First quarter results 2023

Aldo Kamper, CEO / Interim CFO
Moritz M. Gmeiner, Head of IR

May 2023
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
  - LED incl. NIR, IR, UV-C
  - MicroLED
  - EEL / VCSEL
  - Lamps

- Optical components & micro-modules
  - Optical elements
  - Micro-optical packaging
  - Optical modules

- Detectors
  - Light sensors
  - Image sensors
  - Other optical

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

Micro-optical solutions & lamps

Sensing

Illumination

Visualization
Excellent position for leadership in optical solutions

Balanced revenue streams (FY 2022)

- 24% Consumer
- 41% Automotive
- 35% Industrial and Medical

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

Leading technologies for key optical applications
- High performance automotive LED lighting (exterior + interior)
- LED innovation (UV-C, IRED, high power specialty lighting)
- Micro LED next generation display technology
- Display management, optical sensing
- Near-to-eye AR/VR illumination + sensing
- 3D AR/authentication (consumer + industrial)
- EEL/VCSEL ADAS (LIDAR)
- High performance imaging (industrial + medical)
Key societal megatrends drive demand for our optical solutions

<table>
<thead>
<tr>
<th></th>
<th>Consumer</th>
<th>Automotive</th>
<th>Industrial</th>
<th>Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digitalization</strong></td>
<td>Camera enhancement, light sensing, consumer 3D</td>
<td>Advanced displays, smart surfaces, projected lighting</td>
<td>Industrial automation, robotics &amp; drones</td>
<td>Medical imaging</td>
</tr>
<tr>
<td><strong>Smart Living (IoT)</strong></td>
<td>AR/VR glasses sensing &amp; visualization, vital signs monitoring</td>
<td>ADAS/AD (LIDAR), dynamic forward &amp; signal lighting, in-cabin sensing</td>
<td>HABA, outdoor &amp; industry lighting</td>
<td>Personal + home care</td>
</tr>
<tr>
<td><strong>Energy efficiency &amp; sustainability</strong></td>
<td>BOLED ALS/spectral display management, microLED displays</td>
<td>Ambient lighting, UV-C disinfection</td>
<td>Horticulture, UV-C disinfection, LED + laser projection</td>
<td>UV-C disinfection</td>
</tr>
</tbody>
</table>
Broad offering for illumination, visualization and sensing applications

<table>
<thead>
<tr>
<th><strong>Illumination / Visualization</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Dynamic + static forward lighting</td>
</tr>
<tr>
<td>- Dynamic + static signaling</td>
</tr>
<tr>
<td>- Functional illumination + interior lighting</td>
</tr>
<tr>
<td>- Ambient lighting</td>
</tr>
<tr>
<td>- Projection</td>
</tr>
<tr>
<td>- Smart surface</td>
</tr>
<tr>
<td>- LCD backlighting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sensing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- In cabin sensing</td>
</tr>
<tr>
<td>- Exterior sensing + ADAS</td>
</tr>
<tr>
<td>- Rain, light, and tunnel sensing</td>
</tr>
<tr>
<td>- Smart surface</td>
</tr>
<tr>
<td>- Ambient light sensing</td>
</tr>
<tr>
<td>- Position sensing</td>
</tr>
</tbody>
</table>
Enabling innovation in automotive mobility

Driving automotive application and technology trends

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

Automotive

LED (low-mid-high power), matrix light, 2D/3D sensors, IRED, LIDAR (EEL/VCSEL), MicroLED, classic sources (Xenon, Halogen)
Innovative portfolio for smartphone, wearable, AR/VR and other devices

Sensing
- Camera enhancement
- Display management / BOLED sensing
- 2D/3D sensing (Augmented Reality, other)
- Vital Signs Monitoring
- Authentication
- Eye/hand/body tracking
- User interfacing

Illumination / Visualization
- MicroLED
- LED/laser projection (AR/VR glasses)
Enabling innovation in mobile + wearable devices

Creating solutions for consumer application and technology trends

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

Mobile + wearable

BOLED, microLED, LED, proximity + light sensing, color sensing, AWB, spectral sensing, 3D sensing, VCSEL/EEL, Near-to-Eye
Strong differentiation in industrial and medical applications

**Illumination / Visualization**
- Outdoor/industry lighting
- Horticulture & smart farming
- LED & laser projection
- UV-C LED disinfection

**Sensing**
- Industrial automation (IoT + robotics, imaging)
- Home & Building Automation (HABA)
- Medical imaging
- Vital signs monitoring
Enabling innovation in industrial + medical applications

Technologies for current and emerging industrial applications + innovative medical uses

Industrial lighting, IoT + automation

Outdoor lighting, HABA, security

Horticulture

Medical imaging

Vital signs monitoring

UV-C disinfection

Industrial + Medical

IRED, LED, 3D/LIDAR, EEL/VCSEL, UV-C, image sensing, spectral sensing, NIR spectroscopy, digital X-ray, CT sensing/photon counting, NanEye
Q1 2023 Key developments
Q1 2023 Key developments

Overview of key developments

- First quarter results in line with guidance reflecting difficult market environment and macro-economic trends
- Subdued demand situation across areas drives ongoing underutilization with negative impact on profitability
- Strong quarter for automotive aftermarket, moderate sequential decline in automotive semiconductor business
- Very muted consumer business sequentially and year-on-year driven by continued end market weakness
- Continued lower demand in LED industrial, outdoor, and horticulture lighting, but certain signs of stabilization in other industrial markets
- Last communicated disposals closed for full completion of planned disposals
- Synergy creation fully on track
- Meaningful sequential increase in capex driven by investments into 8” LED front-end fab
Q1 2023 Key developments

Disposals progress

- Closing of last two remaining disposals in March/Q1 (entertainment lighting) and April/Q2 (Digital Systems Europe/Asia)
- All planned and communicated disposals of businesses outside of strategic focus areas now closed
- Successful completion of portfolio re-alignment following the acquisition of OSRAM
- Expected total cash inflow of high double-digit EURm from disposal proceeds in 2023, majority still to receive
- Total combined proceeds for all disposal transactions since 2021 expected at close to EUR 600m
- Substantial sequential deconsolidation effect in Q2 of around EUR 80m revenues
Q1 2023 Key developments

Synergy creation / integration update

- EUR 305m synergy and savings run-rate at end of Q1 2023 (87% of total expected run-rate), in line with plans
- Synergy creation and integration programs fully on track
- ~70% of one-time integration costs incurred at end of Q1 2023 (EUR ~80m expected to remain, total cost estimate to realize synergies EUR ~270m)

Creation of synergies and savings (EURm)¹)

Graphical representation of expected annual gross pre-tax run-rate synergies of EUR 300m p.a. against original baseline gradually ramping up over approx. three years after DPLTA effective date.

Overall target 360

Cost savings pre-DPLTA

245 305 50

Sep 2022 Mar 2023 Sep 2023 Mar 2024

All figures in EURm: ¹) synergy and savings values gross pre-tax and approximate figures

Graphic representation of expected annual gross pre-tax run-rate synergies of EUR 300m p.a. against original baseline gradually ramping up over approx. three years after DPLTA effective date.
Q1 2023 Key developments

Capital expenditures

- Significant investment into manufacturing capabilities as part of long-term strategy
- Strong sequential increase in capex in Q1, predominantly for industry-first 8” LED front-end facility in Malaysia
- Completion of building, build-out of support infrastructure and planned equipment deliveries drive substantial capex through 2023, construction progressing on schedule
- Capex development in line with plans, currently expected total 2023 capex of slightly below EUR 1 billion
- 2023 expected to be significant peak capex year compared to last and next few years
Q1 2023 Semiconductors segment

**Automotive market**
- Moderate sequential decline, in line with company expectations
- Inconsistent order patterns in automotive market in Q1
- Inventory adjustments in downstream supply chain continued as expected, stabilizing at end of Q1

**Consumer market**
- Significantly negative q-o-q shipment trend in several product areas
- Driven by lower y-o-y volumes in smartphones + consumer devices given macro-economic environment and consumer spending
- Q-o-q seasonal and mix effects in smartphones across regions, China and Android markets subdued, weak q-o-q volume development in wearables applications

**Industrial & Medical mkt.**
- Unfavorable results in line with expectations
- Reduced q-o-q demand in certain industrial markets (LED industrial, outdoor and horticulture lighting)
- Other industrial and medical market contributions supportive
Q1 2023 Lamps & Systems segment

Automotive market

- L&S automotive incl. traditional lighting for aftermarket and OEM
- Robust segment performance driven by aftermarket business for lamps
- Strong aftermarket business also supported by seasonality despite unfavorable macro-economic trends affecting some regions

Other markets

- Industrial, building-related and medical business supportive
- Mixed demand trends across areas due to macro-economic environment
Financial results Q1 2023
Group revenues

- Revenues in-line with guidance range, challenging market environment causing meaningful sequential decrease
- Reduced quarter-on-quarter demand and volumes in important markets given prevailing macro-economic trends
- Year-on-year comparison reflects de-consolidation effects of around EUR 73m from several disposals, including former OSRAM Continental JV business AMLS, Fluence horticulture fixtures business and others

All figures in EURm / % of revenues
Balanced revenue distribution

Revenues by segment (Q1 2023)

- 59% Semiconductors
- 41% Lamps & Systems

Revenues by end market (Q1 2023)

- 16% Automotive
- 34% Consumer
- 50% Industrial & Medical

Revenues by region (FY 2022)

- 30% EMEA
- 18% APAC
- 52% Americas

- Q1 with strong Lamps & Systems contribution, particularly from automotive aftermarket business
- Automotive: Inventory adjustments continuing in Q1
- Consumer: Very muted demand environment

Note: Revenues by region are updated on a half-yearly basis
Group profitability

Gross profit, gross margin (adj.)\(^1\)

- Gross profit tracked company expectations
- Continued to be impacted by meaningful underutilization effects in manufacturing
- Cost mitigation efforts in manufacturing

EBIT, EBIT margin (adj.)\(^1\)

- Adj. EBIT margin in line with guidance range
- Reflecting sequentially lower Gross Profit base
- Support from Q1 cost mitigation for lower adj. operating expenses

---

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

- Strong decrease in operating expenses on absolute basis over last quarters
- R&D development reflects ongoing stream-lining and efficiency programs, majority of R&D in Semiconductors segment
- Clear SG&A base-line reduction from efficiency programs over last 12 months

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 businesses
Semiconductors segment performance

- Moderate sequential decline in automotive business driven by further inventory adjustments in Q1
- Significantly muted consumer business with lower volumes y-o-y and q-o-q; industrial and medical results tracking expectations, q-o-q demand reduction in certain industrial markets
- Profitability significantly impacted by lower production volumes and underutilization

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 businesses
Lamps & Systems segment performance

- Robust performance and resilience on comparable portfolio basis
- Strong performance of L&S automotive business despite macro-economic trends, other L&S markets reflecting more subdued demand situation
- Substantially improved profitability also reflects positive disposal-related and portfolio streamlining effects

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 businesses
Adj. net result / Adj. EPS

Net result (adj.)¹)

<table>
<thead>
<tr>
<th>Period</th>
<th>Q1 2022</th>
<th>Q4 2022</th>
<th>Q1 2023</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>102</td>
<td>29</td>
<td>6</td>
<td>124</td>
</tr>
</tbody>
</table>

EPS diluted (adj.)¹)

<table>
<thead>
<tr>
<th>Period</th>
<th>Q1 2022</th>
<th>Q4 2022</th>
<th>Q1 2023</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>0.39</td>
<td>0.11</td>
<td>0.02</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

- Financial result Q1 EUR -32m
- Income tax result Q1 EUR -12m
- IFRS reported net result EUR -134m
Continuing strong operating cash flow generation in Q1, up year-on-year (18% of revenues)

Free cash flow (FCF) development as expected given substantial capital expenditures in Q1

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

1. Expected uptick in group leverage to 2.5x net debt/adjusted\(^1\) EBITDA at end of Q1 2023 driven by net debt and trailing EBITDA trend
2. Well-layered debt and maturity structure, EUR 1 billion undrawn multi-year lines (incl. EUR 800m revolving facility)
3. ~95% of outstanding debt on fixed rate basis
4. Adj. EBITDA\(^1\) LTM EUR 767m (based on adj. EBIT + D&A not related to adjustments)

All figures in EURm

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

Q2 2023 financial guidance

Revenues

EUR 800-900 million
(sequentially flat at the midpoint of EUR 880-980 million revenues on comparable portfolio basis)

Operating profitability

3-6% (adjusted EBIT margin)

Comments

- Reflecting ongoing subdued demand trends, seasonal effects, continued reduced production volumes, and meaningful deconsolidation effects
- Approx. EUR 80m q-o-q deconsolidation effect compared to Q1 (Digital Systems Europe/Asia transaction closed early April)
- Approx. EUR 150m y-o-y deconsolidation effect compared to Q2 2022
- Taking into account current macro-economic and market trends, cautiously optimistic to benefit from improving demand environment during H2 2023, based on current information and exchange rates
## Profit and loss statement

**IFRS reported figures**

<table>
<thead>
<tr>
<th></th>
<th>Q1 2023</th>
<th>Q1 2022</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td>927</td>
<td>1,246</td>
<td>4,819</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Gross margin (IFRS reported)</td>
<td>209</td>
<td>385</td>
<td>1,258</td>
</tr>
<tr>
<td>- Gross margin (adjusted¹)</td>
<td>23%</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>- Gross margin (adjusted¹)</td>
<td>29%</td>
<td>33%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Research and development</strong></td>
<td>-147</td>
<td>-162</td>
<td>-630</td>
</tr>
<tr>
<td><strong>Selling, general and administrative</strong></td>
<td>-143</td>
<td>-156</td>
<td>-608</td>
</tr>
<tr>
<td><strong>Other operating income</strong></td>
<td>15</td>
<td>3</td>
<td>179</td>
</tr>
<tr>
<td><strong>Other operating expenses</strong></td>
<td>-17</td>
<td>-31</td>
<td>-357</td>
</tr>
<tr>
<td><strong>Results from investments in associates</strong></td>
<td>-8</td>
<td>0</td>
<td>-4</td>
</tr>
<tr>
<td><strong>Result from operations (EBIT)</strong></td>
<td>-90</td>
<td>40</td>
<td>-161</td>
</tr>
<tr>
<td>- EBIT margin (IFRS reported)</td>
<td>-10%</td>
<td>3%</td>
<td>-3%</td>
</tr>
<tr>
<td>- EBIT margin (adjusted¹)</td>
<td>5%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Net financing result</strong></td>
<td>-32</td>
<td>-50</td>
<td>-201</td>
</tr>
<tr>
<td><strong>Result before tax</strong></td>
<td>-122</td>
<td>-10</td>
<td>-361</td>
</tr>
<tr>
<td><strong>Income tax result</strong></td>
<td>-12</td>
<td>26</td>
<td>-82</td>
</tr>
<tr>
<td><strong>Net result (IFRS reported)</strong></td>
<td>-134</td>
<td>15</td>
<td>-444</td>
</tr>
<tr>
<td><strong>Net result (adjusted¹)</strong></td>
<td>6</td>
<td>102</td>
<td>124</td>
</tr>
</tbody>
</table>

¹) Excluding M&A-related, transformation and share-based compensation costs as well as results from investments in associates and sale of businesses
## Balance sheet

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td></td>
<td></td>
<td>Current interest-bearing loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current financial investments</td>
<td>861</td>
<td>1,087</td>
<td>Trade payables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade receivables</td>
<td>21</td>
<td>21</td>
<td>Income tax payables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>880</td>
<td>864</td>
<td>Current provisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other current receivables and assets</td>
<td>211</td>
<td>223</td>
<td>Other current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets held for sale</td>
<td>158</td>
<td>157</td>
<td>Liabilities held for sale</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td><strong>2,661</strong></td>
<td><strong>2,884</strong></td>
<td><strong>Total current liabilities</strong></td>
<td><strong>2,717</strong></td>
<td><strong>2,717</strong></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>1,973</td>
<td>1,856</td>
<td>Non-current interest-bearing loans</td>
<td>2,636</td>
<td>2,635</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>3,605</td>
<td>3,645</td>
<td>Employee benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-use assets</td>
<td>230</td>
<td>230</td>
<td>Deferred tax liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments in associates</td>
<td>23</td>
<td>35</td>
<td>Non-current provisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>65</td>
<td>69</td>
<td>Other non-current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>53</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current financial assets</td>
<td>36</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td><strong>5,985</strong></td>
<td><strong>5,948</strong></td>
<td><strong>Total non-current liabilities</strong></td>
<td><strong>3,285</strong></td>
<td><strong>3,281</strong></td>
</tr>
<tr>
<td>Shareholders’ equity ams-OSRAM AG</td>
<td></td>
<td></td>
<td></td>
<td><strong>2,638</strong></td>
<td><strong>2,826</strong></td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td></td>
<td></td>
<td></td>
<td><strong>7</strong></td>
<td><strong>7</strong></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>8,646</strong></td>
<td><strong>8,832</strong></td>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>8,646</strong></td>
<td><strong>8,832</strong></td>
</tr>
</tbody>
</table>

All figures in EURm
## Cash flow

### Selected cash flow items

<table>
<thead>
<tr>
<th></th>
<th>Q1 2023</th>
<th>Q1 2022</th>
<th>FY 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net result</td>
<td>-134</td>
<td>15</td>
<td>-444</td>
</tr>
<tr>
<td>Amortization, depreciation and impairment</td>
<td>173</td>
<td>157</td>
<td>1,018</td>
</tr>
<tr>
<td>Cash flows from operating activities</td>
<td>162</td>
<td>147</td>
<td>599</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>-302</td>
<td>-113</td>
<td>-537</td>
</tr>
<tr>
<td>Acquisitions of subsidiaries, net of cash acquired</td>
<td>-31</td>
<td>0</td>
<td>-25</td>
</tr>
<tr>
<td>Proceeds from sale of businesses, net of cash disposed</td>
<td>11</td>
<td>0</td>
<td>346</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>-306</td>
<td>-109</td>
<td>-183</td>
</tr>
<tr>
<td>Proceeds from loans</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Repayment of loans</td>
<td>-2</td>
<td>-62</td>
<td>-134</td>
</tr>
<tr>
<td>Repayment / repurchase of convertible bonds</td>
<td>0</td>
<td>0</td>
<td>-334</td>
</tr>
<tr>
<td>Repayment of lease liabilities</td>
<td>-15</td>
<td>-18</td>
<td>-109</td>
</tr>
<tr>
<td>Interest paid</td>
<td>-46</td>
<td>-46</td>
<td>-125</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>-63</td>
<td>-127</td>
<td>-726</td>
</tr>
<tr>
<td>Net change in cash and cash equivalents (incl. FX effects)</td>
<td>-242</td>
<td>-89</td>
<td>-172</td>
</tr>
<tr>
<td>Cash and cash equivalents at end of the period</td>
<td>861</td>
<td>1,235</td>
<td>1,087</td>
</tr>
</tbody>
</table>

All figures in EURm