It should be noted that Nokia and its business are exposed to various risks and uncertainties and certain statements herein that are not historical facts are forward-looking statements. These forward-looking statements reflect Nokia’s current expectations and views of future developments and include statements preceded by “believe”, “expect”, “expectations”, “commit”, “anticipate”, “foresee”, “see”, “target”, “estimate”, “designed”, “aim”, “plan”, “intend”, “influence”, “assumption”, “focus”, “continue”, “project”, “should”, “is to”, “will” or similar expressions. These statements are based on management’s best assumptions and beliefs in the light of the information currently available to it. Because they involve risks and uncertainties, actual results may differ materially from the results that we currently expect. Factors, including risks and uncertainties that could cause such differences can be both external, such as general, economic and industry conditions, as well as internal operating factors. We have identified these in more detail in our annual report on Form 20-F for the year ended December 31, 2022, under “Operating and Financial Review and Prospects—Risk Factors”, and in our other filings or documents furnished with the U.S. Securities and Exchange Commission, including Nokia’s financial results reports. Other unknown or unpredictable factors or underlying assumptions subsequently proven to be incorrect could cause actual results to differ materially from those in the forward-looking statements. We do not undertake any obligation to publicly update or revise forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent legally required.

Nokia presents financial information on reported, comparable and constant currency basis. Comparable measures presented in this document exclude intangible asset amortization and other purchase price fair value adjustments, goodwill impairments, restructuring related charges and certain other items affecting comparability. In order to allow full visibility on determining comparable results, information on items affecting comparability is presented separately for each of the components of profit or loss. Constant currency reporting provides additional information on change in financial measures on a constant currency basis in order to better reflect the underlying business performance. Therefore, change in financial measures at constant currency excludes the impact of changes in exchange rates in comparison to euro, our reporting currency. As comparable or constant currency financial measures are not defined in IFRS they may not be directly comparable with similarly titled measures used by other companies, including those in the same industry. The primary rationale for presenting these measures is that the management uses these measures in assessing the financial performance of Nokia and believes that these measures provide meaningful supplemental information on the underlying business performance of Nokia. These financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS.

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Agenda

4  Financial highlights
5  Business Group performance
11 Financial performance bridges
14 Cash flow performance
16 2023 TAM and outlook

Pekka Lundmark
President and CEO

Marco Wirén
CFO
Resilient performance amidst macro uncertainty

Q2 23 net sales (EUR)

5.7bn | flat year-on-year in constant currency

Q2 23 gross margin

38.8% | -180 bps year-on-year (comparable)

Q2 23 operating margin

11.0% | -120 bps year-on-year (comparable)
Network Infrastructure

- Short-term challenges impacting top-line
- IP Networks -11% reflected weakness with North America CSPs
- Fixed Networks decline driven by FWA and some inventory digestion
- Optical Networks +16%
- Strong margin progress due to positive product mix and cost discipline

All net sales changes presented are year-on-year in constant currency.
Network Infrastructure – Fixed Networks and IP Networks

Contribution to Fixed Networks y-o-y growth (reported) by product area

IP Networks by customer type

- Enterprise/webscale
- CSP
Mobile Networks

- India continued rapid pace of deployment
- NAM weakness continued in Q2
- Gross margin declined as a result of regional mix
- Operating margin improved sequentially
- Gross margin to improve towards end of year

All net sales changes presented are year-on-year in constant currency.
Cloud and Network Services

- Growth in Core Networks and Enterprise solutions
- Operating margin benefited from other operating income items and lower opex
- Red Hat strategic partnership in cloud infrastructure

All net sales changes presented are year-on-year in constant currency
Nokia Technologies

- Long term agreement signed with Apple
- Net sales benefited from EUR 80m of catch-up net sales
- Excluding catch-up, continue to be at EUR 1.0bn run rate in Q2
- 5,500 patent families declared essential to 5G

Nokia Technologies run-rate evolution

<table>
<thead>
<tr>
<th>Q2 2021 run-rate</th>
<th>Current run-rate</th>
<th>Prospective run-rate as of January 2024*</th>
<th>Long-term expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR 1.4-1.5bn</td>
<td>EUR 1.0bn</td>
<td>EUR 1.1bn</td>
<td>EUR 1.4-1.5bn</td>
</tr>
</tbody>
</table>

*Considering our current base of agreements, subject to any other material developments. This chart is to illustrate our financial planning assumptions. This chart is not illustrative of our view on deal valuations. Actual outcomes of negotiations may be different.
Enterprise momentum continues

- Q2 net sales grew 27%
- Continued strong growth with both enterprise and webscale customers
- More than 635 private wireless customers
- 90 new Enterprise customers

All net sales changes presented are year-on-year in constant currency.
India and Europe strength continue to offset North America
Year-on-year at constant currency

-3% reported
Flat at constant currency

Q2 2022  |  India  |  Europe  |  Middle East & Africa  |  Asia Pacific  |  Latin America  |  Greater China  |  North America  |  Submarine Networks  |  FX impact  |  Q2 2023
---|---|---|---|---|---|---|---|---|---|---
€5.9bn  |  +355%  |  +11%  |  +3%  |  -3%  |  -15%  |  -12%  |  -40%  |  -5%  |  €5.7bn
Nokia Technologies  |  +10%
Regional mix weighs on operating margin

- Cost discipline partly offsetting regional and product mix impact
- Venture funds impacted other operating income / expense
- Positive fluctuation in other operating income and expense
Operating profit by Business Group

- Network Infrastructure resilient despite top-line decline
- Cloud and Network Services showed progress
- Nokia Technologies benefited from EUR 80m of catch-up net sales
- Mobile Networks impacted by regional shift despite cost discipline
- Group Common mainly related to venture fund

<table>
<thead>
<tr>
<th>Business Group</th>
<th>Q2 2022</th>
<th>Q2 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Infrastructure</td>
<td>EUR 714m</td>
<td>12.2%</td>
</tr>
<tr>
<td>Cloud and Network Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nokia Technologies</td>
<td>EUR 80m</td>
<td></td>
</tr>
<tr>
<td>Mobile Networks</td>
<td>EUR 626m</td>
<td>11.0%</td>
</tr>
<tr>
<td>Group Common</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Group comparable operating profit
Free cash flow impacted by working capital

- Free cash flow negative EUR 0.4bn
- Net working capital mainly driven by employee variable pay within liabilities
- Returned EUR 250m to shareholders through dividend and share buyback
2023 cash conversion impacted by net working capital change
Macro uncertainty impacting market in 2023...

<table>
<thead>
<tr>
<th></th>
<th>Estimated, in EUR(^1)</th>
<th>2023</th>
<th>YoY (at const. ccy)</th>
<th>YoY prior est. (at const. ccy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Infrastructure(^2)</td>
<td>44bn</td>
<td>+1%</td>
<td>+4%</td>
<td></td>
</tr>
<tr>
<td>Mobile Networks(^3)</td>
<td>47bn</td>
<td>-2%</td>
<td>+4%</td>
<td></td>
</tr>
<tr>
<td>Cloud and Network Services</td>
<td>27bn</td>
<td>+3%</td>
<td>+3%</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Total addressable market forecasts assume the currency rate of 1 EUR = 1.09 USD as of 30 June 2023 through 2023. The addressable market is excluding Russia and Belarus.  
\(^2\)Excluding Submarine Networks  
\(^3\)Excluding China
...but the structural need to invest remains

Global Total Traffic (ZB/yr)

- Conservative
- Moderate
- Aggressive
- Disruptive

5G mid-band penetration (ex. China)

- North America
- Asia Pacific
- India
- Europe
- Middle East & Africa
- Latin America

- ~20-30% CAGR through 2030
- ~25% of 5G deployed on mid-band

FTTH Penetration Status (2022)

- MEA
- NAM
- LAT
- Europe (WE/EE)
- APAC w/o China

Source: Nokia Bell Labs Consulting
Source: Nokia internal estimates
Source: IDATE World FTTX market, Dec 2022
## 2023 outlook

### Full year 2023

<table>
<thead>
<tr>
<th>Metric</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>EUR 23.2 billion to EUR 24.6 billion (-4 to +2% growth in constant currency)</td>
</tr>
<tr>
<td>Comparable operating margin</td>
<td>11.5 to 13.0%</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>20 to 50% conversion from comparable operating profit</td>
</tr>
</tbody>
</table>

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1. Assuming the rate 1 EUR = 1.09 USD as of 30 June 2023 continues for the remainder of 2023 along with actual H1 foreign exchange rates (adjusted from prior 1.09 USD rate as of 31 March 2023).

2. Please refer to the Performance measure section of our Report for Q2 and Half Year 2023 for a full explanation of how these terms are defined.