Second quarter and half year results 2022

Alexander Everke, CEO
Ingo Bank, CFO
Moritz M. Gmeiner, Head of IR

July 2022
Vision and mission for ams OSRAM

To create the uncontested leader in optical solutions

Sensing  Illumination  Visualization

Become the uncontested leader in optical solutions through bold investments in disruptive innovation and continuous transformation delivering best in class profitability and growth
Pursue market leadership in key optical segments

Building success from our focus technologies

Key solution components

- **Emitters**
  - LEDs
  - Micro LED / Mini LED
  - VCSELs / EELs
  - Lamps

- **Optical components & micro-modules**
  - Optical elements: Lenses, light guides, DOEs
  - Micro-optical packaging
  - Optical modules

- **Detectors**
  - Light sensors
  - Bio-sensors
  - Image sensors

- **Integrated circuits & algorithms**
  - Emitter driver ICs
  - Sensor interfaces
  - Sensor processors (incl. algorithms)

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**Micro-optical solutions & lamps**

**Sensing**

**Illumination**

**Visualization**
Excellent position for leadership in optical solutions

Balanced revenue streams (H1 2022)

Industry-leading portfolio + application expertise
- Focus on leading technology position
- Leader in application expertise across end markets
- Agility to support short and long product life cycles
- Ability to drive innovation in different end markets, applications and customer bases
- Leveraging outstanding IP and manufacturing

Leading in key optical applications
- Advanced automotive exterior/interior LED lighting
- LED innovation (UV-C, IRED, high power specialty lighting)
- Micro LED next generation display technology
- 3D solutions (AR, authentication, consumer + industrial)
- Display management, optical sensing, near-to-eye AR/VR
- EEL + VCSEL LIDAR
- High performance imaging
## Clear investor value proposition

<table>
<thead>
<tr>
<th>Commitment to growth</th>
<th>Clear long-term targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader in optical solutions driven by secular growth trends in Automotive, Consumer and Industrial &amp; Medical</td>
<td>• Revenue CAGR &gt;10%, outgrowing our SAM</td>
</tr>
<tr>
<td><strong>Path to strong sustainable profitability</strong> Doubling of EBIT margin driven by portfolio optimization, manufacturing footprint consolidation, synergy realization and revenue growth</td>
<td>• Synergies / savings ~350M€</td>
</tr>
<tr>
<td><strong>Balanced and diversified business mix</strong> Balanced application end-market exposure and diversified global customer base creates broadly supported earnings streams</td>
<td>• Adj. EBIT margin 20%+</td>
</tr>
<tr>
<td><strong>Prudent financial policy</strong> De-lever based on strong operational cash flows and proceeds from divestments, while maintaining investment for growth</td>
<td>• Automotive 35-40%, Consumer 35-40%, I&amp;M 25-30%</td>
</tr>
<tr>
<td><strong>Focus on long-term value generation</strong> Re-invest in differentiating technology &amp; innovation and related organic growth opportunities, in alignment with ESG focus</td>
<td>• Top 10 global customers 35-40%</td>
</tr>
</tbody>
</table>

- **Adjusted figures exclude M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business**

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Note: Expected values based on current target model and available information. Expectations and targets are based on ams OSRAM’s latest reasonable assumptions and do not include potentially material effects related to the further development of the current or to any future geopolitical crisis.
Key societal megatrends drive demand for our optical solutions

**Digitalization**
- **Consumer**: Consumer 3D sensing, camera enhancement
- **Automotive**: Advanced displays, smart surfaces, head-up display/projected lighting
- **Industrial**: Industrial automation, robotics & drones
- **Medical**: Medical imaging

**Smart Living (IoT)**
- **Consumer**: AR/VR glasses sensing & visualization, vital signs monitoring
- **Automotive**: ADAS/AD (LiDAR), in-cabin sensing, dynamic forward & signal lighting
- **Industrial**: HABA, Outdoor & industry lighting
- **Medical**: Home diagnostics

**Energy efficiency & sustainability**
- **Consumer**: BOLED ALS/Spectral display management, microLED displays
- **Automotive**: Ambient lighting, UV-C disinfection
- **Industrial**: Horticulture, UV-C disinfection, LED & laser projection
- **Medical**: UV-C disinfection
Enabling innovation in automotive mobility

Driving automotive application and technology trends

- Exterior lighting
- Interior lighting
- Automated + autonomous driving
- Dynamic signaling
- Driver + interior monitoring
- Gesture sensing + HMI

Automotive

LED (low-mid-high power), matrix light, LIDAR (EEL/VCSEL), IRED, Micro LED, 2D/3D sensors, classic sources (Xenon, Halogen)
Broad offering of illumination, visualization and sensing components

**Illumination/ Visualization**
- Dynamic forward lighting
- Dynamic signaling
- Static forward lighting
- Functional illumination
- Static signaling
- Ambient lighting
- Projection
- Smart surface
- LCD backlighting

**Sensing**
- In cabin sensing
- Exterior sensing
- Rain-, light-, and tunnel sensing
- Smart surface
- Ambient light sensing
- Position sensing
Enabling innovation in mobile + wearable devices

Creating solutions for consumer application and technology trends

- Next generation microLED displays
- Camera enhancement
- 3D AR/VR + authentication
- Display management
- Presence detection
- Near-to-Eye projection

Mobile + wearable
BOLED, microLED, LED, proximity and 3D sensing, color sensing, VCSEL/EEL, Near-to-Eye, AWB, spectral sensing
Innovative portfolio for phones, wearables, AR/VR and other devices

- microLED
- LED/laser projection (AR/VR glasses)
- Camera enhancement
- 3D sensing for Augmented Reality
- Display management / BOLED sensing
- 2D/3D sensing
- Vital Signs Monitoring
- Authentication
- Eye/hand/body tracking
- User interfacing
Enabling innovation in industrial + medical applications

Technologies for Industry 5.0 applications + innovative medical technologies

Industrial IoT + automation
HABA + security monitoring
Horticulture
Medical imaging
Vital Signs Monitoring
UV-C disinfection

Industrial + Medical
IRED, LED, 3D/LiDAR, EEL/VCSEL, UV-C, near-infrared spectroscopy, Digital X-Ray, spectral sensing, CT sensing + photon counting, NanEye
Differentiated offering for industrial and medical applications

- Outdoor/industry lighting
- Horticulture & smart farming
- UV-C LED disinfection
- LED & laser projection
- Industrial automation (IoT + robotics, imaging)
- Home & Building Automation (HABA)
- Vital Signs Monitoring
- Medical imaging
Highlights Q2 & Outlook Q3 2022

Q2 2022
- Solid overall performance fully in line with guidance in a demanding market and supply chain environment
- Semiconductors: Good automotive and robust industrial performance, less favorable demand/supply chain situation with seasonal effects in consumer market
- L&S: In-line performance in light of automotive supply chain imbalances, seasonal and de-consolidation effects
- Substantial cash inflow and book gain from closing of Fluence transaction in May
- Healthy cash balance and solid leverage situation

Q3 2022
- Expected revenues EUR 1,150-1,250 million (EUR 1,190-1,290 million on a comparable portfolio basis)
- Expected operating profitability 6-9% (adj. EBIT margin)
- AMLS transaction closed 1 July
- Closing will result in deconsolidation effect for Q3 reducing Q3 revenues by approx. EUR 40 million on a comparable portfolio basis

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Financial Results Q2 and H1 2022
Q2 2022 Key financials at a glance

<table>
<thead>
<tr>
<th></th>
<th>Revenues</th>
<th>Gross margin (adj.)</th>
<th>EBIT margin (adj.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,183m EUR</td>
<td>31.6%</td>
<td>8.8%</td>
</tr>
<tr>
<td></td>
<td>-5% q-o-q</td>
<td>374m EUR</td>
<td>104m EUR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Net result (adj.)</th>
<th>Operational Cash Flow</th>
<th>Net debt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-54m EUR</td>
<td>100m EUR</td>
<td>1,727m EUR</td>
</tr>
<tr>
<td></td>
<td>-4.6%</td>
<td>8.4%</td>
<td>1.9x Leverage</td>
</tr>
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</table>
Group revenues – Q2 2022

Total revenues

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Revenues (EURm)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2021</td>
<td>1,239</td>
<td></td>
</tr>
<tr>
<td>Q1 2022</td>
<td>1,246</td>
<td>-5%</td>
</tr>
<tr>
<td>Q2 2022</td>
<td>1,183</td>
<td></td>
</tr>
<tr>
<td>H1 2022</td>
<td>2,429</td>
<td></td>
</tr>
</tbody>
</table>

Comments

- Sequential decrease influenced by de-consolidation effect (Fluence)
- Q2 year-on-year revenue development reflects de-consolidation effects related to several disposals including unwinding of former OSRAM Continental JV
- Like-for-like portfolio comparison shows ~2% growth year-on-year

Deconsolidation effects due to divestments

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business.
Balanced revenue distribution

Revenues by segment (Q2 2022)

- Semiconductors: 68%
- Lamps & Systems: 32%

Revenues by end market (Q2 2022)

- Automotive: 40%
- Consumer: 36%
- Industrial and Medical: 24%

Revenues by region (H1 2022)

- EMEA: 51%
- APAC: 18%
- Americas: 31%
Group profitability – Q2 2022

Gross profit, gross margin (adj.)

- Q2 2021: 415 EURm, 33%
- Q1 2022: 412 EURm, 33%
- Q2 2022: 374 EURm, 32%
- H1 2022: 786 EURm, 32%

EBIT, EBIT margin (adj.)

- Q2 2021: 109 EURm, 9%
- Q1 2022: 126 EURm, 10%
- Q2 2022: 104 EURm, 9%
- H1 2022: 230 EURm, 9%

All figures in EURm / % of revenues, 2021 financials reflect reclassification within functional cost categories

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Operating expenses

R&D expenses (adj.)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2021 Q3</th>
<th>2021 Q4</th>
<th>2022 Q1</th>
<th>2022 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D (adj.)</td>
<td>155</td>
<td>149</td>
<td>146</td>
<td>137</td>
</tr>
<tr>
<td>% of revenues</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>

SG&A expenses (adj.)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2021 Q3</th>
<th>2021 Q4</th>
<th>2022 Q1</th>
<th>2022 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG&amp;A (adj.)</td>
<td>148</td>
<td>145</td>
<td>137</td>
<td>136</td>
</tr>
<tr>
<td>% of revenues</td>
<td>12%</td>
<td>12%</td>
<td>11%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Comments

- SG&A base-line reduction progressing over last quarters
- R&D levels reflect portfolio- and roadmap-driven investments for new technologies (e.g. microLED); vast majority of R&D invest is within Semiconductors segment
- Target levels for operating expenses (% of revenues):
  - Adj. R&D 11-14%
  - Adj. SG&A 7-9%

All figures in EURm / % of revenues. 2021 financials reflect reclassification within functional cost categories
1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
**Adj. Net result and Adj. EPS**

**Net result (adj.)**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2021</th>
<th>Q1 2022</th>
<th>Q2 2022</th>
<th>H1 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adj.</td>
<td>70</td>
<td>102</td>
<td>-54</td>
<td>48</td>
</tr>
</tbody>
</table>

**EPS basic (adj.)**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2021</th>
<th>Q1 2022</th>
<th>Q2 2022</th>
<th>H1 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURm</td>
<td>0.26</td>
<td>0.39</td>
<td>0.18</td>
<td></td>
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<tr>
<td>CHF</td>
<td>0.29</td>
<td>0.40</td>
<td>-0.21</td>
<td>0.18</td>
</tr>
</tbody>
</table>

**Notes:**

- Q2 2022: Significant one-time tax expense with effect from Fluence disposal and respective substantial book gain
- Q2 2022: Financing result EUR -50m, in line with expectations (Q1 2022: EUR -50m)
- IFRS reported net result: Q2 2022 EUR 58m (includes positive effect from Fluence disposal, excluded in adj. figures)

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1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Semiconductors performance

- Slight sequential increase despite continued demanding supply chain and market environment
- Solid performance in automotive business despite supply chain imbalances, robust industrial demand
- Less favorable demand and supply chain situation with lower smartphone volumes in consumer market

All figures in EURm / % of revenue

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Lamps & Systems performance

- De-consolidation effect from Fluence closing beginning of May
- In-line results in light of automotive supply chain imbalances next to more pronounced seasonal effects
- AMLS disposal closed early July; disposals of DS Europe/Asia and Traxon businesses announced in Q2

All figures in EURm / % of revenue

1) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Cash flow overview

Operating / Free cash flow (FCF)

- Q2 2021: 190 EURM, 15% of revenues
- Q1 2022: 146 EURM, 12% of revenues
- Q2 2022: 100 EURM, 8% of revenues
- H1 2022: 247 EURM, 10% of revenues

- Q2 2021: 34 EURM, 4% of revenues
- Q1 2022: 113 EURM, 9% of revenues
- Q2 2022: 97 EURM, 8% of revenues
- H1 2022: 210 EURM, 9% of revenues

Capital expenditures

All figures in EURm / % of revenues
Cash and debt overview

• Solid group leverage of ~1.9x net debt/adjusted\(^1\) EBITDA at end of Q2 2022
• Substantial cash inflow in Q2 from closing of Fluence disposal
• Well-layered debt and maturity structure, augmented by undrawn multi-year EUR 800m revolving facility
• Approx. 95% of outstanding debt on fixed rate basis
• Adj. EBITDA\(^1\) LTM EUR 928m (based on adj. EBIT + D&A not related to adjustments)

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\(^1\) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Outlook Q3 2022

Revenues
EUR 1,150-1,250 million
(EUR 1,190-1,290 million on a comparable portfolio basis)

Operating profitability
6-9% (adjusted EBIT margin)

Comments
• AMLS transaction closed 1 July
• Closing will result in deconsolidation effect for Q3 reducing Q3 revenues by approx. EUR 40 million on a comparable portfolio basis

Adjusted figures exclude M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business
Sensing is life
# Profit and loss statement

**IFRS reported figures**

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q2 2021</th>
<th>HY 2022</th>
<th>HY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td>1,183</td>
<td>1,239</td>
<td>2,429</td>
<td>2,521</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td>348</td>
<td>237</td>
<td>733</td>
<td>654</td>
</tr>
<tr>
<td>• Gross margin (IFRS reported)</td>
<td>29%</td>
<td>19%</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>• Gross margin (adjusted(^1))</td>
<td>32%</td>
<td>33%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>-151</td>
<td>-193</td>
<td>-313</td>
<td>-360</td>
</tr>
<tr>
<td><strong>Selling, general and administrative</strong></td>
<td>-157</td>
<td>-187</td>
<td>-313</td>
<td>-372</td>
</tr>
<tr>
<td><strong>Other operating income/expenses</strong></td>
<td>177</td>
<td>26</td>
<td>149</td>
<td>33</td>
</tr>
<tr>
<td><strong>Results from investments in associates</strong></td>
<td>-1</td>
<td>-3</td>
<td>-1</td>
<td>-7</td>
</tr>
<tr>
<td><strong>Result from operations (EBIT)</strong></td>
<td>216</td>
<td>-119</td>
<td>256</td>
<td>-52</td>
</tr>
<tr>
<td>• EBIT margin (IFRS reported)</td>
<td>18%</td>
<td>-10%</td>
<td>11%</td>
<td>-2%</td>
</tr>
<tr>
<td>• EBIT margin (adjusted(^1))</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Net financing result</strong></td>
<td>-50</td>
<td>-33</td>
<td>-100</td>
<td>-90</td>
</tr>
<tr>
<td><strong>Result before tax</strong></td>
<td>166</td>
<td>-152</td>
<td>156</td>
<td>-142</td>
</tr>
<tr>
<td><strong>Income tax result</strong></td>
<td>-108</td>
<td>-8</td>
<td>-82</td>
<td>-17</td>
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<tr>
<td><strong>Net result (IFRS reported)</strong></td>
<td>58</td>
<td>-158</td>
<td>74</td>
<td>-160</td>
</tr>
<tr>
<td><strong>Net result (adjusted(^1))</strong></td>
<td>-54</td>
<td>70</td>
<td>48</td>
<td>144</td>
</tr>
</tbody>
</table>

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\(^1\) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of a business.
## Balance sheet

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1,413</td>
<td>1,331</td>
<td>Short-term interest-bearing loans</td>
<td>411</td>
<td>480</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>29</td>
<td>6</td>
<td>Trade payables</td>
<td>683</td>
<td>710</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>669</td>
<td>688</td>
<td>Income tax payables</td>
<td>78</td>
<td>85</td>
</tr>
<tr>
<td>Inventories</td>
<td>985</td>
<td>938</td>
<td>Current provisions</td>
<td>249</td>
<td>328</td>
</tr>
<tr>
<td>Other receivables and assets</td>
<td>218</td>
<td>185</td>
<td>Other current liabilities</td>
<td>1,370</td>
<td>1,359</td>
</tr>
<tr>
<td>Assets held for sale</td>
<td>273</td>
<td>134</td>
<td>Liabilities held for sale</td>
<td>77</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>3,588</td>
<td>3,282</td>
<td><strong>Total current liabilities</strong></td>
<td>2,868</td>
<td>3,001</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>1,648</td>
<td>1,606</td>
<td>Interest-bearing loans</td>
<td>2,730</td>
<td>2,646</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>3,965</td>
<td>3,989</td>
<td>Employee benefits</td>
<td>154</td>
<td>181</td>
</tr>
<tr>
<td>Right of use</td>
<td>263</td>
<td>260</td>
<td>Deferred tax liabilities</td>
<td>196</td>
<td>205</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>33</td>
<td>34</td>
<td>Provisions</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>110</td>
<td>182</td>
<td>Other liabilities</td>
<td>391</td>
<td>413</td>
</tr>
<tr>
<td>Other long term assets</td>
<td>176</td>
<td>143</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets</td>
<td>157</td>
<td>147</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td>6,353</td>
<td>6,362</td>
<td><strong>Total non-current liabilities</strong></td>
<td>3,519</td>
<td>3,493</td>
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<tr>
<td>Shareholders’ equity ams-OSRAM AG</td>
<td>3,545</td>
<td>3,142</td>
<td>Non-controlling interests</td>
<td>9</td>
<td>8</td>
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<tr>
<td><strong>Total assets</strong></td>
<td>9,941</td>
<td>9,644</td>
<td><strong>Total liabilities and equity</strong></td>
<td>9,941</td>
<td>9,644</td>
</tr>
</tbody>
</table>

All figures in EURm
## Cash flow statement

### Selected cash flow items

<table>
<thead>
<tr>
<th></th>
<th>Q2 2022</th>
<th>Q2 2021</th>
<th>HY 2022</th>
<th>HY 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net result</td>
<td>58</td>
<td>-158</td>
<td>74</td>
<td>-160</td>
</tr>
<tr>
<td>Amortization, depreciation and impairment</td>
<td>141</td>
<td>304</td>
<td>298</td>
<td>462</td>
</tr>
<tr>
<td>Cash flows from operations</td>
<td>100</td>
<td>190</td>
<td>247</td>
<td>397</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>-97</td>
<td>-44</td>
<td>-210</td>
<td>-124</td>
</tr>
<tr>
<td>Acquisition, net of cash acquired</td>
<td>-7</td>
<td>-429</td>
<td>-7</td>
<td>-442</td>
</tr>
<tr>
<td>Proceeds and payments from disposals of businesses</td>
<td>251</td>
<td>73</td>
<td>251</td>
<td>77</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>148</td>
<td>-395</td>
<td>39</td>
<td>-490</td>
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<tr>
<td>Proceeds from loans</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>96</td>
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<td>Repayment of loans</td>
<td>-5</td>
<td>-4</td>
<td>-67</td>
<td>-169</td>
</tr>
<tr>
<td>Repayment of lease liabilities</td>
<td>-39</td>
<td>-20</td>
<td>-56</td>
<td>-33</td>
</tr>
<tr>
<td>Interest paid</td>
<td>-16</td>
<td>-18</td>
<td>-62</td>
<td>-73</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>-112</td>
<td>-44</td>
<td>-239</td>
<td>-182</td>
</tr>
<tr>
<td>Net change in cash and cash equivalents</td>
<td>200</td>
<td>-263</td>
<td>111</td>
<td>-256</td>
</tr>
<tr>
<td>Cash and cash equivalents at end of period</td>
<td>1,413</td>
<td>1,340</td>
<td>1,413</td>
<td>1,340</td>
</tr>
</tbody>
</table>

All figures in EURm