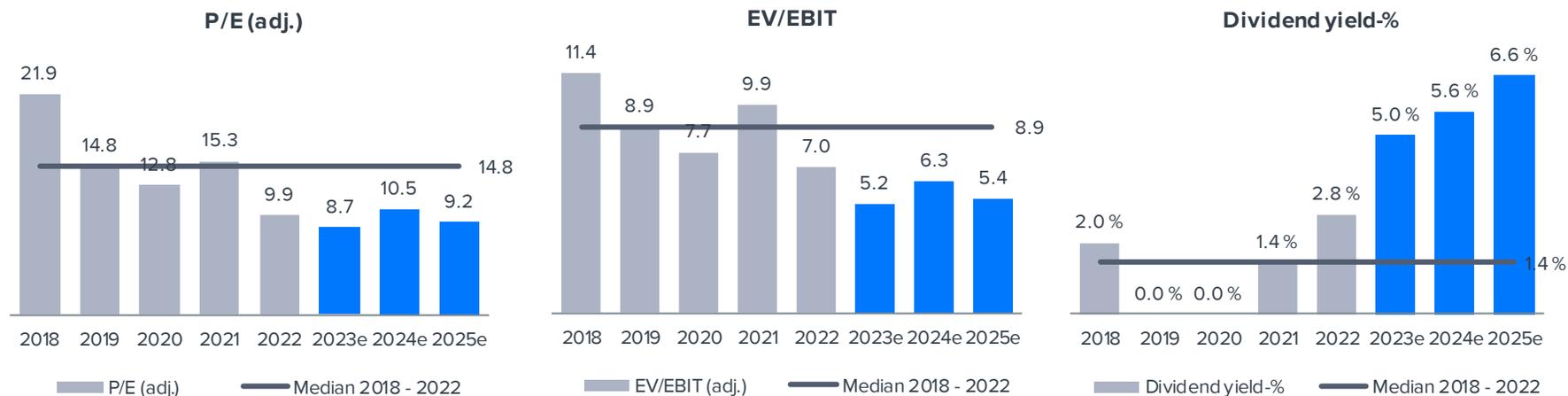
Mobile Networks	Lower end	Neutral	Upper end
Variable: Adj. EBIT 2024e	0.3	0.3	0.3
X valuation multiple	5.0	6.0	7.0
EV	1.6	1.9	2.3
<i>Per share (EUR)</i>	<i>0.3</i>	<i>0.4</i>	<i>0.4</i>

Total	Lower end	Neutral	Upper end
Aggregate EV	16.0	18.4	20.9
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	15	18	21
<i>Per share (EUR)</i>	<i>2.6</i>	<i>3.2</i>	<i>3.8</i>

Valuation table

Valuation	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e
Share price	5.03	3.30	3.15	5.57	4.33	3.01	3.01	3.01	3.01
Number of shares, millions	5593	5606	5617	5629	5590	5540	5540	5540	5540
Market cap	28133	18476	17701	31378	24189	16679	16679	16679	16679
EV	24912	17799	15938	27543	21648	14110	13822	13458	13237
P/E (adj.)	21.9	14.8	12.8	15.3	9.9	8.7	10.5	9.2	8.6
P/E	neg.	>100	neg.	19.3	5.7	11.5	17.2	12.7	10.5
P/B	1.8	1.2	1.4	1.8	1.1	0.8	0.7	0.7	0.7
P/S	1.2	0.8	0.8	1.4	1.0	0.7	0.7	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	5.8	4.8	4.6
EV/EBIT (adj.)	11.4	8.9	7.7	9.9	7.0	5.2	6.3	5.4	5.1
Payout ratio (%)	neg.	0.0 %	0.0 %	27.7 %	15.8 %	57.2 %	97.3 %	84.4 %	69.8 %
Dividend yield-%	2.0 %	0.0 %	0.0 %	1.4 %	2.8 %	5.0 %	5.6 %	6.6 %	6.6 %

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	140981	144772	14.1	12.8	11.9	11.5	4.4	4.1	16.4	14.7	2.3	2.4	7.3
Ciena	6185	6594	12.7	11.9	10.7	9.9	1.6	1.6	16.9	15.5			2.3
Cisco	186785	171661	9.9	10.1	9.0	9.1	3.3	3.4	13.0	12.7	3.1	3.2	4.6
Juniper Networks	8719	8902	10.4	10.3	8.5	8.4	1.7	1.7	12.9	12.6	3.0	3.0	2.2
Motorola	50419	55186	22.6	21.0	19.5	18.3	6.0	5.6	27.9	25.8	1.1	1.1	95.4
ZTE	15401	15074	10.6	9.0	7.8	7.1	0.9	0.9	7.7	6.9	3.7	3.9	1.1
Ericsson	17673	18481		8.3	8.3	6.0	0.8	0.8	16.3	10.7	4.6	4.6	1.9
Amdocs	9563	9514	11.9	11.1	9.8	9.3	2.1	2.0	14.6	13.3	1.9	2.1	2.9
CommScope	409	9691	15.0	12.3	9.9	8.7	1.5	1.6	2.8	2.6			
Oracle	293526	365510	18.8	17.1	15.3	13.9	7.9	7.3	22.8	20.8	1.1	1.3	
Viavi	1834	2017	12.8	16.4	9.6	12.6	1.9	2.1	16.7	22.5			2.7
Nokia (Inderes)	16679	14110	5.2	6.3	4.4	5.8	0.6	0.6	8.7	10.5	5.0	5.6	0.8
Average			13.9	12.7	10.9	10.4	2.9	2.8	15.3	14.4	2.6	2.7	13.4
Median			12.7	11.9	9.8	9.3	1.9	2.0	16.3	13.3	2.6	2.7	2.7
Diff-% to median			-59%	-47%	-55%	-37%	-69%	-70%	-47%	-21%	91%	107%	-72%

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	22436	22655	22965
Mobile Networks	9717	2268	2592	2851	2960	10671	2567	2623	2157	2694	10041	9474	9455	9550
Network Infrastructure	7674	1974	2153	2211	2709	9047	2248	1979	1807	2235	8269	8239	8403	8572
Nokia Technologies	1502	306	305	305	679	1595	242	334	258	690	1524	1360	1401	1415
Cloud and Network Services	3089	736	754	801	1060	3351	760	741	742	1007	3250	3238	3271	3303
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	2379	2781	2875
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	2192	2476	2619
EBIT	2158	354	565	518	882	2318	426	474	241	1015	2156	1392	1826	2169
Mobile Networks	765	171	291	277	201	940	137	205	99	260	701	324	489	576
Network Infrastructure	784	195	247	228	432	1102	344	260	171	287	1062	998	1041	1074
Nokia Technologies	1185	220	217	207	564	1208	149	236	180	589	1154	997	1028	1042
Cloud and Network Services	166	20	-6	16	147	177	-20	16	36	173	205	233	268	276
Other	-125	-23	-36	-71	-189	-318	-131	-91	-63	-115	-399	-360	-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	1297	1756	2124
Taxes	-272	-79	-74	-93	2271	2026	-111	-116	-45	-249	-522	-323	-438	-530
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	968	1312	1588
EPS (adj.)	0.37	0.07	0.10	0.10	0.17	0.44	0.06	0.07	0.05	0.16	0.35	0.29	0.33	0.35
EPS (rep.)	0.29	0.04	0.08	0.08	0.56	0.76	0.05	0.05	0.02	0.13	0.26	0.17	0.24	0.29

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 %	-3.4 %	1.0 %	1.4 %
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 %	-19.5 %	12.9 %	5.8 %
EBITDA-%	14.7 %	11.7 %	14.4 %	12.9 %	15.8 %	13.9 %	11.8 %	13.1 %	10.2 %	19.1 %	13.9 %	10.6 %	12.3 %	12.5 %
Adjusted EBIT-%	12.5 %	10.9 %	12.2 %	10.5 %	15.5 %	12.5 %	8.2 %	11.0 %	8.5 %	17.9 %	11.7 %	9.8 %	10.9 %	11.4 %
Net earnings-%	7.3 %	4.0 %	7.8 %	6.8 %	42.3 %	17.1 %	4.8 %	5.1 %	2.8 %	11.2 %	6.3 %	4.3 %	5.8 %	6.9 %

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	18959	18894
Inventories	2392	3265	3204	3006	2990
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	7601	7839	8125	7875	7975
Cash and equivalents	9604	9162	8357	8077	7929
Balance sheet total	40049	42943	42038	40974	40604

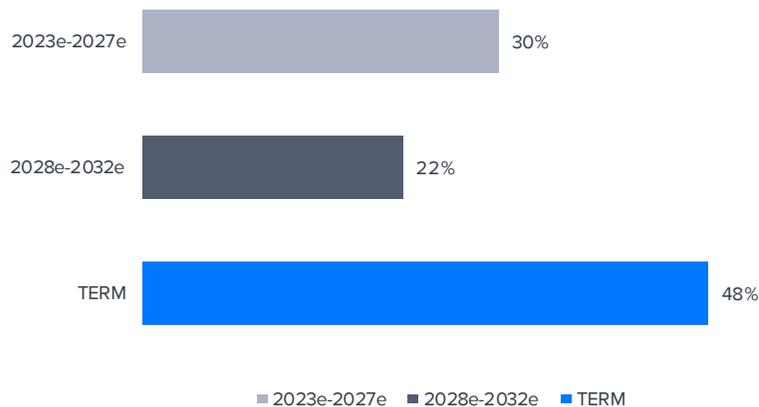
Source: Inderes

Liabilities & equity	2021	2022	2023e	2024e	2025e
Equity	17462	21426	22208	22345	22715
Share capital	246	246	246	246	246
Retained earnings	-2537	1375	2157	2294	2664
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	7914	7231
Deferred tax liabilities	282	332	332	332	332
Provisions	1569	1435	1200	1000	800
Interest bearing debt	5361	5107	4525	4100	3717
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	10714	10658
Interest bearing debt	301	1450	1208	1067	939
Payables	10876	10511	9982	9648	9719
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	40049	42943	42038	40974	40604

DCF calculation

DCF model	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	TERM
Revenue growth-%	12.2 %	-6.8 %	-3.4 %	1.0 %	1.4 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %
EBIT-%	9.3 %	9.3 %	6.2 %	8.1 %	9.4 %	9.2 %	9.0 %	8.9 %	8.8 %	8.7 %	8.5 %	8.5 %
EBIT (operating profit)	2318	2156	1392	1826	2169	2134	2108	2106	2103	2100	2072	
+ Depreciation	1140	1066	987	955	706	689	676	667	660	656	653	
- Paid taxes	-486	-638	-323	-438	-530	-521	-515	-457	-456	-458	-455	
- Tax, financial expenses	-27	-34	-25	-19	-13	-13	-13	-69	-70	-66	-63	
+ Tax, financial income	0	0	0	0	0	0	0	0	0	0	0	
- Change in working capital	-1476	-753	112	-12	-17	-59	-60	-61	-62	-39	-40	
Operating cash flow	1469	1797	2144	2312	2316	2230	2197	2185	2175	2192	2167	
+ 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	1194	1362	1366	1280	1247	1235	1425	1442	1412	
+/- Other	49	33	0	0	0	0	0	0	0	0	0	
FCFF	-979	821	1194	1362	1366	1280	1247	1235	1425	1442	1412	17497
Discounted FCFF		817	1089	1138	1046	898	801	727	769	712	639	7921
Sum of FCFF present value		16558	15741	14652	13514	12468	11570	10769	10041	9273	8560	7921
Enterprise value DCF		16558										
- Interest bearing debt		-6557										
+ Cash and cash equivalents		9162										
-Minorities		-70										
-Dividend/capital return		-671										
Equity value DCF		18438										
Equity value DCF per share		3.3										

Cash flow distribution



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	Per share data	2020	2021	2022	2023e	2024e
Revenue	21852	22202	24911	23215	22436	EPS (reported)	-0.45	0.29	0.76	0.26	0.17
EBITDA	2017	3253	3458	3222	2379	EPS (adj.)	0.25	0.37	0.44	0.35	0.29
EBIT	885	2158	2318	2156	1392	OCF / share	0.38	0.73	0.26	0.32	0.39
PTP	743	1926	2184	1983	1297	FCF / share	0.28	-0.16	-0.18	0.15	0.22
Net Income	-2523	1623	4250	1453	968	Book value / share	2.22	3.08	3.82	3.99	4.02
Extraordinary items	-1196	-617	-791	-568	-800	Dividend / share	0.00	0.08	0.12	0.15	0.17
Balance sheet	2020	2021	2022	2023e	2024e	Growth and profitability	2020	2021	2022	2023e	2024e
Balance sheet total	36191	40049	42943	42038	40974	Revenue growth-%	-6%	2%	12%	-7%	-3%
Equity capital	12545	17462	21426	22208	22345	EBITDA growth-%	-6%	61%	6%	-7%	-26%
Goodwill	5074	5431	5667	5667	5667	EBIT (adj.) growth-%	4%	33%	12%	-12%	-20%
Net debt	-1789	-3942	-2605	-2623	-2910	EPS (adj.) growth-%	10%	49%	20%	-21%	-18%
Cash flow	2020	2021	2022	2023e	2024e	EBITDA-%	9.2 %	14.7 %	13.9 %	13.9 %	10.6 %
EBITDA	2017	3253	3458	3222	2379	EBIT (adj.)-%	9.5 %	12.5 %	12.5 %	11.7 %	9.8 %
Change in working capital	225	608	-1476	-753	112	EBIT-%	4.0 %	9.7 %	9.3 %	9.3 %	6.2 %
Operating cash flow	2118	4127	1469	1797	2144	ROE-%	-18.2 %	10.9 %	22.0 %	6.7 %	4.4 %
CAPEX	-22	-4111	-847	-674	-650	ROI-%	4.6 %	10.3 %	9.0 %	7.6 %	5.0 %
Free cash flow	1599	-911	-979	821	1194	Equity ratio	34.7 %	43.6 %	49.9 %	52.8 %	54.5 %
						Gearing	-14.3 %	-22.6 %	-12.2 %	-11.8 %	-13.0 %
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	5.8						
EV/EBIT (adj.)	7.7	9.9	7.0	5.2	6.3						
P/E (adj.)	12.8	15.3	9.9	8.7	10.5						
P/B	1.4	1.8	1.1	0.8	0.7						
Dividend-%	0.0 %	1.4 %	2.8 %	5.0 %	5.6 %						

Lähde: Inderes

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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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 €
12/7/2023	Reduce	2.90 €	2.82 €
12/13/2023	Reduce	2.90 €	3.01 €



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