

## Our Company

### Our Vision

For ams, “Sensing is Life” and our passion is in creating sensor solutions that make devices and technology smarter, safer, more environmentally friendly and easier to use. We are shaping the world

with sensor solutions, leading the way in forging continuous connections between people and technology, and envisioning a seamless experience between the two.

### Our Company & Strategy

ams’ sensor solutions and sensor ICs are at the heart of the products and technologies that define our world today – from smartphones and mobile devices to smart homes and buildings, industrial automation, medical technology and connected vehicles. Leading manufacturers around the globe rely on our sensing expertise for advanced system designs. Our solutions excel in applications requiring extreme precision, dynamic range, high sensitivity, and low power consumption in small form factors.

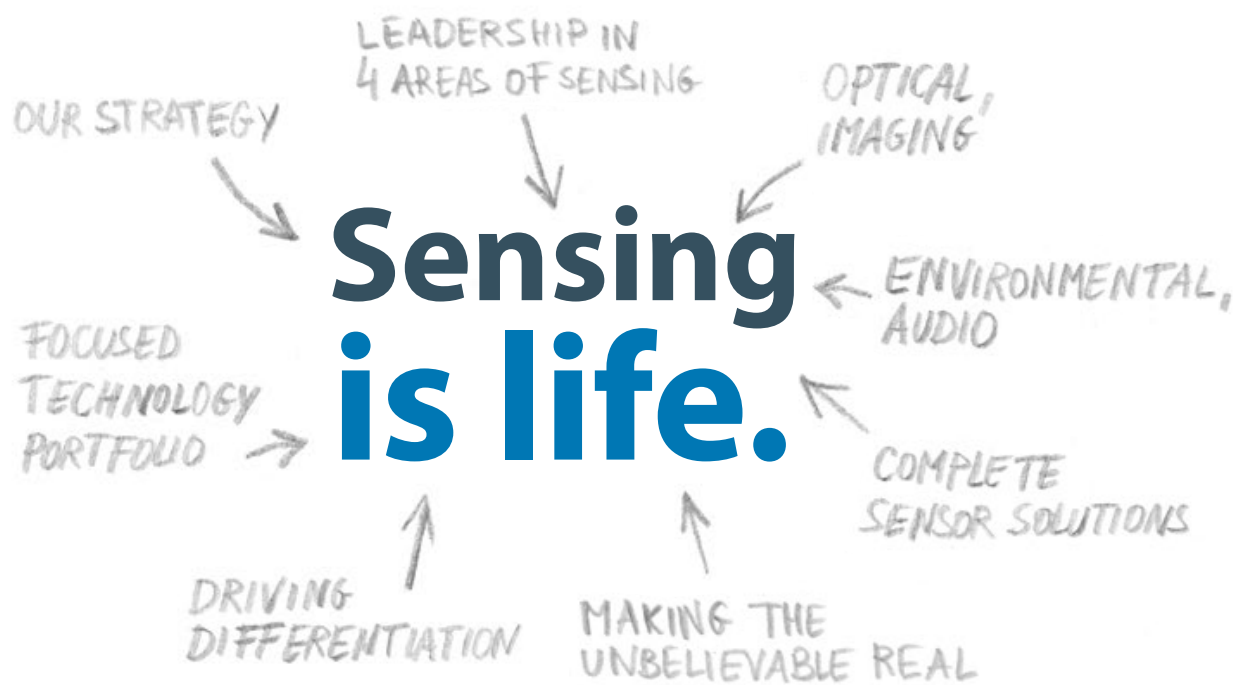
In 2016, we set forth a bold corporate strategy to be the global leader in sensor solutions in four fast growing areas: Optical, Imaging, Environmental and Audio sensing. These areas now represent the four pillars of our business, and we have taken decisive steps to build true leadership in these high-value markets.

We actively manage a focused technology and product portfolio around these four sensing areas to drive differentiation as the key factor for sustained leadership. Executing our roadmap towards our vision makes ams an ever-stronger player in the global semiconductor industry – to benefit our customers, shareholders, suppliers, and employees.

In each of our four focus areas we strive to offer industry-leading performance to our customers

by providing complete sensor solutions, so OEMs can rely on one trusted vendor for their technology needs. We are driving integration of sensor technologies into monolithically integrated solutions or multi-sensor modules. These multi-sensor solutions – also called sensors hubs – may include hardware, state-of-the-art sensor algorithms, sensor fusion software and application software. By offering complete solutions, we help the industry move forward and create strategic advantages for customers. We empower OEMs to deliver differentiated products that change and improve lives, and enable exciting new end-user experiences.

To build global leadership in optical, imaging, environmental and audio sensing, we completed a series of strategic acquisitions in 2016. The addition of Heptagon, the global leader in micro-optics and high-performance optical packaging, stands out as a transforming event for our company making ams the clear worldwide leader in optical sensing. Furthermore, the acquisition of CCMOSS created a leadership position in gas sensing for the environmental sensor market, and the addition of MAZeT enhanced ams’ reach in spectral optical sensing. Finally, the acquisition of Incus Laboratories broadened our offering in active noise cancellation technologies.



## Our Company

### Our Talent

ams recognizes the company's workforce as its greatest asset and the key driver of ams' global success. We embrace a wide range of highly creative, innovative, and unconventional thinkers, helping us attract and retain the best and brightest talent in the industry. Our culture is designed for pushing boundaries, empowering our workforce while

holding them accountable. We demand integrity in everything we do, and expect our team to be loyal, trustworthy, authentic and true role models. Diversity is valued across ams and the commitment and effort of every staff member contributes to our achievements in a competitive worldwide marketplace.

### Manufacturing

ams' flexible manufacturing concept combines internal and external wafer production capacity and in-house test at internal manufacturing sites in Austria and the Philippines. In 2016, we significantly expanded our optical filter layer deposition capacity for industry-leading optical sensor solutions. We also defined a robust path for expanding

wafer volumes with our technology manufacturing partners to support expected growth in the coming years. Through our acquisition of Heptagon we added high-volume manufacturing capabilities for differentiated packaging technology in Singapore where we are completing a major expansion of manufacturing capacity.

## Corporate Responsibility

Ethical, professional practices and environmental responsibility principles guide how ams conducts its business. Our company code of conduct is a binding set of principles and procedures for all ams staff safeguarding consistent, responsible, and accountable corporate activity across all business functions.

We are a member of the UN Global Compact, the world's largest corporate initiative for responsible business and sustainability. With more than 10,000 participants in 130 countries, the UN Global Compact is committed to human rights, labor standards, environmental protection, and anti-corruption measures.

We remain firm in our commitment of protecting the environment and the sustainability of resources, and strive to reduce our carbon emissions footprint globally. We are deploying state-of-the-art technologies designed to decrease our electric and natural gas consumption. Supporting these efforts, ams' internal production sites in Austria and the Philippines are certified per the Environmental Management System DIN EN ISO 14001. Our emissions footprint information is published within the framework of the Carbon Disclosure Project, an international initiative for corporate disclosure of environmental information.

## Our Business

ams focuses on sensor solutions for high value and emerging markets in two major areas:

Consumer and Communications  
Automotive, Industrial, Medical

### Consumer and Communications

ams' consumer and communications business is a major supplier of advanced sensor solutions for smartphones, tablet PCs and other consumer devices supporting a broad range of technologies. Our portfolio for consumer and communications OEMs includes high performance optical sensors for display management and the emerging high growth area of 3D sensing, audio solutions such as Active Noise Cancelling (ANC) and microphone interfaces, and environmental sensor technology for consumer devices.

We are expanding our industry-leading optical portfolio with True Color sensors for enhanced viewing experiences for OLED and non-OLED displays and ultra-high sensitivity proximity modules. Our other lines of light sensors, including RGB color and other proximity sensors, are the existing backbone of our consumer business to support sophisticated display management. Used in hundreds of millions of smartphones, tablets, laptop computers and other communications devices, they deliver a richer and improved overall experience for the user.

The strategic acquisition of Heptagon brings leading expertise in high performance optics and packaging for optical sensing solutions to ams. Heptagon is a major supplier into applications for smartphones and other mobile devices requiring high volume optical packaging in very small form factors. Adding Heptagon's outstanding capabilities

ties positions ams very strongly for leadership in upcoming optical sensing applications.

We recognize significant growth potential from new advanced uses of our light sensor technology based on spectral sensing and 3D sensing. Spectral sensing is a broad technology platform which enables innovative analysis of light environments, colors, body data and, in future, organic material. Consumer spectral sensing supports applications from True Color display management to biosensors for personal health information and new multispectral sensor-on-chip solutions where our roadmap includes the optical identification of organic compounds in foodstuffs.

3D sensing is a major emerging growth opportunity for ams and expected to drive a significant expansion of sensor content in mobile devices. Near-term applications such as facial recognition for authentication and 3D cameras for augmented and virtual reality will serve as starting points for the expected wide adoption of 3D sensing capabilities in the consumer market. We believe the increasing availability of 3D sensing systems will create a whole world of new applications and sensor uses in the coming years.

The recent acquisition of Princeton Optronics completes our optical sensing value chain by adding the illumination light source to our portfolio.

Princeton Optronics has a strong position in VCSEL lasers that are expected to become the technology of choice for optical sensing light sources. Importantly, ams can now leverage in-house technologies for all key elements of optical sensor solutions which enables industry-leading integration and performance.

Refining the audio quality in mobile devices is another strength for ams, and we address market needs with our active noise cancellation solutions (ANC) and MEMS microphone interfaces for smartphones, earphones, headsets, and other consumer devices. ams is the clear market leader in MEMS microphone interfaces focused on high-quality applications while our ANC solutions deliver crystal clear sound regardless of surrounding noise levels.

### Automotive, Industrial and Medical

In automotive applications, ams' high performance sensor solutions make driving safer, smarter and more fuel-efficient. Sensors play a pivotal role in the realization of safety systems supporting the move toward autonomous driving. Based on our existing business in LIDAR collision avoidance, we see attractive potential in the evolution of LIDAR technology, which is expected to expand into a key element of the autonomous driving roadmap. Our optical technology portfolio is well-positioned to create full scale solutions for next-generation LIDAR systems. Intelligent position sensors from ams deliver robustness in automotive applications and increase vehicle reliability. Pedal and throttle position, transmission, steering wheel angle and torque, and brushless motor control are typical uses for position sensing. Overall, ams sensor solutions for safety, position measurement, level

We strengthened our position in ANC last year through the acquisition of Incus Laboratories, a provider of intellectual property (IP) for digital ANC systems. As a result, we are now able to offer analog and digital ANC solutions to cover different system architectures and customer requirements.

ams environmental sensors are seeing first designs in consumer devices that monitor air quality and temperature measuring ambient concentrations of gases associated with poor air quality, such as alcohols and aromatic hydrocarbons, or identify alcohol levels in the breath. In the coming years, we expect environmental sensing, and gas sensing in particular, to begin migrating into smartphones and mobile consumer devices to provide information on potential health or safety concerns.

control and other vehicle systems are successful in a growing range of vehicle platforms.

In the industrial space, ams remains a leading supplier of sensors and sensor interfaces for industrial and factory automation, industrial sensing, and building control. We offer a broad portfolio of differentiated solutions for major OEMs in a wide range of end markets. These include industrial image sensor products for machine vision and inspection, traffic control and high-end imaging applications. Optical sensing is driving emerging applications such as smart lighting solutions which harvest daylight for energy-efficient illumination of indoor spaces using spectral sensing technology. Further industrial applications for spectral sensing are on the horizon aided by last year's acquisition of MAZeT which broadened our portfolio for

next-generation spectral sensing. Our environmental and gas sensing technologies are also seeing the first industrial applications in what we expect to develop into a significant growth market for environmental sensing.

Ongoing demand for more advanced and cost-efficient diagnostics equipment drives the need for advanced sensor solutions in medical technology. In our core area of medical imaging – which includes computer tomography, digital X-ray, and mammography – our CMOS image sensor solutions lead the market, creating significant diagnostic

and patient benefits to improve healthcare. Our very small scale NanEye image sensors provide miniature camera heads for uses such as disposable endoscopy where they are establishing new diagnostic standards. Looking forward, we see opportunities to design converged medical solutions bringing together ams' expertise in image and spectral sensing to realize innovative diagnostic concepts. Sensor technologies from ams thus support new ways to improve medical patients' quality of life and enable easier and more convenient health management.

## Our Global Network

### Europe

**Austria**  
Headquarters

**Germany**  
4 locations

**Belgium**

**Finland**  
2 locations

**France**

**Italy**  
3 locations

**Netherlands**

**Portugal**

**Spain**

**Switzerland**  
2 locations

**United Kingdom**  
3 locations

### Asia

**China**  
3 locations

**India**

**Japan**

**Korea**

**Philippines**

**Singapore**  
2 locations

**Taiwan**

### North America

**USA**  
4 locations



# Group Management Report 2016

## 1. Overview of the Economic Environment and the Past Financial Year

The global semiconductor sector showed a mixed development in 2016 and was influenced by an increasingly volatile macroeconomic environment in key regions. Total sales of the global semiconductor industry increased slightly by 1.1% to USD 338.9bn in 2016, while market volume had decreased by 0.2% in 2015 to USD 335.1bn. The relevant market segment for ams, analog semiconductors, grew 5.8% to USD 47.8bn in 2016 (previous year: USD 45.3bn).<sup>1</sup>

Continuous innovation based on more than 35 years of experience in analog semiconductors and sensors makes ams a leading supplier of advanced sensor and analog IC solutions. Through its worldwide network ams has a strong presence in the relevant markets in Europe, Asia, and North America as more than 8,000 customers globally rely on ams' expertise in sensing.

ams defined a focused strategy around leadership in the fast-growing markets for optical, imaging, environmental and audio sensing last year. As the company started to implement this strategy through active management of its technology portfolio, 2016 was an expected year of transformation for ams.

Taking a significant strategic step forward, ams announced the acquisition of Heptagon last year. Heptagon is a global leader in micro-optics and optical sensing solutions with particular expertise in high performance optical packaging. Adding Heptagon's capabilities positions ams strongly for leadership in upcoming optical sensing applications including spectral sensing, time-of-flight technology, and 3D sensing. The Heptagon

business offers a substantial existing development pipeline and major opportunities to combine ams' and Heptagon technologies into industry-leading optical solutions. ams therefore expects the Heptagon business to enable new growth prospects for the group in the coming years.

ams' business segment Products comprises the markets Consumer & Communications and Automotive, Industrial, Medical.

ams' Consumer & Communications Business which is a major supplier of advanced sensor and analog solutions for smartphones, tablet PCs and other consumer devices recorded a solid performance in 2016. ams' optical sensor product lines again provided the largest share of group revenues in 2016 while ams fortified its position as worldwide market leader in advanced light sensors.

ams continued to supply a broad range of leading smartphone and consumer OEMs with mobile device light sensor solutions last year. ams' high performance color, ambient light and proximity sensors and modules are found in a wide spectrum of high volume consumer devices globally. ams was able to broaden its portfolio of mobile optical sensor solutions last year and recorded strong market traction including designs at new customers. In combination with Heptagon, ams sees itself extremely well positioned to capture significant value in new optical sensing solutions from this year onwards. ams expects technologies such as true color, spectral sensing, 3D sensing and new imaging-related applications to offer substantial growth opportunities for the group.

In audio solutions, the MEMS microphone interface product line performed well again last year with ams' market leadership resulting in continued very high volumes. An increasing adoption of active noise cancellation (ANC) offers attractive potential for higher ams content in consumer devices through bundled accessories. ams acquired Incus, a provider of intellectual property (IP) for digital active noise cancellation, in 2016 to broaden the company's technology reach in ANC.

ams successfully divested its wireless business for NFC and RFID reader applications last year as part of its strategic portfolio alignment. ams retained relevant wireless IP to support the expected adoption of wireless sensor solutions in multiple end markets.

ams' Industrial, Medical and Automotive Businesses developed positively in 2016 in line with expectations. ams was able to improve its market penetration given a strong technology base including newly acquired IP, a wide range of end markets, and a broad base of customers worldwide.

ams' Industrial Business performed well last year, however, business momentum remained limited throughout the year amid signs of end market and macroeconomic uncertainty. As a leading global supplier of sensors and sensor interfaces for industrial and factory automation, building control, and industrial sensing, ams offers a broad portfolio of differentiated solutions for major OEMs and a wide range of applications. Imaging product lines generally developed in line with expectations last year with an attractive pipeline going forward driven by new applications.

Implementing its strategic approach, ams acquired CCMOSS, a world leader in gas and IR sensor technologies, and MAZeT, an important techno-

logy player in spectral sensing with an industrial focus, last year. The addition of CCMOSS creates a complete value chain offering for integrated gas sensors propelling ams into a leadership position in gas sensing for a variety of applications. MAZeT broadens ams' portfolio for next generation spectral sensors concentrating on new industrial opportunities. Both transactions added future growth potential in new markets and innovative applications.

ams' Medical Business recorded attractive results in 2016 demonstrating ams' sector-specific sensing expertise. This development was mainly driven by the core area of Medical Imaging for computed tomography (CT), digital X-ray, and mammography. As the market leader in high resolution imaging solutions ams ramped a new OEM last year and gained additional imaging customers in Asia for future programs. ams therefore broadened its market reach and continues to advance diagnostic, patient and cost benefits in medical imaging.

The company's Automotive Business showed another year of solid growth in 2016 given a supportive demand environment and the ongoing expansion of sensing content in vehicles. ams' high performance sensor solutions for safety, position measurement, level control and other applications are successful in a growing range of vehicle platforms. Focusing on its sensing strengths, ams is well positioned to benefit from the trend towards new automotive sensor systems. ams sees attractive mid-term potential in the evolution of optical sensor technologies which are expected to support the autonomous driving roadmap.

ams' business segment Foundry which manufactures analog and mixed-signal ICs for customers in specialty processes again recorded a positive performance in 2016 and contributed attractively

to the company's results. The business segment is positioned as a full service provider offering a broad spectrum of services from design support to final test and holds a leading market position as an analog foundry for specialty processes.

Preparing for expected business growth in the future, ams made further investments last year to increase production capacity at the company's headquarters and successfully concluded the

expansion of optical filter layer deposition capacity. Due to significant delays outside of ams' control ams decided to withdraw from the envisaged project to operate a wafer fabrication facility to be built by the State of New York (USA). At the same time, ams has defined a robust, cost-attractive path for expanding outsourced wafer volumes with its technology manufacturing partners to support its growth ambitions for the coming years.

## 2. Business Results

### 2.1 Development of Revenues

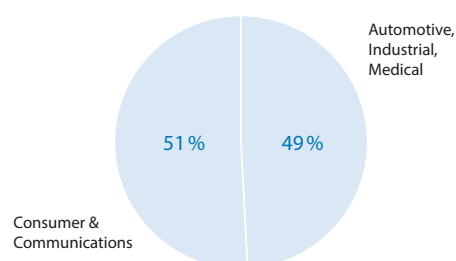
Consolidated group revenues for the financial year 2016 decreased by 12% to EUR 549.9m compared to EUR 623.1m in 2015. This development was primarily due to the development of demand in the target market Consumer & Communications (C&C) (-32%) in conjunction with solid overall demand for ams' solutions in the Automotive, Industry and Medical markets (AIM). The revenue decrease in the company's Consumer & Communications business

resulted in particular from weak volume demand in the global smartphone market in the first half of 2016 and the business performance of major smartphone OEMs using ams solutions. At the same time, ams' Automotive, Industry and Medical businesses were able to participate attractively in the worldwide development of demand.

The revenue distribution by markets is shown below:

in millions of EUR	2016	% of revenues	2015	% of revenues	Change in %
C&C	279.4	51%	407.9	65%	-32%
AIM	270.4	49%	215.2	35%	+26%
	<b>549.9</b>		<b>623.1</b>		

#### Revenue breakdown by markets



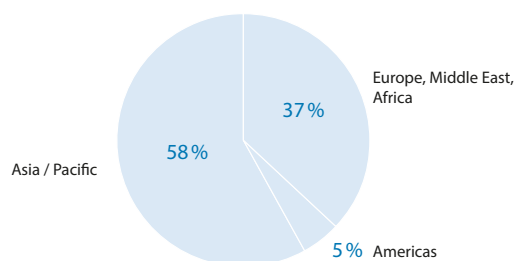
The distribution of revenues by region does not reflect the demand situation in ams' target markets but the geographic billing location of the company's customers. Business in the Asia/Pacific region showed a decrease in 2016 compared to the previous year, particularly due to lower revenues from a major customer in Asia.

The expansion of the company's sales and distribution network continued last year enabling the addition of new customers and a higher market presence in all regions. Against this backdrop, ams expects all regions to continue to contribute to the overall growth of the company.

The revenue breakdown by region (based on billing location) is shown below:

in millions of EUR	2016	% of revenues	2015	% of revenues	Change in %
EMEA	203.0	37%	197.7	32%	+3%
Americas	29.5	5%	22.9	4%	+29%
Asia / Pacific	317.5	58%	402.4	64%	-21%
	<b>549.9</b>		<b>623.1</b>		

#### Revenue breakdown by region



## 2.2 Orders Received and Order Backlog

Given solid order patterns in key markets, orders received increased slightly over the course of the year growing from EUR 569.4m in the previous year to EUR 569.9m in 2016.

ams' year-end order backlog increased by 14% to a positive level of EUR 136.1m on December 31, 2016 (EUR 119.4m at year-end 2015) creating an appropriate starting point for 2017.

Revenues and orders developed as follows:

in millions of EUR	2016	2015	Change in %
Revenues	549.9	623.1	-12%
Orders received	569.9	569.4	+0%
Total order backlog	136.1	119.4	+14%

## 2.3 Earnings

Gross profit decreased to EUR 288.1m in 2016 compared to EUR 339.2m in the previous year.

The company's full year gross margin excluding acquisition-related amortization and share-based compensation costs decreased slightly to 55% (2015: 56%), gross margin including acquisition-related amortization and share-based compensation costs also decreased slightly to 52% compared to 54% in the previous year. The full utilization of the company's production capacity in 2016 had a positive effect here given lower revenue-related economics of scale. Selling prices for the company's products showed a slight overall decline during the year.

Research and development costs showed an increase in 2016 compared to the previous year while marketing and sales expenses were lower than for the previous year. This development resulted from

significant product development efforts and an optimization of sales activities as personnel costs showed a further increase. Administrative costs were also higher compared to the year before due to an increase in personnel costs.

Given the revenue decrease in relation to a comparatively lower increase in fixed costs, the operating result (EBIT) including acquisition-related amortization and share-based compensation costs for the year 2016 decreased by EUR 54.0m to EUR 93.3m. In parallel to the lower EBIT, EBITDA (earnings before interest and taxes plus depreciation and amortization) decreased by EUR 39.6m to EUR 155.6m.

Net income for 2016 decreased to EUR 102.9m compared to EUR 148.7m in 2015. The return on equity reached 15% compared to 22% for 2015 while the return on revenues decreased by 5 percentage points to 19% (2015: 24%).

in millions of EUR	2016	2015	Change in %
Gross profit on revenues	288.1	339.2	-15%
Gross margin (excluding acquisition-related amortization) and share-based compensation costs	55%	56%	
Gross margin (including acquisition-related amortization) and share-based compensation costs	52%	54%	
EBITDA	155.6	195.2	-20%
Operating result (EBIT)	93.3	147.3	-37%
EBIT margin (including acquisition-related amortization) and share-based compensation costs	17%	24%	
Financial result	4.0	11.7	-66%
Result before tax	97.2	158.9	-39%
Net result	102.9	148.7	-31%
Return on equity	15%	22%	
Return on revenues	19%	24%	

## 2.4 Assets and Financial Position

The balance sheet structure shows a high ratio of fixed to total assets which is common to the semiconductor industry, at the same time intangible assets reflect the acquisitions concluded in 2016. The share of intangibles and property, plant and equipment in the total assets decreased from 69% in 2015 to 65% in the reporting period.

The investments in fixed assets affecting cash (capital expenditures) of EUR 91.7m were higher than the current depreciation and amortization of EUR 62.3m and amounted to 17% of full year revenues (2015: 13%). The ratio of equity to fixed assets reached 70% in 2016 compared to 80% in the previous year, thus reflecting the investments in fixed assets, acquisitions and strategic investments.

In the past financial year ams completed strategic transactions to acquire 100% of CCMOSS, MAZeT as well as Incus.

The fixed assets include a deferred tax asset of EUR 35.4m (previous year: EUR 34.8m). Under the current tax legislation, this tax asset can be carried

forward indefinitely but is expected to be used to offset profit taxes within the next five years.

Inventories amounted to EUR 92.9m at the end of 2016 (2015: EUR 79.8m). This increase was particularly driven by the expansion of internal manufacturing capacity at a high level of capacity utilization and a comparable level of inventory turnover.

Trade receivables at balance sheet date increased to EUR 97.2m due to the impact of fourth quarter revenues (2015: EUR 88.7m ). The average period of outstanding receivables showed a slight increase compared to the previous year.

Financial liabilities increased by EUR 196.9m to EUR 472.1m from EUR 275.2m in 2015 as a result of drawing long-term credit lines – exploiting the historically low interest rate levels – for acquisitions and strategic investments. For the same reason, net debt increased to EUR 256.2m in 2016 compared to a net cash position of EUR 131.3m in 2015. Group equity decreased by 2% to EUR 667.6m due to the development of the net result.

in millions of EUR	2016	2015		2016	2015
<b>Assets</b>			<b>Equity and liabilities</b>		
Inventories	92.9	79.8	Financial liabilities	472.1	275.2
Trade receivables	97.2	88.7	Trade liabilities	68.2	58.6
Other current assets	249.3	172.6	Other liabilities	158.3	127.3
Fixed assets	948.3	847.5	Provisions	56.8	81.1
Deferred tax asset	35.4	34.8	Shareholders' equity	667.6	681.2
<b>Total assets</b>	<b>1,423.0</b>	<b>1,223.4</b>	<b>Total equity and liabilities</b>	<b>1,423.0</b>	<b>1,233.4</b>

Given the higher level of gross debt the company's debt-to-equity ratio increased to 71% compared

to 40% in the previous year. At the same time, the equity ratio decreased to 47% (2015: 56%).

	2016	2015
Equity ratio	47%	56%
Debt to equity ratio	71%	40%
Equity to fixed assets ratio	70%	80%

These figures are directly derived from the group financial statements.

## 2.5 Cash Flow

The operating cash flow decreased to EUR 82.3m in 2016 compared to EUR 155.6m in the previous year. This decrease was primarily due to the lower operating result. The cash flow from investing activities was EUR -71.0m (2015: EUR -287.2m ) including EUR 97.7m of expenditures for intangible assets, property, plant and equipment (2015: EUR 80.1m)

and EUR 48.3m for company acquisitions ( 2015: EUR 201.5m ). Free cash flow amounted to EUR 11.3m (2015: -131.6m ). The company's available liquidity increased by EUR 76.0m to EUR 179.6m at the end of 2016. The cash flow from financing activities amounted to EUR 58.5m in 2016 compared to EUR 21.6m in the previous year.

in millions of EUR	2016	2015	Change in %
Operating cash flow	82.3	155.6	-47%
Cash flow from investing activities	-71.0	-287.2	+75%
Free cash flow	11.3	-131.6	+109%
Cash flow from financing activities	58.5	21.6	+170%
Effects of changes in foreign exchange rates on cash and cash equivalents	6.2	9.8	-38%
Cash and cash equivalents	179.6	103.6	+73%



### 3. Research and Development

ams' technological leadership in the design and manufacture of high performance sensor solutions and analog ICs is based on more than 30 years of intensive research and development activities. In order to secure and strengthen its leading position, the company makes significant investments in research and development on a continuous basis. Research and development expenses amounted to EUR 138.6m last year (25% of revenues) compared to EUR 107.8m in the year before (17% of revenues). Research and development activities mainly

comprised sensor solutions, sensors and sensor interfaces for the company's core markets regarding product development as well as the development of specialty variants of CMOS and SiGe processes. The average number of employees in research and development was 677 in 2016 (2015: 548).

ams' R&D activities again allowed the filing of a large number of international patents and the publication of numerous papers in international specialist journals and at trade conferences last year.

### 4. Purchasing and Manufacturing

In purchasing, ams was able to reduce the cost of raw materials and assembly services slightly last year which had a positive effect on the gross profit margin. Given continuously rising personnel costs the cost pressures in manufacturing nevertheless remain high.

Internal production capacity was fully utilized throughout the year 2016. As a consequence, the average capacity utilization across all manufacturing areas was 100% over the reporting period. Any unabsorbed fixed costs have been recorded in the income statement.

Gross margin excluding acquisition-related amortization and share based compensation costs decreased slightly to 55% compared to 56% in 2015, gross margin including acquisition-related amortization decreased as well slightly to 52% from 54% in the previous year. This relatively stable development was mainly due to product mix effects and a high capacity utilization in manufacturing.

Given the positive demand environment for its products ams expects another year of very high capacity utilization for 2017.

## 5. Employees

On average, ams had 2,175 employees in 2016 (2015: 1,921) of which 1,111 worked at the company headquarters in Premstätten (2015: 1,040 ). The increase of 253 employees comprises the addition of 128 employees in research and development, 49 employees in production and 75 employees in General and Administration.

ams recognizes its responsibility as an important employer in the region. The company again offered a wide range of internal and external training and development opportunities for all employees last year and provided training positions for apprentices.

ams attempts to retain its employees with the help of a long-term remuneration model. A profit sharing program for all ams employees augments

the existing employee stock option and incentive programs by way of an attractive direct component. The profit sharing program expresses ams' belief that the company's employees are its most important success factor and honors every employee's contribution to ams' success.

Owing to the earnings in 2016, the total amount for distribution which depends on the operating profit before taxes in relation to full year revenues (EBT margin) decreased significantly and totals EUR 1.7m for 2016 (2015: EUR 15.7m).

Moreover, active internal and employee communications as well as regular employee events which form a company tradition serve to ensure the employees' identification with the company.

## 6. Environment

Acting responsibly towards the environment is a basic principle for ams in all business operations. ams is dedicated meeting the highest environmental standards as well as using resources and the environment conservatively. ams has therefore been certified to ISO 14001:2004 for a number of years.

Sustainability as well as efforts to preserve environmental resources and reduce energy costs and carbon dioxide emissions are major concerns for ams which have been supported by a range of activities for many years. Based on a thorough

analysis of ams' carbon dioxide emission sources in 2009, measures to achieve further reductions in carbon dioxide emissions are being defined each subsequent year.

ams also submits information on its carbon dioxide emissions to the Carbon Disclosure Project, a global transparency initiative which has created the world's largest freely available database of corporate carbon dioxide emissions.

## 7. Subsidiaries and Branch Facilities

ams currently has subsidiaries in Switzerland, Italy, Germany, France, Belgium, the United Kingdom, Spain, Portugal, Sweden, the U.S., the Cayman Islands, the Philippines, China, Japan, Korea, Slovenia and India. The subsidiaries in the USA, Switzerland, Italy, Spain, Belgium, Portugal and the United Kingdom, Slovenia, Germany, Japan and India carry out development, marketing and sales activities, while the subsidiaries in France and China are active in marketing and sales and technical support. The subsidiary in the Philippines is responsible for

production activities in testing, while the subsidiary in Korea is responsible for sales and assembly in the region. Branch facilities exist in Hong Kong, Singapore and Taiwan.

Principal shareholdings: The investment in New Scale Technologies, Inc., Victor, New York (USA), remained unchanged at 34.5%. New Scale Technologies develops piezo-based miniature motor technologies and licenses products and technologies to industrial partners.

## 8. Risk Management

Operating on a global basis, the ams Group is exposed to a variety of risks that are inextricably linked to business activities. In order to identify, evaluate and counteract these risks in a timely manner, ams has developed and implemented tight internal risk management systems. This risk management system was implemented and benchmarked against best practices in conjunction with the company's auditors. The risk management process in place requires the business units to constantly monitor and

evaluate risks. Regular risk reports are prepared for the management board and supervisory board. This ensures that major risks are identified and counteraction can be taken at an early stage.

The internal audit function complements the risk management process. In close alignment with the supervisory board's audit committee it aims to analyze internal processes and if necessary propose improvements.

### Business Interruption Risk

The company's state-of-the-art 200mm manufacturing facility went into operation in 2002. Although 12 years old the facility is regarded as comparatively new by semiconductor industry standards. Therefore the risk of breakdowns or prolonged downtime is relatively low. In addition, this risk is being minimized further by preventive main-

tenance activities. The business interruption risk is additionally insured for the replacement price and against loss of earnings for 18 months. ams' insurer, FM Global, has awarded the company – as one of a select number of semiconductor manufacturers – the HPR (highly protected risk) status.

## Financial Risks

Risk management is handled centrally by the treasury department in accordance with guidelines issued by the management board. These detailed internal guidelines regulate responsibility and acti-

on parameters for the areas affected. The treasury department evaluates and hedges financial risks in close cooperation with the business units.

## Receivables and Credit Risk

ams operates a strict credit policy. The creditworthiness of existing customers is constantly checked and new customers undergo a credit evaluation. Under ams' treasury and risk management policy, investments in liquid securities and transactions

involving derivative financial instruments are only carried out with financial institutions that have high credit ratings. As of the balance sheet date there were no significant concentrations of credit risk.

## Interest Rate Risk

Interest rate risk – the possible fluctuation in value of financial instruments due to changes in market interest rates – arises in relation to medium and long-term receivables and payables (especially borrowings). ams' treasury policy ensures that part of the interest rate risk is reduced by fixed-interest borrowings. On the liability side, 42% of all amounts owed to financial institutions are at fixed

rates. Of the remaining borrowings on a floating rate basis (58%), 37% will be repaid over the next two years. The remaining floating rate borrowings undergo continual checks with regard to the interest rate risk. On the asset side, the interest rate risks are primarily attached to time deposits and securities in current assets that are tied to the market interest rate.

## Foreign Exchange Risk

Financial transactions in the semiconductor industry are predominantly carried out in US dollars. To hedge the currency risk, all transaction and conversion risks are constantly monitored. Within the group, cash flow streams in the same currency are offset (netting). Currency fluctuations during

foreign currency transactions mainly concern the US dollar. From the company's point of view, due to the extreme volatility in the currency markets, it is not possible to engage in economically feasible, efficient, and low risk currency hedges.

## Product Liability and Quality Risk

The products manufactured by ams are integrated into complex electronic systems. Faults or functional defects in the products produced by ams may have a direct or indirect effect on the property, health or life of third parties. The company is not in a position to reduce or exclude its liability towards consumers or third parties in sales agreements. Every product that leaves the company undergoes

several qualified checks regarding quality and function. In spite of quality control systems certified to ISO/TS 16949, ISO/TS 13485, ISO 9001 und ISO 14001, product defects may occur and possibly only show up after installation and use of the finished products. Although this risk has been appropriately insured, quality problems could negatively impact ams' assets, financial and earnings position.

## Patent Infringement Risk

ams manufactures complex ICs using various process technologies, line widths and production facilities. Like industry competitors, the company constantly has to develop these technologies further. Should ams infringe any existing patents while consistently monitoring processes, pro-

duction methods, and design blocks protected under patent law as well as related comprehensive licensing, this may negatively impact the assets, financial and earnings position of the company as well as the ams share price.

# 9. Outlook

Despite prevailing uncertainties about the development of the world economy, global industrial production and private consumption in the current year, ams expects its business to resume growth in 2017 based on the market launch of new advanced sensor and analog solutions and the production ramp-up of various design-wins.

For the analog segment of the worldwide semiconductor industry market researchers assume market volume to expand further in 2017 and currently expect year-on-year growth in the middle single-digit percentage range (WSTS, February 2017) In contrast, ams expresses its confidence at this time to achieve a revenue growth rate above the expected market growth rate for the current year. ams expects gross profit margin for the year 2017 to

remain high and foresees a positive development of the operating and net result in the current year despite further increases in research and development as well as sales and marketing expenses.

However, should global semiconductor demand and the macroeconomic environment develop unfavorably in 2017 and/or the US dollar show notable weakness, ams would experience a meaningful impact on the development of its business and earnings.

ams' outstanding expertise in sensor and analog solutions and its clear strategy of focusing on key sensing markets offer significant growth opportunities for the company. These include a range of new and upcoming applications in smartphones

and other mobile devices as well as the rapidly increasing use of advanced sensor technologies in automotive, industrial, and medical applications. In this context, the expansion of the company's

business with key accounts, a stronger penetration of its worldwide customer base and a continued leadership position in its target markets remain mid-term strategic priorities for ams.

## 10. Other Information

Regarding information concerning equity and investments please refer to the notes of the financial statements.

Premstätten, February 27, 2017



Alexander Everke

Chairman of the  
Management Board  
CEO



Kirk S. Laney

Member of the  
Management Board  
CSO



Dr. Thomas Stockmeier

Member of the  
Management Board  
COO



Michael Wachsler-Markowitsch

Member of the  
Management Board  
CFO