Nokia

Company report

12/7/2023





Mobile Networks starting to look like dead weight again

We reiterate our Reduce recommendation for Nokia and lower our target price to EUR 2.9 (was 3.2 EUR). Nokia losing AT&T's radio networks is a major setback for the company in the North American market - the market crucial to the company's profitability. In addition to the already weak market situation, this will hamper the turnaround of Mobile Networks, which will play an essential role in Nokia's overall medium-term earnings improvement. Without a turnaround in the earnings trend or restructuring of the business, we find it difficult to justify material upside to the low valuation over the next 12 months.

Hard to do good business in Mobile Networks - divesting the business would solve many problems

Nokia dropping out of AT&T radio network supplier list is yet another example of the fierce competitive pressure in the network equipment market under the squeeze of operator juggernauts. According to AT&T, Ericsson was prepared to lower its prices in a challenging market as part of a major deal. In this light, price competition may continue to erode the typically better margins for network equipment suppliers in the North American market. In the big picture, the size of the RAN market has not grown substantially in the long term and the now apparently accelerating shift to Open RAN technologies is bringing new players into the market to compete for the same pie. Looking to the end of the decade, this will make it more difficult to achieve significant improvements in profitability, while at the same time there will be a constant need to invest heavily in product development to keep pace with technological developments. This equation makes it difficult to achieve a good return on capital in the business, and in our view, Nokia should carefully consider whether staying in this business makes sense in terms of long-term shareholder value creation.

Medium-term earnings forecasts fell by around 10-11%

The loss of a major customer in the company's most important market will weigh on Nokia's profitability in the coming years, and the company's comment "Mobile Networks will remain profitable" does not yet paint a terribly encouraging picture of the outlook for the coming years. Competitive pressure from Open RAN technology is also a medium-term threat in terms of both market share losses and margins. We now expect Mobile Networks' EBIT to remain at a modest 5.6%-6.0% between 2024-2026 (was 7.8-8.7%). We expect Nokia to be able to offset to some extent the pressure on declining revenues and gross margin with the already announced efficiency program targeting annual savings of EUR 800-1,200 million. We believe it is possible that the company will have to make further savings in the coming years to defend its profitability. Our forecast still expects the patent disputes in Nokia Technologies to be resolved during Q4, but there is still a risk of a profit warning for the rest of the year.

Without a turnaround in the earnings trend, we do not see material upside to the low multiples

Nokia's adjusted earnings multiples (2024e P/E 9.5x, EV/EBIT 5.6x) look low, but we believe the drivers for a valuation increase are currently missing. Nokia's short-term demand outlook was already soft as operators put the brakes on their investments, and now the loss of AT&T is clouding the medium-term earnings growth outlook for Mobile Networks. Provided these challenges do not materially erode Nokia's current strong net cash position, the company should be able to distribute virtually all free cash flow back to shareholders from next year. Based on our projections, Nokia will generate around EUR 1.3 billion of FCF per annum between 2024 and 2026, representing a FCF yield of just over 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 3.20

Share price: 2.82



Key figures

| | 2022 | 2023 e | 2024e | 2025 e |
|------------------|--------|---------------|--------|---------------|
| Revenue | 24,911 | 23,215 | 22,116 | 22,304 |
| growth-% | 12% | -7% | -5% | 1% |
| EBIT adj. | 3,109 | 2,724 | 2,264 | 2,432 |
| EBIT-% adj. | 12.5 % | 11.7 % | 10.2 % | 10.9 % |
| Net Income | 4,201 | 1,455 | 1,022 | 1,279 |
| EPS (adj.) | 0.44 | 0.35 | 0.30 | 0.32 |
| | | | | |
| P/E (adj.) | 9.9 | 8.1 | 9.5 | 8.8 |
| P/B | 1.1 | 0.7 | 0.7 | 0.7 |
| Dividend yield-% | 2.8 % | 5.3 % | 6.0 % | 7.1 % |
| EV/EBIT (adj.) | 7.0 | 4.8 | 5.6 | 5.1 |
| EV/EBITDA | 6.3 | 4.1 | 5.2 | 4.5 |
| EV/S | 0.9 | 0.6 | 0.6 | 0.6 |
| | | | | |

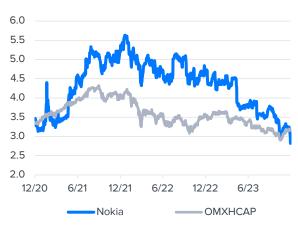
Source: Inderes

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

M

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 | 2023 e | 2024e | 2025 e | |
|----------------------------|---------------|--------|---------------|--|
| Share price | 2.82 | 2.82 | 2.82 | |
| Number of shares, millions | 5540.3 | 5540.3 | 5540.3 | |
| Market cap | 15624 | 15624 | 15624 | |
| EV | 13050 | 12692 | 12359 | |
| P/E (adj.) | 8.1 | 9.5 | 8.8 | |
| P/E | 10.8 | 15.3 | 12.2 | |
| P/B | 0.7 | 0.7 | 0.7 | |
| P/S | 0.7 | 0.7 | 0.7 | |
| EV/Sales | 0.6 | 0.6 | 0.6 | |
| EV/EBITDA | 4.1 | 5.2 | 4.5 | |
| EV/EBIT (adj.) | 4.8 | 5.6 | 5.1 | |
| Payout ratio (%) | 57% | 92% | 87% | |
| Dividend yield-% | 5.3 % | 6.0 % | 7.1 % | |
| | | | | |

Loss of AT&T will weigh on the profitability of Mobile Networks in the coming years

Medium-term earnings forecasts slashed by around 10-11%

- According to Nokia, AT&T's share of the Mobile Networks business group's revenues has been around 5-8% from the beginning of 2023 until now. For the full year 2023, this means around EUR 500-800 million in revenue on our forecasts. It is worth remembering that this year Mobile Network revenues in H2 are under significant pressure, especially as North American operators slow down their investments and digest their inventory levels. Thus, in previous better years, we estimate AT&T's share to have been around one billion.
- We expect the network equipment market to start recovering in H2'24, partially offsetting the revenue loss from AT&T. Overall, we expect Mobile Networks' revenue to remain stable in 2024-2026 at around EUR 9.5 billion (2023e: 10.0 BEUR).
- We expect the loss of AT&T and increased competitive pressure to be particularly reflected in the profitability of Mobile Networks. We now expect Mobile Networks' EBIT to remain at a modest 5.6%-6.0% between 2024-2026 (was 7.8-8.7%).
- We slightly lowered our forecasts for Network Infrastructure for the coming years, reflecting the continued challenging and the still somewhat deteriorating market conditions after the Q3 report

| Estimate revisions | 2023 e | 2023 e | Change | 2024e | 2024e | Change | 2025 e | 2025 e | Change |
|--------------------|---------------|---------------|--------|-------|-------|--------|---------------|---------------|--------|
| MEUR / EUR | Old | New | % | Old | New | % | Old | New | % |
| Revenue | 23215 | 23215 | 0% | 22403 | 22116 | -1% | 22603 | 22304 | -1% |
| EBITDA | 3222 | 3222 | 0% | 2710 | 2451 | -10% | 3043 | 2737 | -10% |
| EBIT (exc. NRIs) | 2724 | 2724 | 0% | 2523 | 2264 | -10% | 2738 | 2432 | -11% |
| EBIT | 2156 | 2156 | 0% | 1723 | 1464 | -15% | 2088 | 1782 | -15% |
| PTP | 1983 | 1983 | 0% | 1628 | 1369 | -16% | 2018 | 1712 | -15% |
| EPS (excl. NRIs) | 0.35 | 0.35 | 0% | 0.33 | 0.30 | -11% | 0.36 | 0.32 | -11% |
| DPS | 0.16 | 0.15 | -6% | 0.18 | 0.17 | -6% | 0.22 | 0.20 | -9% |

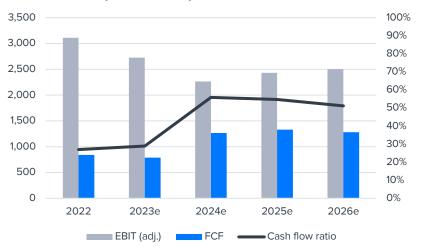
Estimate changes by division

| Estimate revisions | 2023 e | 2023 e | Change | 2024 e | 2024 e | Change | 2025 e | 2025 e | Change |
|----------------------------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|
| MEUR / EUR | Old | New | % | Old | New | % | Old | New | % |
| Revenue | 23215 | 23215 | 0% | 22403 | 22116 | -1% | 22603 | 22304 | -1% |
| Mobile Networks | 10041 | 10041 | 0% | 9645 | 9474 | -2% | 9636 | 9455 | -2% |
| Network Infrastructure | 8269 | 8269 | 0% | 8175 | 8059 | -1% | 8339 | 8220 | -1% |
| Nokia Technologies | 1524 | 1524 | 0% | 1290 | 1290 | 0% | 1367 | 1367 | 0% |
| Cloud and Network Services | 3250 | 3250 | 0% | 3168 | 3168 | 0% | 3136 | 3136 | 0% |
| Other | 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% | 2710 | 2451 | -10% | 3043 | 2737 | -10% |
| EBIT (exc. NRIs) | 2724 | 2724 | 0% | 2523 | 2264 | -10% | 2738 | 2432 | -11% |
| EBIT | 2156 | 2156 | 0% | 1723 | 1464 | -15% | 2088 | 1782 | -15% |
| Network Infrastructure | 701 | 701 | 0% | 748 | 531 | -29% | 817 | 555 | -32% |
| Network Infrastructure | 1062 | 1062 | 0% | 975 | 932 | -4% | 1017 | 973 | -4% |
| Nokia Technologies | 1154 | 1154 | 0% | 927 | 927 | 0% | 995 | 995 | 0% |
| NRIs/non-IFRS adjustments | 205 | 205 | 0% | 243 | 243 | 0% | 259 | 259 | 0% |
| Other | -399 | -399 | 0% | -370 | -370 | 0% | -350 | -350 | 0% |
| NRIs/non-IFRS adjustments | -568 | -568 | 0% | -800 | -800 | 0% | -650 | -650 | 0% |
| PTP | 1983 | 1983 | 0% | 1628 | 1369 | -16% | 2018 | 1712 | -15% |
| EPS (adjusted) | 0.35 | 0.35 | 0% | 0.33 | 0.30 | -11% | 0.36 | 0.32 | -11% |
| Dividend / share | 0.16 | 0.15 | -6% | 0.18 | 0.17 | -6% | 0.22 | 0.20 | -9% |

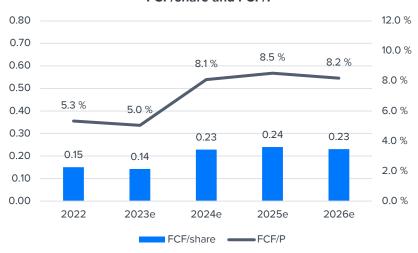
Summary of estimates

| Mobile Networks | 2021 | 2022 | 2023 e | 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 | 3216 | 3215 | 3256 |
| Gross margin | 37.4% | 38.4% | 34.3% | 33.9% | 34.0% | 34.1% |
| EBIT | 764 | 941 | 702 | 531 | 555 | 576 |
| EBIT-% | 7.9% | 8.8% | 7.0% | 5.6% | 5.9% | 6.0% |
| | | | | | | |
| Network Infrastructure | 2021 | 2022 | 2023 e | 2024 e | 2025 e | 2026 e |
| Revenue | 7674 | 9047 | 8268 | 8059 | 8220 | 8385 |
| growth % | 13.9% | 17.9% | -8.6% | -2.5% | 2.0% | 2.0% |
| Gross margin | 2684 | 3309 | 3072 | 2977 | 3033 | 3086 |
| Gross margin | 35.0% | 36.6% | 37.2% | 36.9% | 36.9% | 36.8% |
| EBIT | 784 | 1101 | 1062 | 932 | 973 | 1006 |
| EBIT-% | 10.2% | 12.2% | 12.8% | 11.6% | 11.8% | 12.0% |
| Cloud and Network Services | 2021 | 2022 | 2023 e | 2024e | 2025 e | 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 | 2023 e | 2024e | 2025e | 2026 e |
| 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% |
| Shared group functions and other | 2021 | 2022 | 2023e | 2024e | 2025e | 2026 e |
| Revenue | 257 | 296 | 145 | 140 | 140 | 140 |
| growth % | -4.3% | 15.2% | -51.0% | -3.4% | 0.0% | 0.0% |
| | | | | | | |

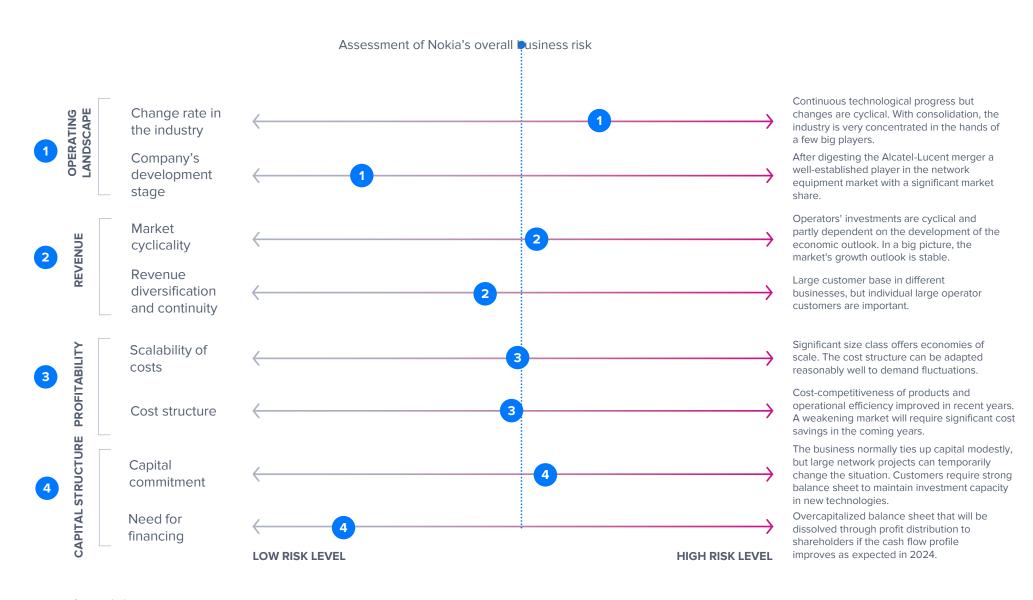
Development of comparable EBIT and cash flow



FCF/share and FCF/P



Risk profile of the business model



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 6.5-8.4 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 1.5-1.7 billion. In addition to weak profitability, the current sluggish growth supports moderate multiples.

For mobile networks, we have now assumed 5x-7x (was 6x-8x) EBIT multiples, resulting in a unit value of EUR 2.7-3.7 billion. The value is already getting very low, and we could see that a strategic buyer might be willing to pay more for the business. Assuming, for example, EV/S multiple of around 0.5x, the value of the transaction would rise to around EUR 5 billion.

Under the above assumptions, the total amount of the SOTP is EUR 18 billion (EUR 3.3/share) with a range of EUR 15-21 billion (EUR 2.7-3.8/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

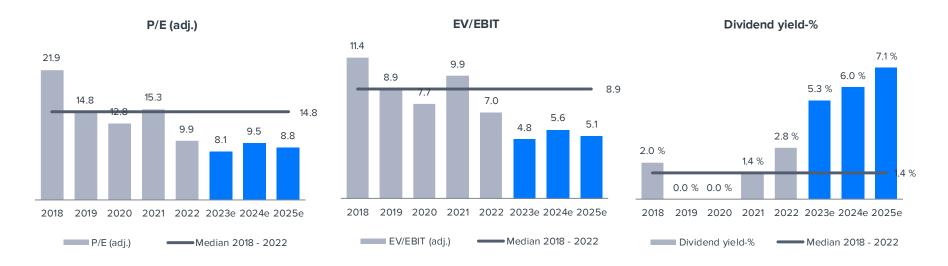
In light of Nokia's current net cash position and its target level (10-15%), the company should start distributing most of its earnings back to shareholders in the future if free cash flow starts to improve in line with the company's targets from next year. The weakened market situation has contributed 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 8% in our 2024-2026 projections. It is likely that some of the profits would be returned through share buybacks, so the dividend yield would not be guite so high. 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 reasonably good 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 | 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 | 0.9 | 0.9 | 0.9 |
| X valuation multiple | 7.0 | 8.0 | 9.0 |
| EV | 6.5 | 7.5 | 8.4 |
| Per share (EUR) | 1.2 | 1.3 | 1.5 |
| 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 | 0.5 | 0.5 | 0.5 |
| X valuation multiple | 5.0 | 6.0 | 7.0 |
| EV | 2.7 | 3.2 | 3.7 |
| Per share (EUR) | 0.5 | 0.6 | 0.7 |
| Total | Lower end | Neutral | Upper end |
| Aggregate EV Other operating and group costs | 16.2 | 18.7 | 21.2 |
| (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 |
| Per share (EUR) | 2.7 | 3.3 | 3.8 |

Valuation table

| Valuation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023e | 2024e | 2025e | 2026e |
|----------------------------|-------|-------|-------|--------|--------|---------------|--------|--------------|--------|
| Share price | 5.03 | 3.30 | 3.15 | 5.57 | 4.33 | 2.82 | 2.82 | 2.82 | 2.82 |
| Number of shares, millions | 5593 | 5606 | 5617 | 5629 | 5590 | 5540 | 5540 | 5540 | 5540 |
| Market cap | 28133 | 18476 | 17701 | 31378 | 24189 | 15624 | 15624 | 15624 | 15624 |
| EV | 24912 | 17799 | 15938 | 27543 | 21648 | 13050 | 12692 | 12359 | 12225 |
| P/E (adj.) | 21.9 | 14.8 | 12.8 | 15.3 | 9.9 | 8.1 | 9.5 | 8.8 | 8.5 |
| P/E | neg. | >100 | neg. | 19.3 | 5.7 | 10.8 | 15.3 | 12.2 | 10.4 |
| P/B | 1.8 | 1.2 | 1.4 | 1.8 | 1.1 | 0.7 | 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 | 0.5 |
| EV/EBITDA | 17.9 | 8.3 | 7.9 | 8.5 | 6.3 | 4.1 | 5.2 | 4.5 | 4.4 |
| EV/EBIT (adj.) | 11.4 | 8.9 | 7.7 | 9.9 | 7.0 | 4.8 | 5.6 | 5.1 | 4.9 |
| Payout ratio (%) | neg. | 0.0 % | 0.0 % | 27.7 % | 15.8 % | 57.2 % | 92.2 % | 86.6 % | 73.9 % |
| Dividend yield-% | 2.0 % | 0.0 % | 0.0 % | 1.4 % | 2.8 % | 5.3 % | 6.0 % | 7.1 % | 7.1 % |



Peer group valuation

| Peer group valuation | Market cap | EV | EV/E | ВІТ | EV/EI | BITDA | EV | //S | P | /E | Dividen | d yield-% | P/B |
|----------------------|------------|--------|-------|-------|-------|-------|---------------|--------------|-------|--------------|---------|-----------|--------------|
| Company | MEUR | MEUR | 2023e | 2024e | 2023e | 2024e | 2023e | 2024e | 2023e | 2024e | 2023e | 2024e | 2023e |
| Qualcomm | 133730 | 137497 | 13.5 | 12.2 | 11.3 | 11.0 | 4.2 | 3.9 | 15.6 | 14.0 | 2.4 | 2.5 | 7.0 |
| Ciena | 6418 | 6693 | 12.9 | 10.9 | 11.0 | 9.3 | 1.7 | 1.6 | 17.7 | 14.4 | | | 2.4 |
| Cisco | 180530 | 165504 | 9.6 | 9.8 | 8.8 | 8.8 | 3.2 | 3.3 | 12.6 | 12.4 | 3.2 | 3.3 | 4.5 |
| Juniper Networks | 8518 | 8699 | 10.2 | 10.1 | 8.3 | 8.3 | 1.7 | 1.7 | 12.6 | 12.4 | 3.0 | 3.1 | 2.1 |
| Motorola | 49668 | 54404 | 22.4 | 20.9 | 19.4 | 18.1 | 5.9 | 5.6 | 27.6 | 25.6 | 1.1 | 1.1 | 94.6 |
| ZTE | 14940 | 14614 | 10.3 | 8.8 | 7.6 | 6.9 | 0.9 | 8.0 | 7.5 | 6.8 | 3.7 | 4.0 | 1.1 |
| Ericsson | 16087 | 16893 | | 7.8 | 7.7 | 5.5 | 0.7 | 0.7 | 14.8 | 9.9 | 5.0 | 5.0 | 1.7 |
| Amdocs | 9394 | 9345 | 11.8 | 11.0 | 9.7 | 9.2 | 2.1 | 2.0 | 14.4 | 13.1 | 2.0 | 2.1 | 2.8 |
| CommScope | 371 | 9599 | 14.9 | 12.2 | 9.9 | 8.6 | 1.5 | 1.6 | 2.6 | 2.4 | | | |
| Oracle | 293253 | 364770 | 18.9 | 17.1 | 15.4 | 14.0 | 7.9 | 7.4 | 23.0 | 20.9 | 1.1 | 1.3 | |
| Viavi | 1760 | 1942 | 12.4 | 15.9 | 9.3 | 12.3 | 1.9 | 2.1 | 16.2 | 21.8 | | | 2.6 |
| Nokia (Inderes) | 15624 | 13050 | 4.8 | 5.6 | 4.1 | 5.2 | 0.6 | 0.6 | 8.1 | 9.5 | 5.3 | 6.0 | 0.7 |
| Average | | | 13.7 | 12.4 | 10.8 | 10.2 | 2.9 | 2.8 | 15.0 | 14.0 | 2.7 | 2.8 | 13.2 |
| Median | | | 12.6 | 11.0 | 9.7 | 9.2 | 1.9 | 2.0 | 14.8 | 13.1 | 2.7 | 2.8 | 2.6 |
| Diff-% to median | | | -62% | -49% | -58% | -44% | - 70 % | -71 % | -45% | -27 % | 97% | 115% | -73 % |

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 | 22116 | 22304 | 22577 |
| 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 | 8059 | 8220 | 8385 |
| 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 |
| Muut | 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 | 2451 | 2737 | 2757 |
| 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 | 2264 | 2432 | 2502 |
| EBIT | 2158 | 354 | 565 | 518 | 882 | 2318 | 426 | 474 | 241 | 1015 | 2156 | 1464 | 1782 | 2052 |
| Mobile Networks | 765 | 171 | 291 | 277 | 201 | 940 | 137 | 205 | 99 | 260 | 701 | 531 | 555 | 576 |
| Network Infrastructure | 784 | 195 | 247 | 228 | 432 | 1102 | 344 | 260 | 171 | 287 | 1062 | 932 | 973 | 1006 |
| Nokia Technologies | 1185 | 220 | 217 | 207 | 564 | 1208 | 149 | 236 | 180 | 589 | 1154 | 927 | 995 | 1008 |
| Cloud and Network Services | 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 | 1369 | 1712 | 2007 |
| Taxes | -272 | -79 | -74 | -93 | 2271 | 2026 | -111 | -116 | -45 | -249 | -522 | -341 | -427 | -500 |
| 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 | 1022 | 1279 | 1500 |
| EPS (adj.) | 0.37 | 0.07 | 0.10 | 0.10 | 0.17 | 0.44 | 0.06 | 0.07 | 0.05 | 0.16 | 0.35 | 0.30 | 0.32 | 0.33 |
| EPS (rep.) | 0.29 | 0.04 | 80.0 | 80.0 | 0.56 | 0.76 | 0.05 | 0.05 | 0.02 | 0.13 | 0.26 | 0.18 | 0.23 | 0.27 |
| | | | | | | | | | | | | | | |
| 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 % | -4.7 % | 0.8 % | 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 % | -16.9 % | 7.4 % | 2.9 % |
| EBITDA-% | 14.7 % | 11.7 % | 14.4 % | 12.9 % | 15.8 % | 13.9 % | 11.8 % | 13.1% | 10.2 % | 19.1% | 13.9 % | 11.1 % | 12.3 % | 12.2 % |
| Adjusted EBIT-% | 12.5 % | 10.9 % | 12.2 % | 10.5 % | 15.5 % | 12.5 % | 8.2 % | 11.0 % | 8.5 % | 17.9 % | 11.7 % | 10.2 % | 10.9 % | 11.1 % |
| Net earnings-% | 7.3 % | 4.0 % | 7.8 % | 6.8 % | 42.3 % | 17.1 % | 4.8 % | 5.1% | 2.8 % | 11.2 % | 6.3 % | 4.6 % | 5.7 % | 6.6 % |

Balance sheet

| Assets | 2021 | 2022 | 2023 e | 2024e | 2025 e |
|--------------------------|-------|-------|---------------|-------|---------------|
| 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 | 18688 | 18602 |
| Inventories | 2392 | 3265 | 3204 | 2964 | 2944 |
| Other current assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Receivables | 7601 | 7839 | 8125 | 7763 | 7851 |
| Cash and equivalents | 9604 | 9162 | 8357 | 7962 | 7806 |
| Balance sheet total | 40049 | 42943 | 42038 | 40703 | 40312 |

| Liabilities & equity | 2021 | 2022 | 2023e | 2024e | 2025 e |
|-----------------------------|-------|-------|-------|-------|---------------|
| Equity | 17462 | 21426 | 22208 | 22398 | 22736 |
| Share capital | 246 | 246 | 246 | 246 | 246 |
| Retained earnings | -2537 | 1375 | 2157 | 2347 | 2685 |
| 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 | 7775 | 7109 |
| Deferred tax liabilities | 282 | 332 | 332 | 332 | 332 |
| Provisions | 1569 | 1435 | 1200 | 1000 | 800 |
| Interest bearing debt | 5361 | 5107 | 4525 | 3961 | 3595 |
| 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 | 10530 | 10467 |
| Interest bearing debt | 301 | 1450 | 1208 | 1020 | 898 |
| Payables | 10876 | 10511 | 9982 | 9510 | 9569 |
| Other current liabilities | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Balance sheet total | 40049 | 42943 | 42038 | 40703 | 40312 |

DCF calculation

| DCF model | 2022 | 2023e | 2024e | 2025 e | 2026 e | 2027 e | 2028e | 2029 e | 2030 e | 2031e | 2032e | TERM |
|---|--------|--------|--------|---------------|---------------|---------------|-------|---------------|---------------|-------|-------|-------|
| Revenue growth-% | 12.2 % | -6.8 % | -4.7 % | 0.8 % | 1.2 % | 1.0 % | 1.0 % | 1.0 % | 1.0 % | 1.0 % | 1.0 % | 1.0 % |
| EBIT-% | 9.3 % | 9.3 % | 6.6 % | 8.0 % | 9.1% | 9.2 % | 9.0 % | 8.9 % | 8.8 % | 8.7 % | 8.5 % | 8.5 % |
| EBIT (operating profit) | 2318 | 2156 | 1464 | 1782 | 2052 | 2098 | 2073 | 2070 | 2067 | 2064 | 2037 | |
| + Depreciation | 1140 | 1066 | 987 | 955 | 706 | 689 | 676 | 667 | 660 | 656 | 653 | |
| - Paid taxes | -486 | -638 | -341 | -427 | -500 | -512 | -506 | -449 | -447 | -450 | -447 | |
| - 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 | 130 | -10 | -15 | -58 | -59 | -60 | -61 | -39 | -39 | |
| Operating cash flow | 1469 | 1797 | 2215 | 2281 | 2230 | 2204 | 2172 | 2160 | 2150 | 2166 | 2141 | |
| + 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 | 1265 | 1331 | 1280 | 1254 | 1222 | 1210 | 1400 | 1416 | 1386 | |
| +/- Other | 49 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| FCFF | -979 | 821 | 1265 | 1331 | 1280 | 1254 | 1222 | 1210 | 1400 | 1416 | 1386 | 17180 |
| Discounted FCFF | | 816 | 1152 | 1111 | 978 | 878 | 784 | 711 | 754 | 699 | 627 | 7767 |
| Sum of FCFF present value | | 16276 | 15460 | 14308 | 13197 | 12219 | 11341 | 10557 | 9846 | 9092 | 8393 | 7767 |
| | | | | | | | | | | | | |

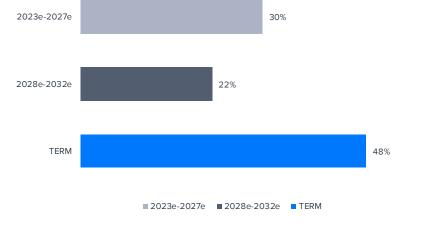
| Enterprise value DCF | 16276 |
|-----------------------------|-------|
| - Interest bearing debt | -6557 |
| + Cash and cash equivalents | 9162 |
| -Minorities | -66 |
| -Dividend/capital return | -671 |
| Equity value DCF | 18160 |
| Equity value DCF per share | 3.3 |

WACC

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

Source: Inderes

Cash flow distribution



Summary

| Income statement | 2020 | 2021 | 2022 | 2023 e | 2024 e | Per share data | 2020 | 2021 | 2022 | 2023 e | 2024e |
|---------------------------|-------|-------|-------|---------------|---------------|--------------------------|---------|---------|---------|---------------|---------------|
| Revenue | 21852 | 22202 | 24911 | 23215 | 22116 | EPS (reported) | -0.45 | 0.29 | 0.76 | 0.26 | 0.18 |
| EBITDA | 2017 | 3253 | 3458 | 3222 | 2451 | EPS (adj.) | 0.25 | 0.37 | 0.44 | 0.35 | 0.30 |
| EBIT | 885 | 2158 | 2318 | 2156 | 1464 | OCF / share | 0.38 | 0.73 | 0.26 | 0.32 | 0.40 |
| PTP | 743 | 1926 | 2184 | 1983 | 1369 | FCF / share | 0.28 | -0.16 | -0.18 | 0.15 | 0.23 |
| Net Income | -2523 | 1623 | 4250 | 1453 | 1022 | Book value / share | 2.22 | 3.08 | 3.82 | 3.99 | 4.03 |
| 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 | 2024 e |
| Balance sheet total | 36191 | 40049 | 42943 | 42038 | 40703 | Revenue growth-% | -6% | 2% | 12% | -7% | -5% |
| Equity capital | 12545 | 17462 | 21426 | 22208 | 22398 | EBITDA growth-% | -6% | 61% | 6% | -7% | -24% |
| Goodwill | 5074 | 5431 | 5667 | 5667 | 5667 | EBIT (adj.) growth-% | 4% | 33% | 12% | -12% | -17% |
| Net debt | -1789 | -3942 | -2605 | -2623 | -2981 | EPS (adj.) growth-% | 10% | 49% | 20% | -21% | -15% |
| | | | | | | EBITDA-% | 9.2 % | 14.7 % | 13.9 % | 13.9 % | 11.1 % |
| Cash flow | 2020 | 2021 | 2022 | 2023e | 2024e | EBIT (adj.)-% | 9.5 % | 12.5 % | 12.5 % | 11.7 % | 10.2 % |
| EBITDA | 2017 | 3253 | 3458 | 3222 | 2451 | EBIT-% | 4.0 % | 9.7 % | 9.3 % | 9.3 % | 6.6 % |
| Change in working capital | 225 | 608 | -1476 | -753 | 130 | ROE-% | -18.2 % | 10.9 % | 22.0 % | 6.7 % | 4.6 % |
| Operating cash flow | 2118 | 4127 | 1469 | 1797 | 2215 | ROI-% | 4.6 % | 10.3 % | 9.0 % | 7.6 % | 5.3 % |
| CAPEX | -22 | -4111 | -847 | -674 | -650 | Equity ratio | 34.7 % | 43.6 % | 49.9 % | 52.8 % | 55.0 % |
| Free cash flow | 1599 | -911 | -979 | 821 | 1265 | Gearing | -14.3 % | -22.6 % | -12.2 % | -11.8 % | -13.3 % |
| Valuation multiples | 2020 | 2021 | 2022 | 2023e | 2024e | | | | | | |
| EV/S | 0.7 | 1.2 | 0.9 | 0.6 | 0.6 | | | | | | |

Dividend-% Lähde: Inderes

EV/EBITDA (adj.)

EV/EBIT (adj.)

P/E (adj.)

P/B

7.9

7.7

12.8

1.4

0.0 %

9.9

15.3

1.8

1.4 %

6.3

7.0

9.9

1.1

2.8 %

4.1

4.8

8.1

0.7

5.3 %

5.2

5.6

9.5

0.7

6.0 %

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) | t 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€ |
| 12/7/2023 | Reduce | 2.90 € | 2.82 € |



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