

T H E   A R T   O F   I N N O V A T I O N

Annual Report 2016



**Besix**



**People in Turmoil (1961)**

**Karel Appel**

Born: Amsterdam, the Netherlands, 1921

Died: Zürich, Switzerland, 2006

A Dutch painter, sculptor and poet, who was one of the founders of the avant-garde movement Cobra in 1948.

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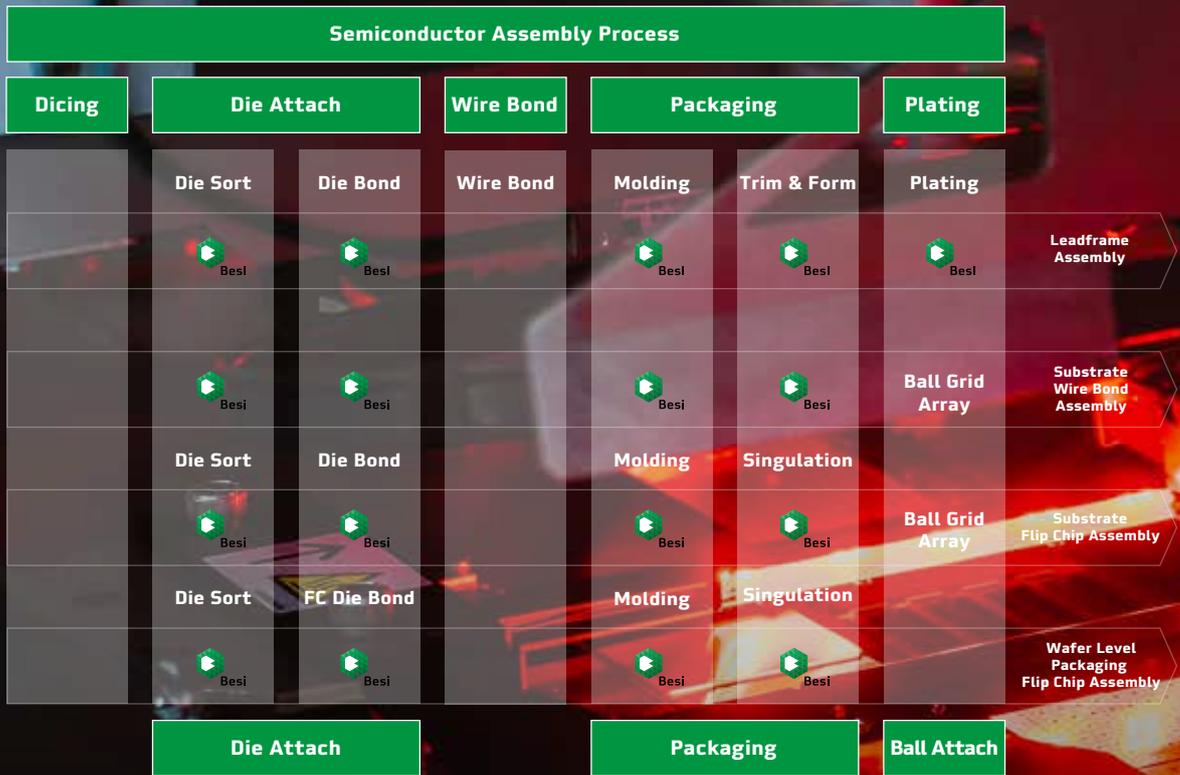
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# Report of the Board of Management

From processed wafer to assembled chip

Semiconductor Manufacturing Equipment (2016: \$ 42.8B)		
Front end: \$ 35.3B (82%)	Assembly: \$ 3.7B (9%)	Test: \$ 3.8B (9%)

Source: VLSI January 2017



FROM PROCESSED WAFER TO ASSEMBLED CHIP

# Company Profile

BE Semiconductor Industries N.V. ("Besi" or the "Company") is engaged in one line of business, the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries.

## Our market

The semiconductor manufacturing process involves two distinct phases, wafer processing, commonly referred to as the front-end, and assembly/test operations which are commonly referred to as the back-end. Our equipment is used by customers principally to produce advanced semiconductor assemblies or "packages". Typically, such assemblies provide the electronic interface and physical connection between a semiconductor device, or "chip", and other electronic components and protect the chip from the external environment. VLSI Research, a leading independent industry analyst, estimated that the size of the assembly equipment market was approximately \$ 3.7 billion in 2016, or 8.7% of the total semiconductor equipment market. Annual growth rates in the semiconductor assembly equipment market can fluctuate greatly based on global economic cycles and the capital investment programs of our semiconductor and industrial customers.

Semiconductor assembly shares certain common processes but involves three distinct technologies currently depending on the product application required:

**Leadframe assembly**, the most traditional approach, involves the electrical connection of the chip via a wire bonding process to a metal leadframe. Leadframe assembly technology is most frequently used to produce semiconductor devices for mass market and consumer electronics applications.

**Substrate assembly**, an alternative assembly process, has gained increased market acceptance and is used most frequently in new product applications that require high degrees of miniaturization and chip density such as smart phones, tablets and portable personal computers as well as wireless and cloud based internet applications. In a typical substrate assembly, no metal leadframes are utilized and the electrical connection of the chip is made directly to a multi-layer substrate or through the creation of direct connections to the multi-layer substrate via a flip chip die bonding process.

**Wafer level packaging**, the most advanced assembly technology, eliminates the use of either a metal leadframe or laminated substrate for semiconductor assembly. In wafer level packaging, the electrical connections are directly applied to the chip without the need for an interposer. This process technology enables customers to achieve even higher degrees of miniaturization, chip density and performance and lower energy consumption than substrate assembly but at a higher cost and reduced yield currently.

## Our market growth opportunities

The markets which we serve offer significant long-term opportunities for growth particularly in the most advanced packaging applications. Besi is well positioned to capitalize on end-user market opportunities, the most prominent of which include: (i) mobile internet devices (smart phones, wearable internet devices, other wireless

devices and logistical systems), (ii) intelligent automotive components and sensors, (iii) computing (tablets, servers, PCs, flat panel displays, internet applications), (iv) data mining, (v) cloud computing and peripherals, (vi) the Internet of Things including the management of residential, industrial and municipal equipment and functions, (vii) artificial intelligence, (viii) virtual reality, (ix) advanced medical equipment and devices, (x) solar, battery and renewable energy applications and (xi) LED devices.

## Our products and services

Besi develops and supplies leading edge systems offering high levels of accuracy, reliability and productivity at a low cost of ownership. We offer customers a broad portfolio of systems which address substantially all the assembly process steps involved in leadframe, substrate and wafer level packaging. Our principal product and service offerings include:

- **Die attach equipment:** single chip, multi chip, multi module, flip chip, TCB and eWLB die bonding systems and die sorting systems.
- **Packaging equipment:** conventional, ultra thin and wafer level molding, trim and form and singulation systems.
- **Plating equipment:** tin, copper and precious metal plating systems and related process chemicals.
- **Services/Other:** tooling, conversion kits, spare parts and other services for our installed base of customers.

## Our customers

Our customers are primarily leading multinational chip manufacturers, assembly subcontractors and electronics and industrial companies and include ASE, Amkor, Infineon, JCE/STATS ChipPAC, MPS, NXP, Osram, Qorvo, Silicon Precisionware Industries, STMicroelectronics and Utac. Customers are either independent device manufacturers ("IDMs") which purchase our equipment for internal use at their assembly facilities or assembly subcontractors which purchase our equipment to produce packages for third parties on a contract basis. Our equipment performs critical functions in our customers' assembly operations and in many cases represents a significant percentage of their installed base of assembly equipment.

## Our global presence

We are a global company with headquarters in Duiven, the Netherlands. We operate seven facilities in Asia and Europe for production and development activities as well as eight sales and service offices across Europe, Asia and North America. We employed a total staff of 1,669 fixed and temporary personnel at December 31, 2016, of whom approximately 65% were based in Asia and 35% were based in Europe and North America.

## Our listings

Besi was incorporated under the laws of the Netherlands in May 1995 and had an initial public offering in December 1995. Besi's Ordinary Shares are listed on Euronext Amsterdam (symbol: BESI) and are included in the Amsterdam Midcap Index ("AMX index"). Our level 1 ADRs trade on the OTC markets (symbol: BESIY Nasdaq International Designation).

More detailed information about Besi can be found at our website: [www.besi.com](http://www.besi.com).

# Key Highlights 2016

## Solid growth in revenue, profitability and margins versus 2015

- Revenue of € 375.4 million, up 7.5%
- Gross margin of 51.0%, up 2.2 points
- Net income of € 65.3 million, up 33.3%
- Net margin of 17.4% versus 14.0%

## Favorable market positioning in renewed industry upcycle

- Advanced packaging portfolio well positioned for new technology cycle of <20 nanometer device geometries at ever higher levels of accuracy
- Broad based revenue growth and margin expansion reinforces technological leadership position
- Expanded die bonding production capabilities facilitate greater market share of Chinese semiconductor expansion
- Increased customer investment for advanced smart phone features, flash memory and cloud server applications
- Growth in intelligent automotive applications

## Operating efficiency improved

- Initiatives continue to reduce structural costs and enhance financial metrics:
  - Transfer of certain die attach support functions from Europe to Singapore completed
  - Die sorting production transfer to Malaysia completed
  - 7.4% decrease in European fixed headcount
  - Chinese die bonding production quadrupled versus 2015 reducing costs and improving cycle times
- Improved controls and further Asian supply chain optimization increased inventory turnover

## Strong cash flow generation continues. Solid liquidity position to finance future growth

- Cash flow from operations of € 98.7 million, up 14.1% versus 2015
- Cash and deposits of € 304.8 million (€ 7.45 per diluted share) versus € 157.8 million (€ 4.10 per diluted share) at year end 2015
- Net cash of € 168.1 million, up € 31.6 million (23.2%) versus year end 2015
- Issuance of 7 year € 125 million of 2.5% Convertible Notes provides attractive growth capital

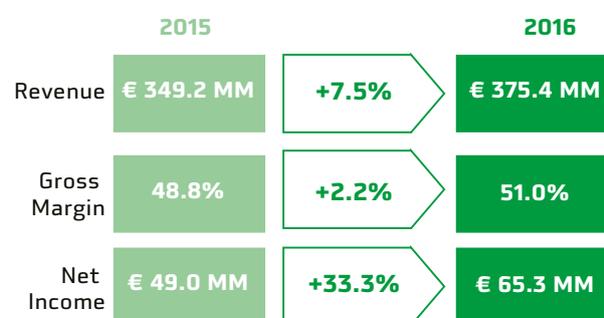
## Progress in new product development

- Ongoing development of new assembly technologies such as WLP, TCB, TSV as well as solar and 3D lithium-ion battery plating
- Significant increase in eWLB die bonding bookings confirms leadership position in FOWL P
- Successful introduction of next generation die bonding, packaging and plating systems

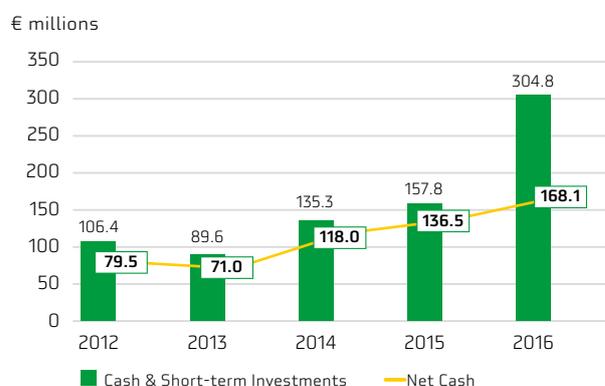
## Shareholder value enhanced

- Besi stock price up +70.5% in 2016 versus +36.6% for benchmark SOX index
- € 67.8 million cash utilized for dividends and share repurchases in 2016 versus € 60.9 million in 2015 (+11.3%)
- € 186.0 million cash utilized over past six years of which € 140.8 million used for dividends
- Proposed 2016 dividend of € 1.74 per share (€ 0.35 per share represents a special dividend) is up 45.0% versus 2015
- 2015 buyback program completed in October 2016 under which 1.0 million shares repurchased for € 22.5 million
- New 1.0 million share repurchase program initiated in October 2016 under which 126,395 shares repurchased in 2016 for € 4.0 million

## KEY FINANCIAL HIGHLIGHTS



## LIQUIDITY TRENDS



\* Includes € 125 million of Convertible Notes issued in December 2016 with a carrying value of € 111.5 million.

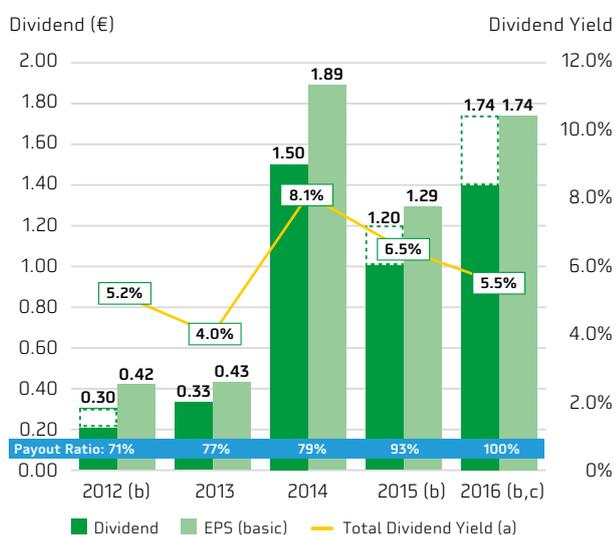
# Key Financial Highlights

Year Ended December 31,	2016	2015	2014	2013	2012
<b>Operating data</b> (in euro millions, except share and per share data)					
Orders	<b>373.8</b>	348.3	407.6	251.9	276.1
Revenue	<b>375.4</b>	349.2	378.8	254.9	273.7
Operating income	<b>75.2</b>	57.9	72.1	18.9	20.8
EBITDA	<b>89.8</b>	73.0	82.1	27.9	32.4
Net income	<b>65.3</b>	49.0	71.1	16.1	15.8
Adjusted net income	<b>65.2</b>	46.9	64.5	16.9	18.2
Net income per share					
Basic	<b>1.74</b>	1.29	1.89	0.43	0.42
Diluted	<b>1.70</b>	1.27	1.87	0.43	0.42
Dividend per share*	<b>1.74</b>	1.20	1.50	0.33	0.30
Shares outstanding**	<b>37,326,309</b>	37,863,456	37,712,540	37,306,966	37,629,148
Backlog	<b>76.3</b>	77.8	78.7	50.0	53.0
<b>Balance sheet data</b>					
Cash, cash equivalents and deposits	<b>304.8</b>	157.8	135.3	89.6	106.4
Total debt	<b>136.7</b>	21.4	17.4	18.6	26.9
Net cash	<b>168.1</b>	136.5	118.0	71.0	79.5
Total equity	<b>345.0</b>	332.2	328.8	264.2	265.0
<b>Financial ratios</b>					
Operating income as % of revenue	<b>20.0</b>	16.6	19.0	7.4	7.6
Net income as % of revenue	<b>17.4</b>	14.0	18.8	6.3	5.8
Return on average equity (in %)	<b>19.3</b>	14.8	24.0	6.1	6.1
Current ratio	<b>4.7</b>	4.4	3.4	3.7	2.9
Solvency ratio	<b>58.7</b>	76.8	74.0	77.5	72.9
<b>Headcount data</b>					
Headcount fixed	<b>1,586</b>	1,499	1,510	1,434	1,479
Headcount temporary	<b>83</b>	40	122	24	60
Total headcount	<b>1,669</b>	1,539	1,632	1,458	1,539
<b>Geographic data</b>					
Revenue from Asia as % of total revenue	<b>78.2</b>	66.4	67.4	75.1	73.8
Headcount in Asia as % of total headcount	<b>66.8</b>	61.7	59.4	55.7	54.3

\* Proposed 2016 dividend for approval at Besi's AGM to be held on May 1, 2017. Includes a special dividend of € 0.35 per share in 2016, € 0.20 per share in 2015 and € 0.08 per share in 2012.

\*\* Net of shares held in treasury.

## DIVIDEND TRENDS



(a) Based on year end stock price. Dividend policy: 40-80% of net income.

(b) Includes special dividend of € 0.08, € 0.20 and € 0.35 in 2012, 2015 and 2016, respectively.

(c) Proposed for approval on May 1, 2017 AGM.

## FIXED HEADCOUNT TRENDS



# Letter to Shareholders



LETTER TO SHAREHOLDERS

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## Forever Bicycles (2015)

**Ai Weiwei**

Born: Beijing, China, 1957

Ai Weiwei is a Chinese contemporary artist and activist. Forever Bicycles 2015 is a major new installation designed specifically for the NGV and composed from over 1,500 bicycles, which for Ai, symbolizes the freedom to move.

© Anna Jasinski 2016 © Ai Weiwei Studio

Dear Shareholders,

2016 was a year of unexpected industry growth, strong financial performance and strategic positioning for the future. Besi generated revenue and net income of € 375.4 million and € 65.3 million, respectively, increases of 7.5% and 33.3%, respectively versus 2015. Net income grew even more rapidly than sales this year as gross margins reached 51.0% and cost control initiatives kept expense growth in check. In addition, our financial position continued to strengthen with net cash and deposits reaching € 168.1 million at year end, an increase of 23.2% versus year end 2015.

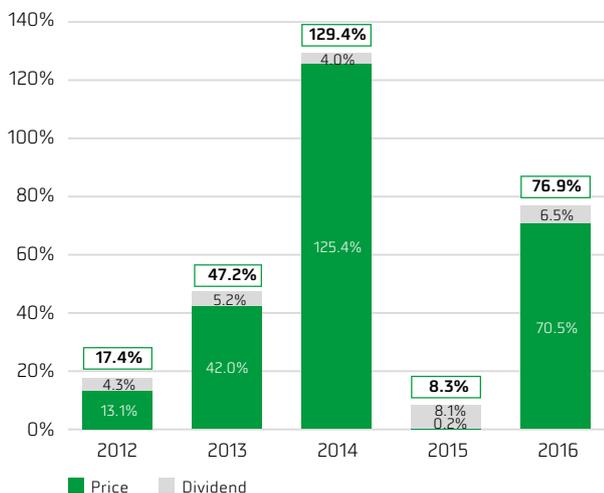
Revenue growth built progressively during 2016 stimulated by expanded investment by Chinese and Taiwanese subcontractors for new, state of the art advanced packaging capacity, accelerating demand for flash memory devices, the continued proliferation of intelligent automotive electronics and a new technology cycle which encouraged capital spending for next generation <20 nano applications. In the smart phone arena, there was expanded customer investment in more advanced features and functionality such as fingerprint sensors and advanced dual camera and flashlight modules.

We seek to build on our industry leading assembly portfolio and strategic momentum to generate further growth over the next decade. To help us capitalize on future prospects, Besi successfully placed in December 2016 € 125 million of 2.5% Convertible Notes due 2023 which provides us with funding on highly attractive terms for our next strategic planning phase. With a proven, leading edge product portfolio and a strong capital base, we are well positioned to take advantage of the exciting opportunities which lay ahead.

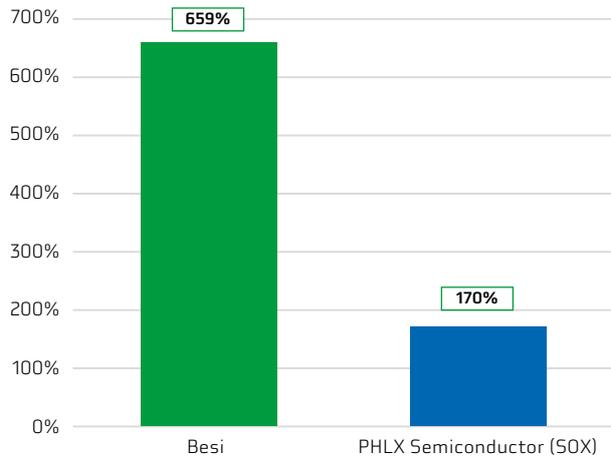
**Shareholder value increased**

Besi has greatly increased shareholder value in recent years through its improved profit and cash flow generation, stock price development and capital allocation policy.

**BESI SHAREHOLDER TOTAL RETURN**



**TOTAL CUMULATIVE SHAREHOLDER RETURN  
BESI VS. SOX INDEX 2012 - 2016**



• Besi returns calculated in EUR.  
• Philadelphia SOX returns calculated in USD.

Over the past five years, Besi’s stock has produced a cumulative total return of 659%, significantly outpacing returns of our benchmark Philadelphia Semiconductor (“SOX”) index. In 2016, Besi’s stock price increased by 70.5% versus a 36.6% increase for the benchmark index continuing our relative outperformance trend. Besi was also the leading performer on the Amsterdam Midcap Index for the year.

Besi’s capital allocation policy seeks to provide a current return to shareholders while retaining sufficient cash to fund future growth opportunities. In aggregate, total dividends and share repurchases reached € 67.8 million in 2016 versus € 60.9 million in 2015 (+11.3%) and were € 186.0 million over the past six years. In October 2016, we completed the 2015 share buyback program under which 1.0 million shares were repurchased for € 22.5 million. Upon completion, we initiated a new 1.0 million share repurchase program in October 2016 under which Besi has bought back 126,395 shares (€ 4.0 million) through year end and an additional 101,512 shares (€ 3.4 million) through February 22, 2017. In aggregate Besi held approximately 2.8 million shares in treasury at such date at an average cost per share of € 13.47.

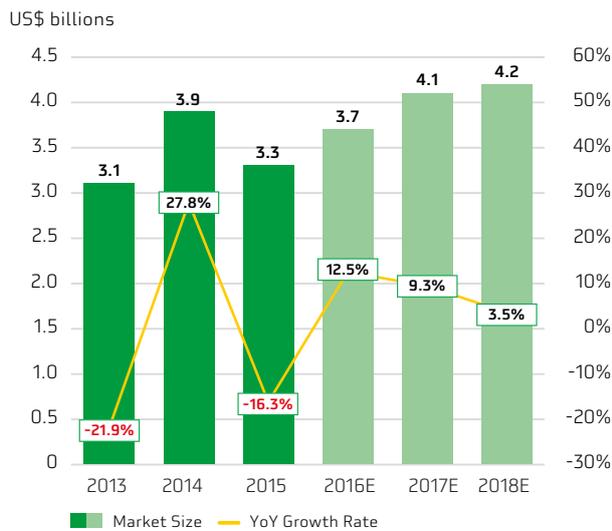
Given continued strong cash flow generation in 2016 and our healthy financial position, we propose to pay a 2016 cash dividend of € 1.74 per share, of which € 0.35 per share represents a special dividend, for approval at Besi’s AGM on May 1, 2017. The proposed distribution represents an annual increase of 45.0% and is the seventh consecutive annual dividend paid.

**Business review**

Semiconductor assembly equipment market growth exceeded expectations in 2016. Growth anticipated to continue in 2017

VLSI Research currently estimates that the semiconductor assembly equipment market increased by approximately 12.5% in 2016 to reach approximately \$ 3.7 billion. Their current 2016 estimate reflects a much more positive outcome than the 3.9% decrease initially forecast at the start of the year.

## ASSEMBLY EQUIPMENT MARKET TRENDS



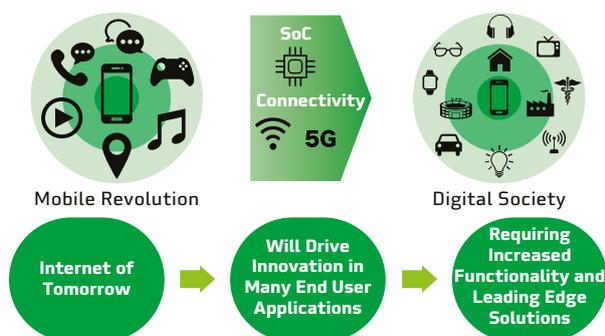
Source: VLSI January 2017

VLSI estimates that the current industry uptrend will continue next year resulting in estimated growth of approximately 9% in 2017. The upcycle will be fuelled by (i) strong demand from Chinese subcontractors as its government continues an aggressive semiconductor infrastructure build out, (ii) additions to advanced packaging capacity by IDMs and Asian subcontractors as they upgrade lines to handle <20 nanometer device geometries and higher accuracy requirements and (iii) increased spending for automotive electronics, the Internet of Things, flash memory and enhanced smart phone features.

### Besi's advanced packaging portfolio favorably positioned to capitalize on new industry and technology upcycle

A new technology cycle has begun wherein customers increasingly demand <20 nanometer device geometries with higher degrees of accuracy for which new assembly equipment and solutions will be required. This trend plays to Besi's strength as a technological leader in advanced packaging and offers new opportunities for revenue and market share growth.

## INTERNET OF TOMORROW DRIVES NEW INNOVATION CYCLE



We anticipate that customers will significantly increase spending over the next five years on wafer level and 3D stacked die solutions to (i) shrink next generation device geometries, (ii) increase chip density and functionality and (iii) significantly reduce power consumption requirements. Higher sales of advanced packaging systems are forecast to serve growing areas such as:

- High level communication protocols including the emerging 5G standard with increased mobile features and functionality.
- Advanced automotive electronics including driverless and electronic cars.
- Cloud computing and data mining.
- Artificial intelligence, virtual reality and wearable devices.
- The Internet of Things including, but not limited to, digital homes, municipalities, industry, transportation and health care facilities.

Besi's product portfolio and development programs are well positioned to capitalize on such trends. In 2016, we experienced broad based growth and margin expansion for our wide array of advanced packaging systems which reinforces our technology leadership position within the industry.

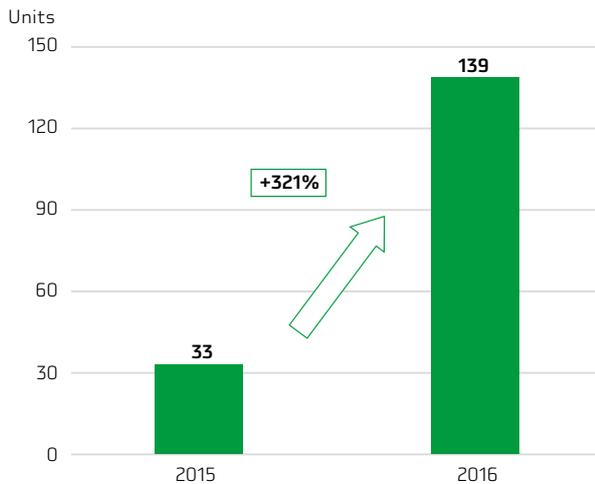
### Timely expansion of production capabilities aided market share gains in rapidly growing Chinese market

Over the past 10 years, Besi has successfully transferred substantially all production, component sourcing, tooling and applications engineering to its Asian operations. As our capabilities and business have grown in recent years, we also started to diversify Besi's Asian manufacturing and engineering capabilities. As such, operations in China and Singapore were expanded to further drive cost reduction, increase capacity, better service our growing installed base and improve local customer presence.

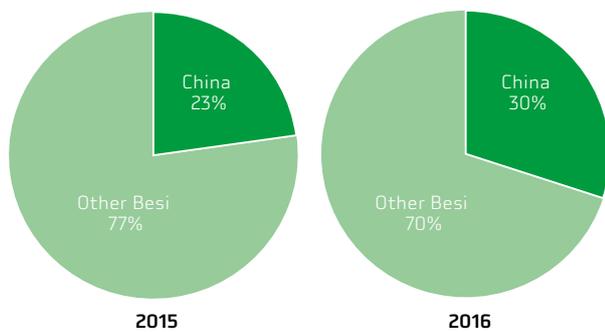
Besi decided to set up parallel production in 2014 of certain die bonding lines at Besi's Leshan, China facility targeted specifically for the local Chinese market. By such actions, top selling epoxy and multi module die bonding systems produced at Besi APac (Malaysia) could also be tailored specifically for local Chinese customer demand. In this way, we could better increase local brand equity and further reduce cycle times and cost. The timely expansion of Besi's Chinese production capacity favorably coincided with the launch by the Chinese government of a five-year plan designed to double investment in its semiconductor production infrastructure and become a greater force in global markets. As a result of our market leading advanced packaging portfolio and timely expansion of Chinese production capabilities, Besi Leshan production quadrupled in 2016 to reach 139 units. Similarly, Besi's revenue from Chinese customers increased to 30% of consolidated revenue in 2016 versus 23% in 2015.

## EXPANSION OF BESI CHINESE PRODUCTION AND REVENUE

### Unit Shipments Besi China



### China Customer Revenue as % of Total Revenue



Execution of strategic initiatives kept expense growth in check in 2016 and helped increase the profit and cash flow generation of our business model

Besi's business strategy seeks to generate ever higher levels of through cycle profitability and cash flow from the execution of operating initiatives designed to further reduce European structural and supply chain costs, move operations closer to customers and improve cycle times and inventory management.

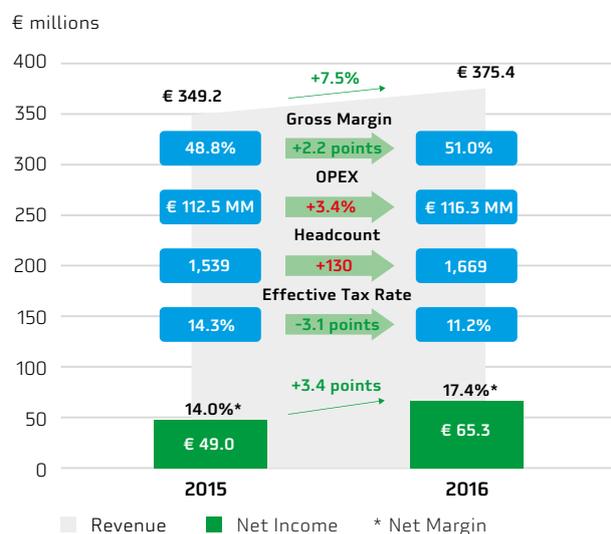
In 2016, Besi realized a number of important operational objectives, including:

- Transfer of certain die attach support functions from Europe to Singapore.
- Hiring and training of 43 engineering, support and administrative personnel in Singapore.
- Transfer of die sorting production from Austria to Malaysia.
- Reduction of European fixed personnel by 7.4%.
- Successful scaling of Chinese system production and supply chain network.
- Increased inventory turnover via supply chain optimization and shorter cycle times.

Partly through successful execution of its operating objectives, Besi was able to increase its gross margins by 2.2% over 2015 to reach 51.0%. In addition, operating expenses only grew by 3.3% as current initiatives reduced structural costs despite 7.5% annual revenue growth. 2016 operating expenses actually decreased by 0.7% excluding one-time net restructuring benefits and consulting costs in the comparable 2015-2016 periods. The combination of revenue growth, improved gross margins and cost containment resulted in net margins rising from 14.0% in 2015 to 17.4% in 2016. Both gross and net margins are at industry benchmark levels.

In addition, we continue to enhance the cash flow generation from our business model. Cash flow from operations of € 98.7 million was up 14.1% versus 2015 and significantly exceeded 2016 profit levels.

## REVENUE GROWTH AND OPERATIONAL PROGRESS YIELD INCREASED PROFIT 2016 VS. 2015



Besi's key operational priorities for 2017 include:

- Scaling production and supply chain activities to support anticipated industry growth.
- Further optimization of the Asian supply chain network.
- Expansion of Singapore's R&D and administrative capabilities.
- Program development to transfer additional SG&A functions from Europe to Asia.

### Progress in new product development

Besi's product strategy focuses on the development of advanced packaging systems as the driver of future growth. We are at the forefront of assembly technology with leadership positions in emerging process technologies such as: FOWLP, TCB, TSV, thin die applications for memory, power and flip chip applications, large area and wafer level molding and 3D lithium-ion battery plating. Customer device shrinks <20 nanometers, 3D and wafer level technology, sub 5-micron placement accuracy and more complex functionality offer us both great revenue opportunities and technological challenges.

In 2016, Besi's development efforts focused on the following:

- Successful roll out and volume production of leading <5 micron eWLB systems to major IDMs and Asian subcontractors.
- Scaling and integrating personnel at our Singapore die bonding R&D center.
- Introduction of next generation die attach, packaging and plating systems with higher speed and accuracy.

We have a number of important development projects underway for 2017 including the introduction of next generation system enhancements to ensure that our product portfolio continues to meet or exceed customer requirements. In addition, we will commit additional resources to further our leadership position in FOWLP and wafer level process technologies and to train and further integrate our Singapore R&D personnel after the large 2016 staffing increase. Finally, Besi will invest additional resources to increase the number of common parts and modules used in each new die bonding and packaging system platform. This last initiative offers an excellent opportunity to further streamline R&D and manufacturing processes, reduce customer lead times and enhance our competitive position.

#### Corporate Responsibility activities

Besi takes its responsibilities seriously with respect to its people, stakeholders and environment (see pages 42 to 55). In 2016, key CR highlights included the implementation of a talent and succession program and a Besi policy on conflict minerals in accordance with the Conflict Free Sourcing Initiative. In addition, we continue to make progress reducing our impact on the environment and communities in which we operate through more efficient usage of packaging, raw materials, energy, transportation, recycling and facilities. Furthermore, we engaged in Q4-16 a third party CR consultancy firm to perform a strategic study of Besi's sustainability policies. The strategic study is anticipated to be completed by year end 2017 and will serve as the basis for the further development of our CR vision and strategy.

#### Strategic planning review 2017-2021

Besi's business model development and strategic execution since 2007 have greatly benefitted shareholders by means of significantly increased financial and stock price performance. However, there still remains much unrealized potential to increase our market position and profitability in the years ahead. Toward such end, the Board of Management hired an independent consulting firm and completed in Q4-16 a comprehensive review of Besi's business, strategic positioning and cost structure. Upon completion of the review, revenue and cost initiatives were set for implementation over the next five years and owners designated per initiative. Key actionable items from the strategic planning review are listed below:

- *Achieve revenue growth in excess of assembly equipment market:*
  - Expand Besi's share of the mainstream assembly market via high quality, mid range offerings.
  - Increase penetration of leading global semiconductor supply chains.

- Increase investment in Besi's Asian process and technical support to better serve its growing installed base.
- Further grow Besi's Chinese local market presence and customer share of wallet.
- *Realize additional cost savings from business model:*
  - Continue West-East personnel transfer with a target of 75% Asian headcount.
  - Further reduce European based personnel and overhead costs.
  - Accelerate common platform initiatives.
  - Increase optimization of Asian supply chain.

In conjunction with internal growth targets, Besi will also continue to explore external means of achieving its strategic objectives via acquisition opportunities, particularly in the area of wafer level packaging. We issued € 125 million of Convertible Notes in December 2016 which increased our total cash and deposits to € 305 million at year end. We believe this level of resources, in combination with future internal cash flow generation, positions us well to take advantage of any attractive opportunities that might come our way.

#### Outlook

Leading independent analysts suggest continued industry growth in 2017 and 2018. Besi's strong order trends in Q4-16 and year to date in Q1-17 confirm such an assessment and provide favorable visibility through the first half of 2017. Global geopolitical developments add an element of uncertainty to the path of global GDP development and assembly equipment trends this year, but the underlying industry base line still appears favorable.

Longer term, there are many reasons to be optimistic about the industry's prospects. Exciting new applications for the digital society such as driverless and electric cars, artificial intelligence, virtual reality and increased automation in our daily lives will complement the ongoing mobile and cloud revolutions and provide strong underpinnings for future growth in equipment spending.

In addition, a new technology cycle is underway. New technology developments will require new advanced packaging solutions which is a favorable growth driver for our business. Volatility in our end user markets is a reality we face every day but we are working hard through new strategic initiatives to generate even more profit and cash flow from our business model and enhance shareholder returns in the years to come.

In closing, we want to thank all our employees, customers, suppliers, business partners and shareholders for helping us to achieve a very solid financial performance and enhanced shareholder value in 2016. We appreciate your continued support.

Board of Management  
Richard W. Blickman

February 22, 2017



# Strategy



## 738 Grass for those who cry (1975)

**Friedensreich Regentag Dunkelbunt Hundertwasser**

Born: Vienna, Austria, 1928

Died: Pacific Ocean, 2000

An Austrian-born New Zealand artist and architect who worked also in the field of environmental protection. His real name was Stowasser, his pseudonym Hundertwasser comes from sto in Slavic languages, meaning "hundred".

© The Hundertwasser Non Profit Foundation 2017 c/o Pictoright Amsterdam 2017



# Strategy

## I. Strategic objective

Besi's objective is to become the world's leading supplier of semiconductor assembly equipment for advanced packaging applications and to exceed industry average benchmarks of financial performance.

In 2016, Besi's Board of Management initiated a comprehensive review of its strategy, market position and operations with an independent consulting firm. Upon completion of the review, revenue and cost initiatives were set for implementation over the next five years and owners designated per initiative.

## II. Strategic initiatives

The key initiatives to realize Besi's strategic objectives include:

1. Developing new products and markets.
2. Expanding addressable markets and Besi's revenue growth potential.
3. Strengthening and expanding strategic long-term customer relationships.
4. Expanding its Asian operations, capabilities and supply chain.
5. Developing common platforms and common parts for its systems.
6. Achieving a more scalable, flexible and lower cost manufacturing model.
7. Selectively acquiring companies with complementary technologies and products.

Through the implementation of its strategy, Besi seeks to (i) increase its revenue at rates exceeding the growth of the assembly equipment market, (ii) become a more efficient and profitable company with increased market share in the segments of the assembly equipment market with the greatest potential for long-term growth and (iii) significantly enhance its scalability and flexibility to respond more effectively to increasingly volatile industry order patterns.

### 1. Developing new products and markets

Besi seeks to provide global semiconductor manufacturers and subcontractors a compelling value proposition combining superior levels of accuracy and reliability at the lowest cost of ownership. As a result, Besi's technology efforts are focused on developing leading edge processes and equipment for leadframe, substrate and wafer level packaging applications that are consistent with customers' needs and have the greatest potential for long-term growth.

Besi seeks to differentiate itself in the marketplace by means of a technology led product strategy that exploits revenue opportunities in both premium and mainstream assembly equipment markets. Besi enters such markets with leading edge technology and products appealing to the first movers of its industry, typically leading global semiconductor manufacturers and other advanced industrial end-users. Upon commercial acceptance, Besi then seeks to maximize the return on investment of its products through continued system cost reduction so that they appeal to a broader, more mainstream customer base and extend their product life cycle. Mainstream customers are typically Asian assembly

subcontractors. Besi exits product markets when its technology becomes commoditized and returns on investment become unattractive.

In pursuing its product strategy, Besi uses its core competency to (i) increase revenue by expanding its addressable market and market share and (ii) maximize the return on its technology investment.

### 2. Expanding addressable markets and Besi's revenue growth potential

Besi seeks to increase its revenue growth by expanding its addressable markets and market presence via the following strategies:

- Capitalize on its <20 nano expertise to capture system sales for new device introductions and applications demanding ever smaller geometries and increased functionality such as the Internet of Things, wearables, big data, artificial intelligence, driverless and electric cars, virtual reality, cloud servers and fingerprint recognition.
- Further penetrate the largest global smart phone and electronics supply chains with both high end and high quality mid range product offerings.
- Leverage its lead in its core competencies at the expense of Japanese and Asian competitors.
- Expand in the Chinese handset, semiconductor and electronics industries.
- Apply its leadership positions in eWLB, TCB and ultra thin and wafer level molding to drive revenue as customers utilize leading edge processes for more mainstream applications.
- Gain market share from increased usage of flip chip, eWLB and TCB assembly processes at the expense of more conventional wire bonding solutions.
- Expand penetration of plating markets including high end solar and battery plating applications.

The expansion of Besi's addressable markets and revenue potential will be aided by ongoing efforts to further improve its competitive cost position via its Asian manufacturing and common platform initiatives, further reduction of European based costs and the diversification and expansion of its Asian production capabilities.



### 3. Strengthening and expanding strategic long-term customer relationships

One of Besi's primary business objectives is to develop close, strategic relationships with customers deemed critical to its technological leadership and growth. Besi's customer relationships, many of which exceed forty-five years, provide Besi with valuable knowledge about semiconductor assembly requirements as well as new opportunities to jointly develop assembly systems. As such, they provide Besi with an important insight into future market trends as well as an opportunity to broaden the range of products sold to customers.

In order to sustain close relationships with customers and generate new product sales, Besi believes that it is critical to maintain a significant presence in after-sales and service in each of its principal markets. As such, Besi currently has eight regional sales and service offices in Europe, the Asia Pacific region and the United States and a direct sales force and customer service staff of approximately 180 people. Consistent with the migration of its customer base to Asia, Besi has strengthened its sales and customer service activities in this region and has shifted a significant portion of its resources to countries such as Malaysia, Singapore, China, Taiwan and Korea. The Company plans to significantly expand its Asian process support, order fulfillment and field service capabilities over the next five years to better serve a rapidly growing installed base of customers in the region.

#### CURRENT OPERATIONAL PROFILE



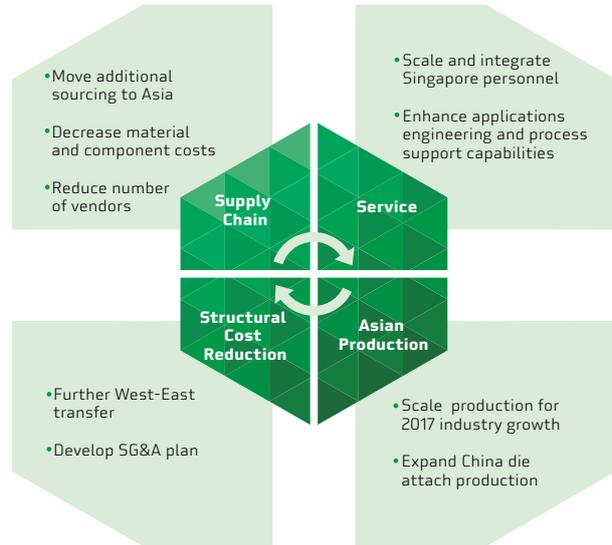
### 4. Expanding its Asian operations, capabilities and supply chain

Besi has restructured its operations over the past ten years in an effort to improve profitability and better service a customer base that has migrated from Europe and North America to Asia. In 2016, approximately 78% of revenue was derived from sales to Asian customer locations, which reflected a 26.6% increase in absolute revenue levels versus 2015.

Besi's Asian strategy focuses on the transfer to its Asian facilities of substantially all component sourcing, system manufacturing, product applications engineering, process and software support and tooling/spares operations. In this concept, product ownership and responsibility for new product development remains at its European

operations. Only highly customized systems are produced in Europe for which it generates attractive gross margins. In recent years, Besi has also diversified its manufacturing and engineering capabilities in Asia, significantly increasing operations in China and Singapore to further drive cost reduction, increase capacity, technical and field service support and local customer presence.

#### KEY ASIAN OPERATING PRIORITIES 2017



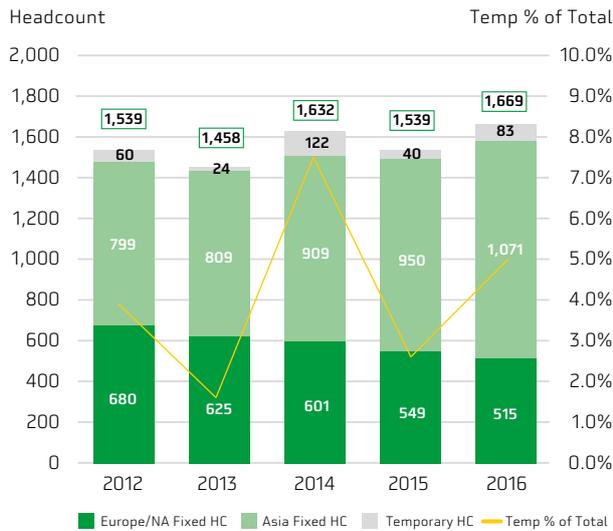
### 5. Developing common platforms and common parts for its systems

Besi is in the process of re-engineering several of its existing product platforms to reduce their overall cost and manufacturing cycle time through more standardized design and manufacturing processes. As part of the streamlining process, it has focused on the development of common parts and common platforms for each successive, next generation die bonding and packaging system with the objective of decreasing the number of platforms for such products. Such decrease will enable Besi to (i) reduce the number of components and machine parts per system, (ii) decrease average component costs, (iii) greatly simplify design engineering, (iv) shorten cycle times and (v) lower warranty expense. In this manner, Besi expects to achieve additional labor cost, supply chain and working capital efficiencies.

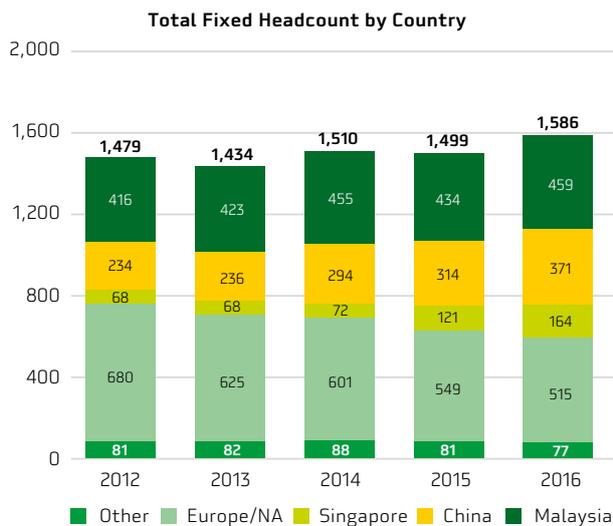
### 6. Achieving a more scalable, flexible and lower cost manufacturing model

The semiconductor equipment market has become increasingly more volatile in recent years due to heightened global economic uncertainty, changing end market applications, more seasonal purchasing patterns and shorter lead times for delivery. As a result, Besi has adjusted its manufacturing model to be more responsive to rapid changes in customer demand, to optimize its revenue potential and to become more profitable in both cyclical upturns and downturns. Key initiatives include the realization of Besi's Asian operating priorities, increased flexibility in scaling its production personnel and supply chain network as well as the simplification and harmonization of manufacturing and IT processes.

## WORKFORCE HAS BECOME MORE SCALABLE AND FLEXIBLE



## BESI GEOGRAPHIC HEADCOUNT TRENDS



### 7. Selectively acquiring companies with complementary technologies and products

In order to provide customers with leading edge process solutions, it is critically important to identify and incorporate new technologies on a timely and continuous basis. As a result, Besi actively identifies and evaluates acquisition candidates that can assist it in (i) maintaining process technology leadership and increasing market share in those assembly markets with the greatest long-term potential such as wafer level packaging, (ii) enhancing the productivity and efficiency of its Asian manufacturing operations and (iii) growing its less cyclical, "non-system" related revenues from tooling, spares and service.

### III. Implementation of strategic initiatives

Besi has undertaken a series of actions and completed important acquisitions to advance its strategic initiatives, accelerate revenue growth and reduce its cost structure.

### Development of new products and markets

Besi has a history of innovation and leadership in developing systems for leadframe, substrate and wafer level assembly technologies covering a wide variety of end-use applications. Over the past five years, Besi has developed next generation die attach and packaging systems designed to address its customers' requirements for higher levels of miniaturization, accuracy, performance and chip density at lower overall cost of ownership and power consumption in substrate and wafer level packaging applications. Key highlights included:

- Development and first shipment of TCB die bonding equipment to assemble next generation <20 nanometer device geometries (2013).
- Development and shipment of sub 5-micron flip chip and wafer level die bonding systems and molding systems for volume production environments (2015).
- Development and sale of advanced systems for solar and 3D lithium-ion battery plating (2015).
- Development and volume shipment of new eWLB die bonding systems with 3-micron accuracy (2016).

### Reduction of structural costs in business model

In 2007, Besi decided to fundamentally re-organize its global operations and management structure to streamline operations, improve returns from its product portfolio, reduce its break-even revenue levels and increase profitability. Since then, the Company has (i) significantly rationalized its manufacturing operations, (ii) reduced its unit manufacturing costs, (iii) transferred substantially all of its European production to Asia, (iv) decreased its European headcount, footprint and operations, (v) greatly reduced cycle times and (vi) developed a highly scalable production and supply chain model. As a result, Besi has greatly reduced break-even revenue levels to increase margins and gain through cycle profitability on a consistent basis.

Key organizational changes in 2015 and 2016 included:

- Restructuring its European die attach operations to transfer certain die attach support functions to Besi's Singapore facility (2015).
- Implementation of a headcount reduction plan in response to industry downturn and rise of Swiss franc versus euro (2015).
- Transfer of plating production from the Netherlands to Malaysia (2015).
- 26% reduction of European facility space (2016).
- Completion of die sorting production transfer from Austria to Malaysia (2016).
- 7.4% reduction of European fixed headcount (2016).

### Increased scale and flexibility in manufacturing operations

As a result of significant changes in Besi's Asian production capacity, supply chain and processes, it was able to ramp orders in 2014, 2015 and 2016 by 117%, 28% and 39%, respectively, from trough to peak in response to increased customer demand for assembly equipment. Similarly, Besi was able to downscale production by 34%, 28% and 25% from peak to trough in 2014, 2015 and 2016, respectively, while maintaining profitability. Increased scalability and flexibility have been important factors contributing to Besi's improved competitive position in recent years.

### Expansion of Besi's Asian operations

To support its Asian production strategy, Besi has restructured its global operations and made capital investments to expand its Asian production capacity. As a consequence of its capacity upgrade, Besi has significantly reduced its European and North American workforce, closed inefficient operations and transferred substantially all its European production and all its tooling capacity to its Malaysian, Chinese and Singapore facilities over the past ten years. As a result, Besi has reduced labor and material costs, increased manufacturing flexibility and scalability, improved delivery times and inventory turnover and enhanced its local customer presence.

Key highlights during 2015 and 2016 included:

- Expansion of Singapore die attach operations by 91 people during the period.
- Plating system production transfer from the Netherlands to Malaysia (2015).
- Die sorting production transfer from Austria to Malaysia (2016).
- Production transfer from Malaysia to China of certain die bonding systems for the local Chinese market (2015).
- 321% increase in Chinese die bonding production for the local market (2016).

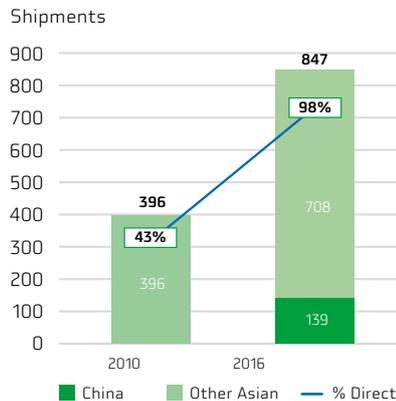
### Completion of strategic acquisitions

Besi has made four important acquisitions since 2000:

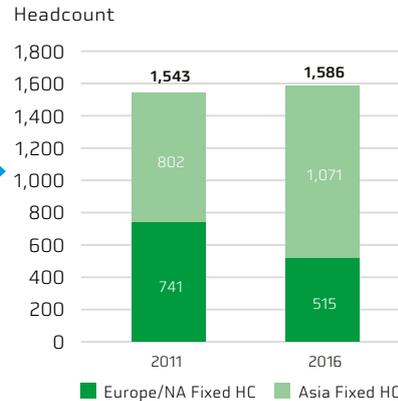
- In September 2000, RD Automation (USA) was acquired to advance Besi's product strategy into the front end assembly process with the addition of flip chip capabilities.
- In January 2002, Laurier (USA) was acquired adding intelligent die sorting capabilities into its product range.
- In January 2005, Besi acquired Datacon (Austria) further extending its presence in the flip chip and die bonding equipment markets and increasing its scale in the assembly equipment market.
- In April 2009, Besi acquired Esec (Switzerland) to expand its position in the mainstream die bonding market, one of the most rapidly growing segments of the assembly equipment business.

## ASIAN PRODUCTION TRANSFER HAS HELPED REDUCE BREAK-EVEN REVENUE LEVELS

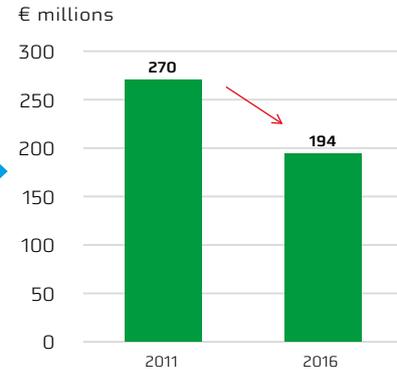
Asian production has significantly expanded



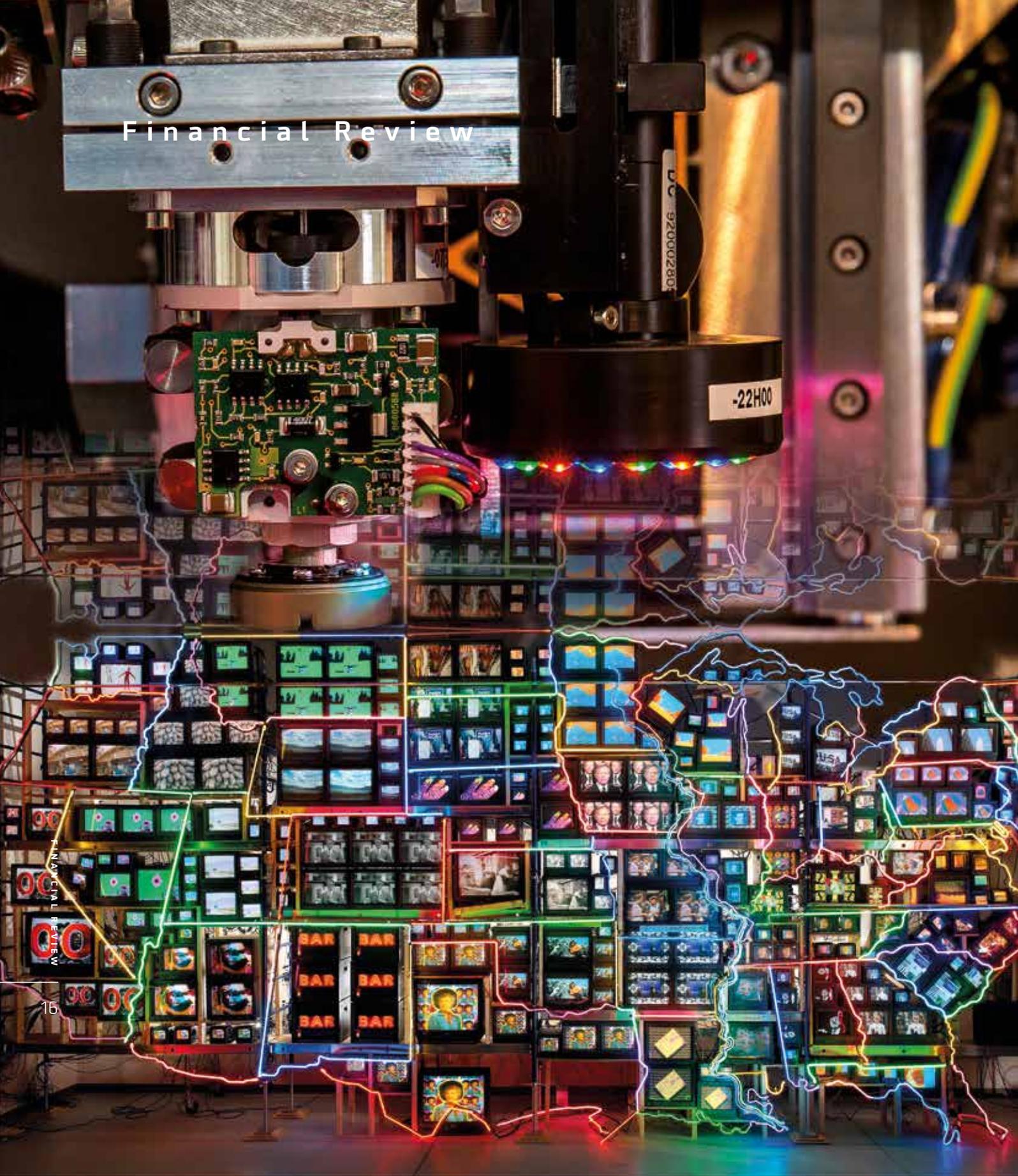
Leading to lower fixed European/NA headcount



And reduced break-even revenue levels



# Financial Review



FINANCIAL REVIEW

16



## **Electronic Superhighway** Continental U.S., Alaska, Hawaii (1995)

**Nam June Paik**

Born: Seoul, Korea, 1932

Died: Miami Beach, Florida, USA, 2006

A Korean American artist, who worked with a variety of media and is considered to be the founder of video art. He is credited with an early usage (1974) of the term "electronic super highway" in application to telecommunications.

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# Financial Review

## General

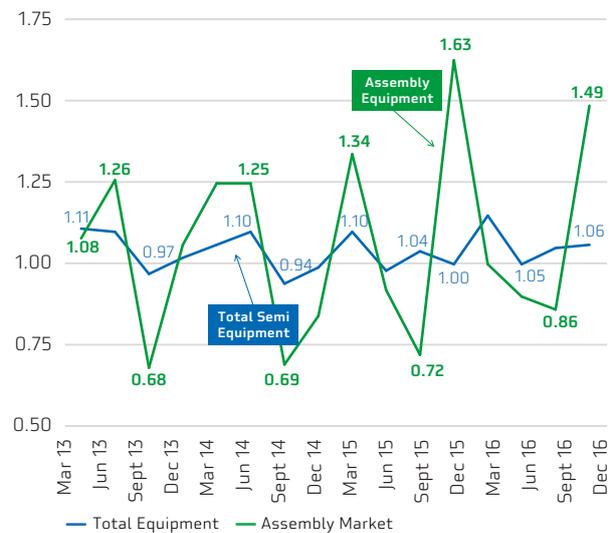
BE Semiconductor Industries N.V. ("Besì" or the "Company") is engaged in one line of business, the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries. Since Besì operates in one segment and in one group of similar products and services, all financial segment and product line information can be found in the Consolidated Financial Statements.

Besì's revenue and results of operations depend in significant part on the level of capital expenditures by semiconductor manufacturers, which in turn depends on the current and anticipated market demand for semiconductors and for products utilizing semiconductors. Demand for semiconductor devices and expenditures for the equipment required to assemble semiconductors is highly cyclical, depending in large part on levels of demand worldwide for smart phones, tablets and other personal productivity devices, computing and peripheral equipment and automotive and industrial components, as well as the production capacity of global semiconductor manufacturers. Furthermore, a rise or fall in the level of sales of semiconductor equipment typically lags any downturn or recovery in the semiconductor market by approximately three to six months due to the lead times associated with the production of semiconductor equipment.

In recent years, Besì has experienced significant upward and downward movements in quarterly order rates due to global macro-economic concerns and increased seasonality of end-user application revenue. Customer

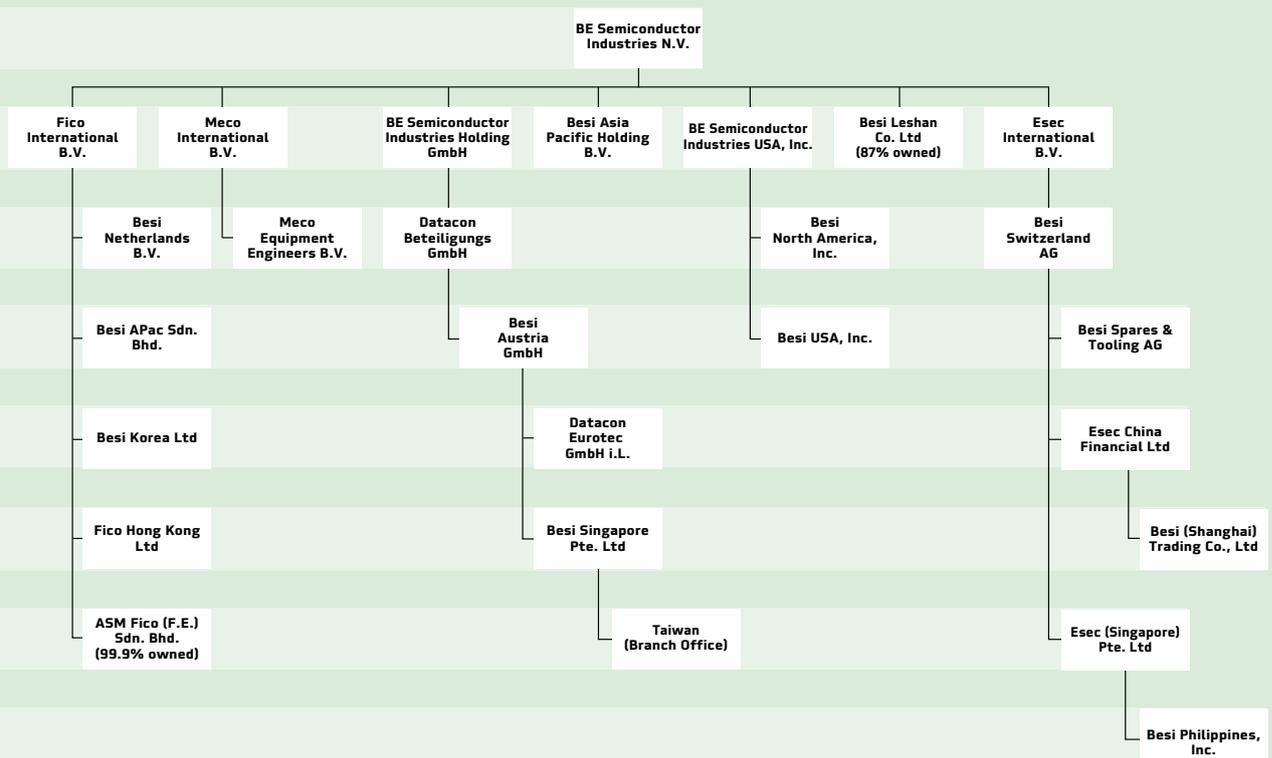
order patterns have become increasingly more seasonal due to the growing influence of more retail oriented electronics applications in the overall demand for semiconductor devices such as smart phones, tablets, wearable devices and automotive electronics. As is evident in the chart below, order patterns have been characterized by a strong upward ramp in the first half of the year to build capacity for anticipated year end demand followed by a subsequent decline in the second half of the year as capacity additions are digested by customers. Volatile global macro-economic conditions and seasonal influences have also contributed to the significant upward and downward movements in Besì's quarterly and semi-annual revenue and net income.

## QUARTERLY BOOK TO BILL RATIOS 2013-2016



Source: SEMI January 2017

## Legal Chart



Besi's revenue is generated primarily by shipments to the Asian manufacturing operations of leading European and American independent device manufacturers ("IDMs") and Taiwanese, Chinese, Korean and other Asian IDMs and subcontractors. Besi's sales to specific customers tend to vary significantly from year to year depending on their capital expenditure budgets, new product introductions, production capacity and packaging requirements. For the year ended December 31, 2016, one customer accounted for 8.1% of Besi's revenue and its three largest customers accounted for 19.8% of revenue. In addition, Besi derives a substantial portion of its revenue from products that have an average selling price in excess of € 250,000 and that have lead times of approximately 4-8 weeks between the initial order and delivery of the product. The timing and recognition of revenue from customer orders can cause significant fluctuations in operating results from quarter to quarter.

### Corporate and financial structure

Besi's corporate organization consists of a Dutch holding company in which shareholders own Ordinary Shares and a network of predominantly wholly-owned subsidiaries located globally which reflects its product group and business activities. The chart on page 17 presents Besi's legal organization as of December 31, 2016. To get a better overview of Besi's largest shareholders, reference is made to Besi Shareholder Information on page 29.

In general, Besi funds its operations through available cash on hand, cash generated from operations and, in some instances, funds the operations of its subsidiaries through intercompany loans. In addition, some of its subsidiaries maintain lines of credit with various local commercial banks to meet their internal working capital needs. Please refer to pages 22 to 24 for a detailed analysis of Besi's financial structure at December 31, 2016.

### Restructuring activities

In order to improve its profitability and scalability in light of semiconductor market volatility, Besi has undertaken a number of operational restructurings over the past ten years. Besi recorded charges of € 1.0 million in 2016 versus a net restructuring benefit of € 3.3 million in 2015. The 2016 restructuring charges were primarily related to employee severance in connection with the transfer of certain die bonding functions from Europe to Singapore. In 2015, the net restructuring benefit was primarily due to a pension curtailment gain of € 5.6 million partially offset by severance and other costs.

### Currency exposure

Besi's reporting currency is the euro. In 2016 and 2015, Besi's revenue denominated in euro represented 25% and 29% of its total revenue, respectively, while its costs and expenses denominated in euro represented 26% and 30%, respectively. As seen in the table set forth below, the substantial majority of Besi's revenue is denominated in US dollars while the majority of its costs and expenses is denominated in euro, Malaysian ringgit and Swiss franc. Besi seeks to manage its exposure to currency fluctuations in part by hedging firmly committed sales contracts denominated in US dollars and, in part, by hedging net exposures in Besi's principal transaction currencies at its Swiss and Malaysian operations.

	2016	2015	Revenue 2014
Euro	25%	29%	34%
US dollar	74%	70%	65%
Malaysian ringgit	-	-	-
Swiss franc	-	-	-
Chinese renminbi	-	-	-
Singapore dollar	-	-	-
Other	1%	1%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

	2016	2015*	Costs and Expenses 2014
Euro	26%	30%	32%
US dollar	5%	5%	4%
Malaysian ringgit	30%	28%	37%
Swiss franc	21%	23%	18%
Chinese renminbi	11%	7%	5%
Singapore dollar	4%	4%	2%
Other	3%	3%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\* Excludes net restructuring benefit of € 3.3 million.

Given changes in the foreign currency composition of its revenue, costs and expenses, Besi's results of operations are increasingly affected by fluctuations in the value of, and relationships between, the euro, the US dollar, Swiss franc, Malaysian ringgit, Singapore dollar and Chinese renminbi. The reduction in the value of the euro versus the US dollar benefited Besi's revenue and operating profit in 2016 and 2015. However, operating profit in 2015 was adversely affected by the actions of the Swiss National Bank which caused an approximate 14% increase in the value of the Swiss franc versus the euro during the year.

## Results of operations

### 2016 compared to 2015

Besi's results of operations in the 2015-2016 period were influenced by volatility in the global economy, seasonal customer order patterns and an industry recovery which began in Q1-16 and continued through year end. Such conditions caused Besi's revenue, orders and profit levels to vary on a quarterly and semi-annual sequential basis in each year as set forth in the table below.

(euro in millions)				2015				2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenue	94.9	104.3	72.1	77.8	79.0	109.0	94.3	93.1
Orders	104.2	91.9	74.9	77.3	103.9	100.5	78.1	91.4
Net income	17.5	15.5	6.3	9.7	8.0	24.0	16.6	16.7
Ending backlog	87.9	75.6	78.4	77.8	102.7	94.2	78.0	76.3

In recent years, Besi's first half year orders and profits have increased as compared to the prior semi-annual period as customers significantly added incremental semiconductor assembly capacity to meet rising orders for smart phones and automotive electronics and new device introductions. Typically, the seasonal upcycle has ended by early summer as customers digest incremental capacity additions made in the first half year. However, Besi's 2016 quarterly results varied from the traditional pattern in that Q4-16 revenue and net income did not decline as much as anticipated given ongoing industry strength, faster cycle times and cost control efforts. As such, Besi's second half 2016 revenue was approximately equal to the first half year and second half 2016 net income actually exceeded first half levels.

### Revenue/Orders

(euro in millions)	Year ended December 31,		% Change
	2016	2015	2016/2015
Revenue	375.4	349.2	7.5%
Orders	373.8	348.3	7.3%

Besi's revenue increased by € 26.2 million (7.5%) in 2016 as compared to 2015 primarily due to increased demand by Chinese and Taiwanese subcontractors for Besi's range of high end and mainstream assembly solutions and more favorable industry conditions. In general, customers increased advanced packaging capacity for mobile handsets, upgraded smart phone features such as fingerprint sensors and advanced dual camera and flashlight modules and automotive applications. In particular, Besi experienced strong growth for its epoxy, multi module and eWLB die bonders and ultra thin molding equipment for such applications. Revenue and order growth was also favorably influenced by a new technology cycle wherein customers increased demand for electronics applications requiring <20 nanometer geometries and higher levels of accuracy.

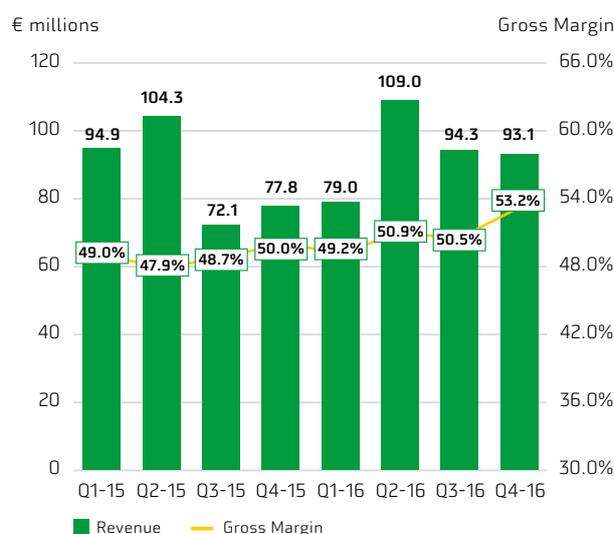
Similarly, orders in 2016 increased by 7.3% as compared to 2015. Orders by IDMs and subcontractors represented approximately 51% and 49%, respectively, of Besi's total orders in 2016 versus 60% and 40%, respectively, in 2015.

### Backlog

Besi includes in backlog only those orders for which it has received a completed purchase order. Such orders are subject to cancellation by the customer with payment of a negotiated charge. Besi's backlog as of any particular date may not be representative of actual sales for any succeeding period because of the possibility of customer changes in delivery schedules, cancellation of orders and potential delays in product shipments.

Backlog decreased slightly from € 77.8 million at December 31, 2015 to € 76.3 million at December 31, 2016 although quarterly levels fluctuated during the year reflecting customer order patterns and industry volatility. The book-to-bill ratio was 1.0x in both 2015 and 2016.

### QUARTERLY REVENUE AND GROSS MARGIN TRENDS



## Gross profit

Besi's gross profit and gross margin for the years ended December 31, 2016 and 2015 were as follows:

(euro in millions)	Year ended December 31,				% Change 2016/2015 <sup>1</sup>
	2016 % revenue	2015 % revenue	2016 % revenue	2015 % revenue	
Gross profit	191.5	51.0%	170.4	48.8%	2.2
Restructuring charges (benefit)	0.3	0.1%	(0.7)	(0.2%)	0.3
Adjusted gross profit	191.8	51.1%	169.7	48.6%	2.5

<sup>1</sup> Change in absolute percentage points.

Gross profit increased by € 21.1 million to € 191.5 million in 2016 versus 2015. Similarly, gross margins improved by 2.2% to reach 51.0% due primarily to (i) lower material and personnel costs and (ii) foreign currency benefits primarily from a reduction in the value of the Malaysian ringgit and Swiss franc versus the euro. Such benefits were partially offset by higher freight costs and the absence of net restructuring benefits in 2015.

## Selling, general and administrative expenses

The details of Besi's selling, general and administrative ("SG&A") expenses for the years ended December 31, 2016 and 2015 were as follows:

(euro in millions)	Year ended December 31,				% Change 2016/2015 <sup>1</sup>
	2016 % revenue	2015 % revenue	2016 % revenue	2015 % revenue	
SG&A expenses	80.5	21.4%	74.1	21.2%	0.2
Restructuring benefit (charges)	(0.6)	(0.2%)	0.6	0.2%	(0.4)
Amortization of intangible assets	(1.1)	(0.2%)	(1.3)	(0.4%)	0.2
<b>Adjusted SG&amp;A expenses</b>	<b>78.8</b>	<b>21.0%</b>	<b>73.4</b>	<b>21.0%</b>	<b>0.0</b>

<sup>1</sup> Change in absolute percentage points.

Total SG&A expenses increased by € 6.4 million, or 8.6% in 2016 versus 2015. The 2016 increase was due primarily to (i) increased share based compensation expense of € 2.0 million, (ii) one-time strategic consulting costs and (iii) a € 1.2 million negative variance in restructuring charges due to the absence of € 0.6 million of restructuring benefits recorded in 2015. Such increases were partially offset by lower sales and service personnel costs from cost control initiatives. On an adjusted basis, Besi's SG&A expenses increased by € 5.4 million, or 7.4% in 2016 versus 2015.

## QUARTERLY OPERATING EXPENSE TRENDS



\* Other operating expenses include R&D capitalization/amortization, foreign exchange, restructuring cost (benefit), variable compensation and one-time H2-16 consulting costs.

## Research and development expenses

Set forth below are the details of Besi's research and development ("R&D") activities for the years ended December 31, 2016 and 2015:

(euro in millions)	Year ended December 31,		% Change 2016/2015 <sup>1</sup>		
	2016 % revenue	2015 % revenue			
R&D expenses	35.9	9.6%	38.5	11.0%	(1.4)
Capitalization of development costs	6.7	1.7%	5.6	1.6%	0.1
Amortization of development costs	(8.7)	(2.3%)	(8.6)	(2.5%)	0.2
Restructuring benefit	0.0	0.0%	2.0	0.6%	(0.6)
<b>Adjusted R&amp;D expenses, net</b>	<b>33.9</b>	<b>9.0%</b>	<b>37.5</b>	<b>10.7%</b>	<b>(1.7)</b>

<sup>1</sup> Change in absolute percentage points.

In 2016, Besi's R&D expenses decreased by € 2.6 million or 6.8% versus 2015 and, as a percentage of revenue, decreased to 9.6% versus 11.0%. The 2016 decrease was primarily due to lower personnel and material costs, higher R&D grants and higher capitalization of development costs related to the introduction of a new high speed die bonder. Such decrease was partially offset by the absence of a restructuring benefit recognized in 2015. Adjusted R&D expenses decreased by € 3.6 million, or 9.6%, versus 2015 and, as a percentage of revenue, decreased from 10.7% in 2015 to 9.0% in 2016.

## Restructuring charges

Restructuring charges (benefits) are recognized in the following line items in Besi's Consolidated Statement of Comprehensive Income:

(euro in millions)	Year ended December 31,	
	2016	2015
Cost of sales	0.3	(0.7)
SG&A expenses	0.6	(0.6)
R&D expenses	0.0	(2.0)
<b>Total</b>	<b>0.9</b>	<b>(3.3)</b>

In order to improve its profitability and scalability in light of volatile semiconductor markets, Besi has undertaken a number of operational restructurings. Besi recorded charges of € 1.0 million in 2016 and a restructuring benefit, net of charges, of € 3.3 million in 2015. The 2016 restructuring charges were primarily related to employee severance in connection with the transfer of certain die bonding functions from Europe to Singapore. In 2015, the net restructuring benefit was primarily due to a pension curtailment gain of € 5.6 million partially offset by severance and other costs.

## Impairment of intangible assets

Besi tests the value of its goodwill and other intangible assets on its balance sheet according to IFRS on an annual basis or if a trigger for impairment occurs. No impairment charges were recorded in 2016. In 2015, Besi recorded an impairment charge of € 0.3 million related to its plating IT development assets.

## Operating income

Besi reported operating income of € 75.2 million in 2016, an increase of 29.9% versus 2015. Set forth below is a table presenting Besi's operating income for 2016 and 2015 and as adjusted for all restructuring charges (benefits) reported during each respective period.

(euro in millions)	Year ended December 31,	
	2016	2015
Operating income	75.2	57.9
% of revenue	20.0%	16.6%
Restructuring charges (benefit)	1.0	(3.3)
<b>Adjusted operating income</b>	<b>76.2</b>	<b>54.6</b>
% of revenue	20.3%	15.6%

Besi incurs identifiable intangible asset amortization charges related to the acquisitions of various product lines. Such charges were € 0.5 million in each of 2016 and 2015.

## Financial income (expense), net

The components of Besi's financial income (expense), net, for the years ended December 31, 2016 and 2015, were as follows:

(euro in millions)	Year ended December 31,	
	2016	2015
Interest income	0.5	0.5
Interest expense	(0.7)	(0.5)
<b>Interest income (expense), net</b>	<b>(0.2)</b>	<b>0.0</b>
Foreign exchange gains (losses), net	(1.4)	(0.8)
<b>Financial income (expense), net</b>	<b>(1.6)</b>	<b>(0.8)</b>

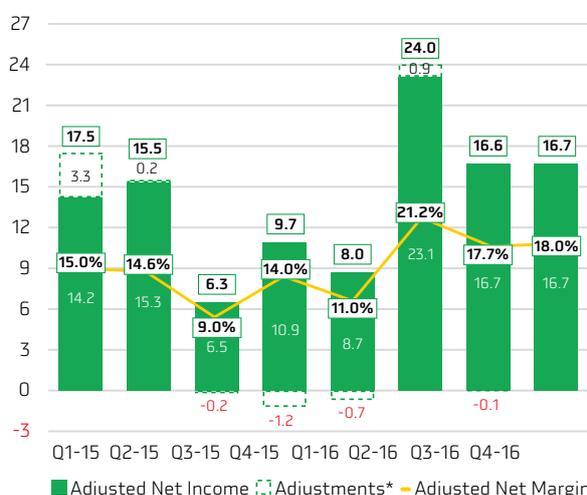
Besi's financial expense, net, increased in 2016 due to larger foreign exchange hedging losses and higher interest expense related to the issuance in December 2016 of € 125 million of 2.5% Senior Unsecured Convertible Notes due 2023 ("the Notes").

### Income taxes

Besi recorded income taxes of € 8.3 million in 2016 and € 8.1 million in 2015 with effective tax rates of 11.2% and 14.3%, respectively. 2016 income taxes included a € 1.0 million upward revaluation of net operating loss carry forwards at Besi's Swiss operations. 2015 income taxes included charges of € 1.2 million principally related to an anticipated expiration of tax losses at Besi's Swiss operations. Excluding such items, the 2016 and 2015 effective tax rates were 12.5% and 12.1%, respectively.

### NET INCOME TRENDS

€ millions



\* Adjustments exclude upward revaluation of tax loss carry forwards, restructuring charges and net restructuring benefit.

### Net income

Besi's net income in 2016 was € 65.3 million, an increase of 33.3% versus 2015. Set forth below is a table presenting Besi's reported net income in 2016 and 2015 and as adjusted for all restructuring charges (benefits) and tax loss carry forward revaluation adjustments incurred during each respective period.

(euro in millions)	Year ended December 31,	
	2016	2015
Net income as reported	65.3	49.0
<b>% of revenue</b>	<b>17.4%</b>	<b>14.0%</b>
Deferred tax and other adjustments	(1.1)	1.2
Restructuring charges (benefits)	1.0	(3.3)
Adjusted net income	65.2	46.9
<b>% of revenue</b>	<b>17.4%</b>	<b>13.4%</b>

Besi's net income in 2016 increased by € 16.3 million versus 2015 primarily due to a (i) 7.5% revenue increase, (ii) 2.2 point gross margin improvement and (iii) 3.1% reduction in the effective tax rate partially offset by € 3.8 million of increased operating expenses primarily due to the absence of net restructuring benefits recognized in 2015.

### Balance sheet, cash flow development and financing

#### Cash flow

Besi's cash and deposits increased by € 147.0 million to reach € 304.8 million at December 31, 2016. The increase was primarily due to:

- € 122.7 million of net cash proceeds from the issuance of the Notes.
- € 98.7 million of cash flow generated from operations.
- € 3.9 million of borrowings under bank lines of credit.
- € 0.4 million from favorable forex currency influences.

Positive cash flow was utilized primarily as follows:

- € 45.4 million of cash dividends were paid to shareholders.
- € 22.0 million of Treasury Shares were purchased.
- € 6.7 million of development expenses were capitalized.
- € 4.5 million of net capital expenditures were made.

Besi's net cash position (defined as cash and deposits less total debt) increased by € 31.6 million to € 168.1 million at December 31, 2016 versus year end 2015.

#### Working capital

Besi's working capital (excluding cash and debt) decreased by € 9.8 million (€ 71.8 million at December 31, 2016 versus € 81.6 million at December 31, 2015) due primarily to an increase in trade receivables of € 9.2 million associated with higher sales levels and increased other current assets of € 3.9 million. Inventories rose by only € 1.2 million at year end 2016 despite the 7.5% year over year revenue increase. Increases in current assets were more than offset by increased trade payables and accrued liabilities aggregating € 24.1 million.

#### Capital expenditures

Besi's capital expenditures, net of dispositions, were € 4.5 million and € 4.2 million in 2016 and 2015, respectively. Capital expenditures in 2016 consisted primarily of new production equipment for the upgrading and expansion of its Chinese facility and upgrading its Swiss facilities. Besi expects 2017 capital expenditures of approximately € 5.0 million primarily focused on upgrading its Chinese die bonding production capabilities and its Singapore facility to accommodate the rapid growth of personnel over the past two years.

#### Financing

In general, Besi funds its operations through available cash on hand, cash generated from operations and, in some instances, funds the operations of its subsidiaries through intercompany loans. In addition, some of its subsidiaries maintain lines of credit with various local commercial banks to meet their internal working capital needs.



*Besì worldwide sales meeting, Leshan, China.*

The working capital requirements of its subsidiaries are affected by the receipt of periodic payments on orders from its customers. Although its subsidiaries occasionally receive partial payments prior to final installation, initial payments generally do not cover a significant portion of the costs incurred in the manufacturing of such systems which requires Besì to finance its system production with internal resources and, in certain instances, via bank financing.

#### External financing structure

At December 31, 2016, Besì had € 136.7 million of total indebtedness outstanding, of which € 111.5 million related to the Notes (€ 125 million principal amount), € 13.3 million related to bank loans of which € 2.2 million was classified as short-term and € 11.9 million related to short-term notes payable to banks under Besì's lines of credit. Management does not foresee any issues in refinancing or redeeming its current indebtedness outstanding given its cash and deposits of € 304.8 million at December 31, 2016 and cash flow generation prospects relative to its current level of indebtedness outstanding.

#### Bank lines of credit

At December 31, 2016, Besì's subsidiaries had available lines of credit aggregating € 33.0 million, under which € 18.6 million of borrowing capacity was utilized of which € 11.9 million related to notes payable to banks and the remaining balance of € 6.7 million related primarily to bank guarantees and foreign currency transactions. In general, interest is charged at the banks' base lending rates or Euribor/Libor plus an increment. Most credit facility agreements include covenants requiring Besì and/or its subsidiaries to maintain certain financial positions or financial ratios and have no stated

contractual maturity. Besì and its subsidiaries were in compliance with all loan covenants at December 31, 2016.

For more information on Besì's bank lines of credit, please refer to page 94 in the Notes to the Consolidated Financial Statements.

#### Issuance of Convertible Notes

On December 2, 2016, Besì issued € 125 million principal amount of 2.5% Senior Unsecured Convertible Notes due December 2023 (the "Notes"). Interest on the Notes is payable semi-annually in arrears. The Notes convert into approximately 2.9 million Besì Ordinary Shares at a conversion price of € 43.51 (subject to adjustment). The Notes will be repaid at maturity at 100% of their principal amount plus accrued and unpaid interest. The Notes were privately offered to institutional investors via Morgan Stanley & Co. International and were listed on the Deutsche Borse's Freiverkehr market. The net proceeds from the offering totaled € 122.7 million and were added to Besì's cash and deposits.

Besì may redeem the outstanding Notes at 100% of their principal amount after December 23, 2020, provided that on the date of conversion, the market value of its ordinary shares exceeds 130% of the then effective conversion price for a specified period of time. In the event of a change of control (as defined), each noteholder will have the right to require Besì to redeem all (but not less than all) of the Notes at 100% of their principal amount together with accrued and unpaid interest thereon. The terms and conditions governing the Notes contain no incurrence tests nor maintenance covenants which could materially limit Besì's ability to conduct its operations in the normal course.

### Dividends

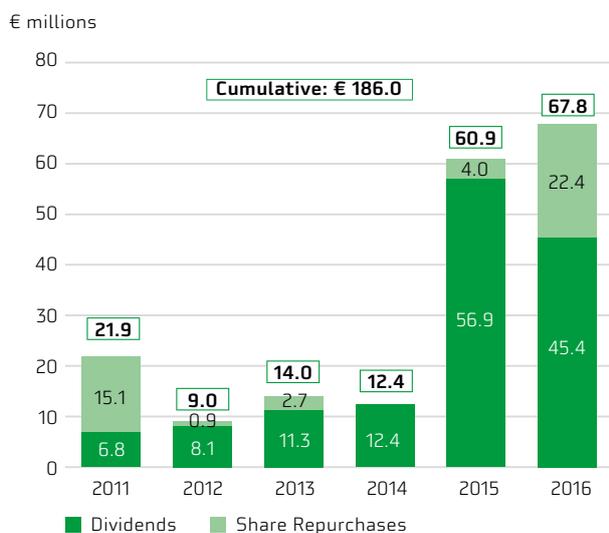
Besi dividend policy considers the payment of dividends on an annual basis based upon (i) a review of its annual and prospective financial performance and liquidity/ financing needs, the prevailing market outlook, Besi's strategy, market position and acquisition strategy and/or (ii) a dividend payout ratio in the range of 40-80% relative to net income to be adjusted accordingly if the factors referred to under (i) so require.

Due to Besi's earnings and cash flow generation in 2015, the Board of Management proposed and Besi paid a dividend to shareholders in cash equal to € 1.20 per share in May 2016, of which € 0.20 represented a special dividend which resulted in cash payments to shareholders of € 45.4 million.

Due to Besi's earnings and cash flow generation in 2016, the Board of Management has proposed a cash dividend of € 1.74 per share for 2016, of which € 0.35 per share represents a special dividend, for approval at Besi's Annual General Meeting of Shareholders on May 1, 2017.

The payments for the year 2015 and proposed for the year 2016 represent a dividend payout ratio relative to net income of 93% and 100% (approximately 80% ex special dividend), respectively.

### CAPITAL ALLOCATION TRENDS 2011-2016



### Share repurchase program

In September 2015, Besi initiated a program to repurchase up to a maximum of 1.0 million of its ordinary shares, or approximately 3% of its shares outstanding. The program was successfully completed in October 2016 under which the full 1.0 million shares were repurchased at an average price of € 22.50 for a total of € 22.5 million.

In October 2016, Besi announced the initiation of a new share repurchase program under which it may buy back up to approximately 1.0 million Ordinary Shares (2.7% of its outstanding shares at October 27, 2016) from time to time on the open market and depending on market conditions. At present, Besi has shareholder authorization to purchase up to 10% of its Ordinary Shares outstanding (approximately 3.7 million shares) until October 30, 2017. The repurchase program was initiated for capital reduction purposes and to help offset dilution associated with share issuance under employee stock plans. In 2016, Besi purchased 126,395 shares at a weighted average price of € 31.30 per share for € 4.0 million. Through February 22, 2017, Besi had purchased an additional 101,512 shares at a weighted average price of € 33.62 per share for € 3.4 million. Regular purchase activity is expected to continue in 2017.

Besi believes that its cash position, internally generated funds and available lines of credit will be adequate to meet its anticipated levels of capital spending, research and development, debt service requirements, working capital and proposed dividend for at least the next twelve months.

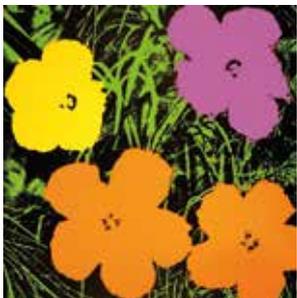
# Director's Statement of Responsibilities

In accordance with statutory provisions, the director states, to the best of his knowledge that:

1. The Financial Statements provide a true and fair view of the assets, liabilities, financial position and result for the financial year of BE Semiconductor Industries N.V. and its subsidiaries included in the Consolidated Statements.
2. The Report of the Board of Management provides a true and fair view of the position at the balance sheet date and the business conducted during the financial year of BE Semiconductor Industries N.V. and its subsidiaries, details of which are contained in the Financial Statements. The Annual Report provides information on any material risks to which BE Semiconductor Industries N.V. is exposed.

Richard W. Blickman

# Besi Shareholder Information



## Flowers (1964)

**Andy Warhol**

Born: Pittsburgh, USA, 1928

Died: New York City, USA, 1987

Andy Warhol was an American artist who was a leading figure in the visual art movement known as pop art. His works explore the relationship between artistic expression, celebrity culture and advertising that flourished in the 1960s.

© The Andy Warhol Foundation for the Visual Arts inc.  
c/o Pictoright Amsterdam 2017

# Besi Shareholder Information

## Euronext Amsterdam listing

Besi's Ordinary Shares are listed on Euronext Amsterdam and are included in the Euronext AMX index. The stock symbol is BES1 and the ISIN code is NL0000339760.

	2016	2015
Number of Ordinary Shares, net of shares held in treasury	37,326,309	37,863,456
Average daily shares traded	216,078	304,893
Highest closing price (in euro)	32.90	31.35
Lowest closing price (in euro)	15.52	12.14
Year end share price (in euro)	31.64	18.56

## Nasdaq International Designation

Besi's Level 1 ADRs are traded in the OTC markets (symbol: BES1Y) and have participated in the Nasdaq International program since December 2015. Investors in Besi's Level 1 ADRs can find real-time quotes, news and financial information about Besi at [www.nasdaq.com](http://www.nasdaq.com).

## Convertible Note Listing

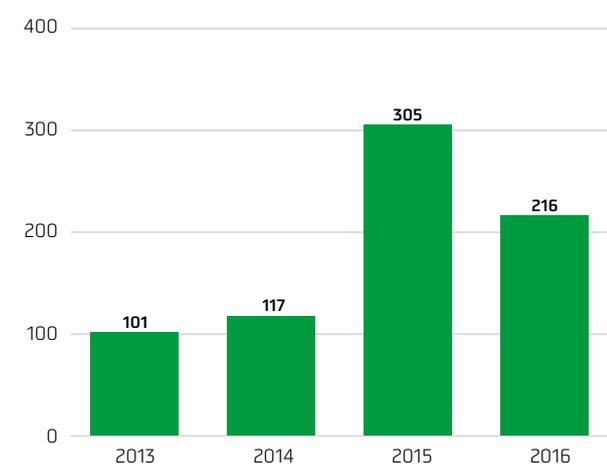
Besi has outstanding € 125 million of 2.5% Senior Unsecured Convertible Notes due 2023 (the "Notes") which are listed on Deutsche Borse's Freiverkehr market (Cusip: XIN-DM034.FID12501), [www.borse-frankfurt.de](http://www.borse-frankfurt.de).

## BESI MARKET INFORMATION

<b>Symbol/ Index</b>	<ul style="list-style-type: none"> <li>• BES1</li> <li>• Euronext AMX index</li> </ul>
<b>Market Cap*</b>	<ul style="list-style-type: none"> <li>• € 1,267 (\$ 1,332)</li> </ul>
<b>Dividend Policy</b>	<ul style="list-style-type: none"> <li>• Pay out 40-80% of net income per annum</li> </ul>

\* As of December 31, 2016; in millions.

## Average Daily Volume (shares in thousands)



Source: Euronext

## Besi's equity structure

Besi's authorized share capital consists of 80,000,000 ordinary shares ("Ordinary Shares") and 80,000,000 preference shares ("Preference Shares"). Each share (whether Ordinary Share or Preference Share) carries the right to cast one vote. Resolutions by the General Meeting of Shareholders require the approval of an absolute majority of votes validly cast, unless otherwise required by Dutch law or Besi's articles of association. At the end of 2016, the number of issued and outstanding Ordinary Shares was 40,033,921 of which Besi held 2,707,612 shares in treasury.

As stated on page 28 of this Annual Report, the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") has been granted an option to acquire protective Preference Shares, which would, if the option were exercised, allow the Foundation to acquire a maximum of 50% of the total issued capital including the Preference Shares.

## Issuance of Ordinary Shares and pre-emptive rights

Ordinary Shares may be issued pursuant to a resolution of the General Meeting of Shareholders. The General Meeting of Shareholders may grant the authority to issue Ordinary Shares to the Board of Management for a maximum period of five years. After such designation, the Board of Management may determine the issuance of Ordinary Shares subject to the approval of the Supervisory Board. The foregoing applies accordingly to the granting of rights to subscribe for Ordinary Shares but shall not be applicable to the issuance of Ordinary Shares to a party exercising a previously acquired right to subscribe for Ordinary Shares.

Currently, the General Meeting of Shareholders has delegated its authority to the Board of Management until May 14, 2018, subject to the approval of the Supervisory Board, to issue Ordinary Shares and grant rights to subscribe for Ordinary Shares up to a maximum of 10% of Besi's issued share capital as at April 29, 2016.

Holders of Ordinary Shares have a pro-rata pre-emptive right in relation to any Ordinary Shares issued, which right may be limited or excluded. Such shareholders have no pro-rata pre-emptive right with respect to (i) any Ordinary Shares issued against contributions other than in cash, (ii) any issuance of Preference Shares, or (iii) any Ordinary Shares issued to employees. The foregoing applies accordingly to the granting of rights to subscribe for Ordinary Shares but shall not be applicable to the issuance of Ordinary Shares to a party exercising a previously acquired right to subscribe for Ordinary Shares. On the basis of a designation by the General Meeting of Shareholders, the Board of Management has the power, subject to the approval of the Supervisory Board, to limit or exclude the pre-emptive right in relation to any Ordinary Shares issued and rights to subscribe for Ordinary Shares granted until May 14, 2018, subject to the 10% maximum as described above. The designation may be renewed for a maximum period of five years. In the absence of such designation, the General Meeting of Shareholders has the power to limit or exclude such pre-emptive rights.

### Issuance of Preference Shares

The provisions in Besi's articles of association for the issuance of Preference Shares are similar to the provisions for the issuance of Ordinary Shares described herein. However, an issuance of Preference Shares will require prior approval of the General Meeting of Shareholders if it would result in an outstanding amount of Preference Shares exceeding 100% of the outstanding amount of Ordinary Shares and the issuance is effected pursuant to a resolution of a corporate body other than the General Meeting of Shareholders, such as the Board of Management. Furthermore, within two years after the first issuance of such Preference Shares, a General Meeting of Shareholders will be held to determine the repurchase or cancellation of the Preference Shares. If no resolution to repurchase or cancel the Preference Shares is adopted, another General Meeting of Shareholders with the same agenda must be convened and held within two years after the previous meeting and this meeting will be repeated until no Preference Shares are outstanding. This procedure does not apply to Preference Shares that have been issued pursuant to a resolution by the General Meeting of Shareholders.

In connection with the issuance of Preference Shares, it may be stipulated that an amount not exceeding 75% of the nominal amount ordinarily payable upon issuance of shares may be paid only if the Company requests payment.

### The Foundation

Under the terms of an agreement entered into in April 2002 between the Company and the Foundation, the Foundation has been granted a call option, pursuant to which it may purchase a number of Preference Shares up to a maximum of the total number of outstanding Ordinary Shares at the time of exercise of the option minus one. This call option agreement was revised in May 2008 to comply with applicable laws. The purpose of the Foundation is to safeguard the Company's interests, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the Company's continuity, independence and identity. Until the call option is exercised by the Foundation, it can be revoked by the Company, with immediate effect. The aim of the Preference Shares is, amongst other things, to provide a protective measure against unfriendly take-over bids and other possible influences that could threaten the Company's continuity, independence and identity, including, but not limited to, a proposed resolution to dismiss the Supervisory Board or the Board of Management.

The Foundation was established in April 2000. The board of the Foundation consists of four members, three of whom are independent of Besi and one of whom is a member of the Supervisory Board. Please refer to the chapter "Other Information" for additional information on the Foundation and its board members.

### Voting rights

Each share (whether Ordinary Share or Preference Share) carries the right to cast one vote. Resolutions by the General Meeting of Shareholders require the approval of an absolute majority of votes validly cast, unless otherwise required by Dutch law or Besi's articles of association.

### Repurchase and cancellation of shares

The Board of Management may cause the Company to repurchase for consideration any class of shares in its own capital which have been paid-up, subject to certain provisions of Dutch law and its articles of association, if (i) the shareholders' equity less the payment required to make the acquisition does not fall below the sum of the paid-up and called part of the issued share capital and any reserves required to be maintained by Dutch law or Besi's articles of association and (ii) the Company and its subsidiaries would thereafter not hold shares with an aggregate nominal value exceeding 50% of the Company's issued share capital. Shares held by the Company or any of its subsidiaries will have no voting rights and the Company may not receive dividends on shares it holds in its own capital. Any such repurchases may only take place if the General Meeting of Shareholders has granted the Board of Management the authority to effect such repurchases, which authorization may apply for a maximum period of 18 months. The Board of Management is currently authorized to repurchase up to 10% of Besi's issued share capital as at the time of such repurchase through October 29, 2017.

Upon a proposal of the Board of Management and approval of the Supervisory Board, the General Meeting of Shareholders has the power to decide to cancel shares acquired by the Company or to reduce the nominal value of the Ordinary Shares. Any such proposal is subject to the relevant provisions of Dutch law and Besi's articles of association.

### Change of control provisions in significant agreements

In December 2016, the Company issued € 125 million principal amount of the Notes which initially convert into Ordinary Shares at a conversion price of € 43.51 per share. In the event of a change of control of Besi (as defined), each noteholder will have the right to require Besi to redeem all (but not less than all) of its Notes at 100% of their principal amount together with accrued and unpaid interest thereon. As of December 31, 2016, there was no change of control provision contained in any other of Besi's material agreements.

### Dividend policy

Besi considers the payment of dividends on an annual basis based upon (i) a review of its annual and prospective financial performance, liquidity and financing needs, the prevailing market outlook, Besi's strategy, market position and acquisition strategy and/or (ii) a dividend payout ratio in the range of 40-80% relative to net income to be adjusted if the factors referred to under (i) so require.



*Besi APac: Customer and Operations celebrating first successful internal buy-off WTT & TTR machine.*

Due to Besi's earnings and cash flow generation in 2015, the Board of Management proposed and Besi paid a cash dividend of € 1.20 per share, of which € 0.20 per share represented a special dividend that resulted in cash payments to shareholders of € 45.4 million in May 2016.

Due to Besi's earnings and cash flow generation in 2016, the Board of Management has proposed a cash dividend of € 1.74 per share for 2016, of which € 0.35 per share represents a special dividend, for approval at Besi's Annual General Meeting of Shareholders on May 1, 2017.

The payments for the year 2015 and proposed for the year 2016 represent a dividend payout ratio relative to net income of 93% and 100% (approximately 80% ex special dividend), respectively.

### Ownership interests in the Ordinary Shares

Under the Dutch Financial Supervision Act (Wet op het financieel toezicht, "Wft"), the following parties have notified the Dutch Authority for the Financial Markets (Autoriteit Financiële Markten, "AFM") of their share interests in the Company exceeding 3%:

#### **Norges Bank**

Notification effective February 21, 2017 5.60%

#### **BE Semiconductor Industries N.V.**

Notification effective August 16, 2011 5.12%

#### **BlackRock, Inc.**

Notification effective February 14, 2017 5.03%

#### **JP Morgan Asset Management Holdings, Inc.**

Notification effective February 9, 2017 4.96%

#### **Kempen Capital Management N.V.**

Notification effective January 17, 2017 4.82%

#### **Darlin N.V.**

Notification effective December 29, 2016 4.99%

#### **Old Mutual plc**

Notification effective January 25, 2016 3.04%

A list of ownership interests in the Company of 3% or more can be found on the AFM website: [www.afm.nl](http://www.afm.nl).

### Analysts

The following sell side analysts cover Besi's shares:

Degroof Petercam	Marcel Achterberg
ING Bank N.V.	Nigel van Putten
Kepler Cheuvreux	Peter Olofsen
NIBC	Edwin de Jong
Theodoor Gilissen	Jos Versteeg

### Investor relations

Besi uses a range of activities to initiate and maintain contacts with investors. After publication of its annual and quarterly results, roadshows are held in the Netherlands, Europe and the United States to meet existing and potential new institutional investors. Besi is represented at these roadshows by the CEO and/or the Senior Vice President Finance. Planned roadshows and presentations can be found on the Besi website. Contacts with institutional investors are further maintained by means of conference calls, conferences organized by brokers and Euronext and by investor visits to Besi.

The Company increased its investor outreach in 2016. A total of 231 meetings with institutional investors were held including roadshows, conference calls and broker conferences. In addition, a total of 16 meetings with research analysts, private and retail investors, journalists and media outlets were held during the year to help further communicate the Besi story to the investment community and general public.

Important investor relations dates in 2017 that are currently planned (subject to change) are as follows:

April 25, 2017	2017 first quarter results
May 1, 2017	Annual General Meeting of Shareholders, to be held at Besi in Duiven at 10.30 a.m.
July 27, 2017	2017 second quarter results
November 1, 2017	2017 third quarter results
February 2018	2017 fourth quarter and annual results

**Prevention insider trading**

Besi has implemented measures to prevent the use of inside information by its Supervisory Board, the Board of Management and other specified persons who have access to price-sensitive information, including key staff members. The group of persons to whom this applies have agreed in writing to observe the Besi code of conduct regarding the reporting and regulation of transactions in Besi securities (and other designated securities) and the treatment of price-sensitive information. Besi has appointed a compliance officer who is responsible for monitoring compliance with its code of conduct and communicating with the AFM.

**Besi Incentive Plan**

Besi may grant Performance Shares on an annual conditional basis to members of the Board of Management, executive employees and officers under the current Besi Incentive Plan. Further information on this subject is given on pages 62 to 69 of this Annual Report.

**Besi share price development**

**BESI'S SHARE PRICE VS. SOX**

(Since January 1, 2016, rebased to 100)



Source: Capital iQ

**BESI'S SHARE PRICE VS. SOX**

(Since January 1, 2014, rebased to 100)



Source: Capital iQ

EVO2200 FT  
STATION 14

# Risks and Risk Management

EVO2200 FT  
STATION 12

EVO2200 FT  
STATION 10

EVO2200 FT  
STATION 8

EVO2200 FT  
STATION 6

EVO2200 FT  
STATION 4



# Risks and Risk Management

Risk management is a very important part of doing business in today's world. Over the past decade, the importance of risk management and control systems has grown substantially for Besi as a result of its increased size and complexity, changing market conditions and substantial expansion of its business operations outside of Europe. Besi's risk management and control systems have been designed to address and help limit the risk factors described commencing on page 32. In 2016, the most important components of Besi's internal risk management and control system were:

- An extensive and documented process for preparing its annual budget, quarterly estimates and reports of its monthly financial and non-financial information compared with the budgeted and quarterly estimated information.
- Monthly business reviews with product group and production site managers with respect to their monthly and quarterly bookings, revenue, backlog, working capital and results of operations together with discussions of general market, economic, technological, ecological and competitive developments.
- Monthly reviews of the foreign currency positions at all significant operating companies.
- Annual documentation and analysis of key risks and the development and control of such risks.
- Weekly management reviews of its business, operations, cash and inventory development.
- Compliance with finance and controlling guidelines governing its financial accounting and reporting procedures.
- Compliance with internal controls over financial reporting that has been implemented in all significant operating companies.
- Regular management review of key staff development.
- Regular analyses of operational risks at the subsidiary level.
- Regular analyses of Besi's capital structure, financing requirements, tax position and transfer pricing system.

All material findings that result from the use of Besi's internal risk management and control system are discussed with the Audit Committee and Supervisory Board including the:

- Development of Besi's bookings, revenue, backlog, results of operations and balance sheet versus budget as well as developments in the global economy and semiconductor assembly equipment market and their impact on Besi's financial results.
- Progress of ongoing cost reduction efforts.
- Status of key customer relationships.
- Analysis of orders lost to competitors and the development of Besi's competitors' business.
- Material developments in Besi's research and development activities.
- Foreign currency exchange rate developments.
- Status of its current corporate governance procedures.

In addition to internal controls over financial reporting, the operation of Besi's internal control system is also assessed by the external auditor where deemed relevant in the context of the audit of the annual Financial Statements. The results of this audit are discussed with the Board of Management and the Audit Committee of the Supervisory Board.

In addition, Besi's operations are governed by a set of guidelines and instructions regarding the following topics:

- Code of Conduct
- Conflict Minerals Policy
- Supply Chain Policy
- Code of Ethics for Senior Financial Officers
- Whistleblower procedure
- Guidelines regarding authorizations
- Reporting of fraudulent activities
- Hedging of financial risks
- Internal financial reporting
- Transfer pricing

The Whistleblower procedure was updated in 2016 to meet best practice standards and published on the Company's website. In 2016, violations of the Code of Conduct were reported by means of the Whistleblower procedure. These incidents were promptly responded to by Besi senior management, adjudicated in a satisfactory manner and were immaterial to our 2016 financial results. No other violations of the Code of Conduct were reported in 2016.

Insurance policies are in place to cover the typical business risks associated with Besi's operations which are reviewed every year. Besi's policies regarding foreign currency hedging, interest rate, credit, market and liquidity risks are further described in the Financial Statements on pages 109 to 115.

There were no indications that Besi's risk management and control systems did not function properly in 2016.

## Risk Appetite

Besi's risk appetite is primarily based on defined and agreed upon strategies and the individual objectives and initiatives within such strategies. Our risk appetite differs per risk type.

- Strategic risks and risks related to the semiconductor industry: Besi seeks to realize its strategic ambitions and priorities, and is willing to accept reasonable risks to achieve such objectives.
- Operational risks: Besi has a variety of operating initiatives and challenges which require an appropriate level of management attention. We seek to mitigate risks that could negatively affect our realization of operating initiatives and efficiency targets while ensuring that our quality standards are unaffected in the process.

- Financial risks: Besi's financial strategy is focused on generating increased revenue, profit and cash flow from its business model, maintaining a strong financial position and creating long-term value for our shareholders.
- Legal and regulatory risks: We strive to be fully compliant with our Code of Conduct and all applicable national and international laws and regulations in the markets and jurisdictions in which we operate.

Besi does not rank the individual risks identified by management. We believe that all risks described herein have significant relevance to Besi and that a ranking process would negate the purpose of a comprehensive risk assessment. Besi management assesses its risks and risk management twice per year including the residual risks, net of risk mitigating measures. Besi's risk appetite is aligned with its strategy and priorities.

### Risks factors relating to Besi, its industry, its business and its shares

#### Strategic Risks

Besi's business and results of operations may be negatively affected by general economic and financial market conditions and volatile spending patterns by its customers.

Though the semiconductor industry's cycle can be independent of the general economy, global economic conditions may have a direct impact on demand for semiconductor devices and ultimately demand for semiconductor manufacturing equipment. Accordingly, Besi's business and financial performance is affected, both positively and negatively, by fluctuations in the macro-economic environment. As a result, the Company's visibility as to future demand is generally limited and its ability to forecast future demand is difficult.

For example, between 2010 and 2013, sovereign debt concerns involving eurozone countries significantly adversely affected global economic conditions which, in turn, had a negative impact on demand for semiconductor devices and semiconductor manufacturing equipment. In the third quarter of 2015, Besi experienced an abrupt and rapid reduction in Q3 orders as customers digested capacity added in 2014 and the first half of 2015, along with typical downward order pressure from seasonal factors.

Besi believes that historic volatility in capital spending by customers is likely to persist in the future. In addition, future economic downturns and/or geopolitical events could adversely affect Besi's customers and suppliers which would in turn have an impact on Besi's business and financial condition.

Besi's business includes significant operations in Europe. Disruptions to European economies could have a material adverse effect on Besi's operations, financial performance, share price and access to credit markets.

The financial markets remain concerned about the ability of certain European countries to finance their deficits, service growing debt burdens and refinance current debt maturities amidst difficult economic conditions. Global markets are also concerned as to the possible contagion effects of a default by a European sovereign issuer, its impact on economic growth in emerging markets and other developed markets and its impact on corporations' abilities to access credit and capital markets.

Given the scale of its European operations and scope of its relationships with customers and counterparties, Besi's results of operations and financial condition could be materially and adversely affected by persistent disruptions in European financial markets, the attempt of a country to abandon the euro or leave the European Union, the effects of austerity measures on eurozone economies, the failure of a significant European financial institution, even if not an immediate counterparty to Besi, persistent weakness in the value of the euro and the potential adverse impact on global economic growth and capital markets if eurozone issues spread to other parts of the world as a result of the default of a eurozone sovereign or corporate issuer.

Besi may acquire or make investments in companies or technologies that could disrupt its ongoing business, distract its management and employees, increase its expenses and adversely affect its results of operations.

As part of its growth strategy, Besi may from time to time acquire or make investments in companies and technologies. Besi could face difficulties in integrating personnel and operations from the acquired businesses or technology and in retaining and motivating key personnel from these businesses. In addition, these acquisitions may disrupt Besi's ongoing operations, divert management resources and attention from day-to-day activities, increase its expenses and adversely affect its results of operations and the market price of its Ordinary Shares. In addition, these types of transactions often result in charges to earnings for items such as business unit restructuring, including charges for personnel and facility termination and the amortization of intangible assets or in-process research and development expenses. Any future acquisitions or investments in companies or technologies could involve other risks, including the assumption of additional liabilities, dilutive issuances of equity securities, the utilization of its cash and the incurrence of debt.



*Besi APac engineers testing systems.*

### Semiconductor industry related risks

Besi's revenue and results of operations depend in significant part on demand for semiconductors which is highly cyclical and has increasingly become more seasonal in nature.

Besi's customers' capital expenditures for semiconductor manufacturing equipment depend on the current and anticipated market demand for semiconductors and products using semiconductors. The semiconductor industry is highly cyclical and volatile and is characterized by periods of rapid growth followed by industry-wide retrenchment. These periodic downturns which have been characterized by, among other things, diminished product demand, production overcapacity, oversupply and reduced prices, and which have resulted in decreased revenue, have been regularly associated with substantial reductions in capital expenditures for semiconductor facilities and equipment.

Over the past decade, Besi has experienced significant upward and downward movements in quarterly order rates due to global macro-economic concerns, the timing of industry capacity additions and increased seasonality of end-user application revenue which materially affected and, in certain instances, materially adversely affected its revenue, results of operations and backlog. Customer order patterns have become increasingly more seasonal due to the growing influence of more retail oriented electronics applications in the overall demand for semiconductor devices such as smart phones, tablets, wearables and automotive electronics. As such, order patterns have been characterized by a strong ramp in the first half of the year to build capacity to meet anticipated year end demand followed by a subsequent decline in the second half of the year as capacity additions are digested by customers.

Due to the lead times associated with the production of semiconductor equipment, a rise or fall in the level of sales of semiconductor equipment typically lags any downturn or recovery in the semiconductor market by approximately three to six months. This cyclicity has had, and is expected to continue to have, a direct adverse effect on Besi's revenue, results of operations and backlog. Industry downturns can be severe and protracted and will continue to adversely affect Besi's revenue, results of operations and backlog.

**Because of the lengthy and unpredictable sales cycle for its products, Besi may not succeed in closing transactions on a timely basis, if at all, which could adversely affect its revenue and operating results.**

The average selling price for a substantial portion of Besi's equipment exceeds € 250,000, and as a result of such potential investment size, the sales cycles for these transactions are often lengthy and unpredictable. Factors affecting the sales cycle include:

- Customers' capital spending plans, capacity utilization rates, technology roadmaps and budgetary constraints.
- Timing related to the adoption, testing, qualification and introduction of new devices and process technologies and related equipment.
- The timing of customers' budget cycles.
- Customers' internal approval processes.

These lengthy sales cycles may cause Besi's revenue and results of operations to vary from period to period and it may be difficult to predict the timing and amount of any variations. Besi may not succeed in closing such large transactions on a timely basis or at all, which could cause significant variability in its revenue and results of operations for any particular period.

### Recent consolidation activity in the semiconductor industry has further increased customer concentration and the risk of loss.

There has been and Besi expects that there will continue to be, consolidation within the semiconductor industry resulting in even fewer potential customers for its products and services, and, more significantly, the potential loss of business from existing customers that are a party to a merger if the combined entity decides to purchase all of its equipment from one of Besi's competitors. Further industry consolidation could result in additional negative consequences to Besi including increased pricing pressure, increased customer demands for enhanced or new products, greater sales and promotional costs and the potential for increased oversight from regulatory agencies. Any of the foregoing events would have an adverse impact on Besi's business, results of operations and financial condition.

### Industry alliances may not select our equipment.

Some of our customers and potential customers are entering into alliances or other forms of cooperation with one another to expedite the development of processes and other manufacturing technologies. One of the results of this cooperation may be the definition of a system or particular tool set for a certain function or a series of process steps that uses a specific set of manufacturing equipment. These decisions could work to Besi's disadvantage if a competitor's equipment becomes the standard equipment for such function or process. Even if Besi's equipment was previously used by a customer, that equipment may be displaced in current and future applications by the equipment standardized through such cooperation. These forms of cooperation may have a material adverse effect on Besi's business, financial condition and results of operations.

### Besi may experience increased price pressure on its product sales.

Typically, Besi's average selling prices for mature products have declined over time. Besi seeks to offset this decline, in part, by continually developing and introducing next generations of its principal products. In addition, it has reduced its cost structure by consolidating and transferring production operations to lower cost areas, expanding its lower cost Asian sources of supply, reducing other operating costs and by pursuing product strategies focused on product performance and customer service. If these efforts do not fully offset any such price declines, Besi's financial condition and operating results may be materially and adversely affected.

### Besi may fail to compete effectively in its market.

Besi faces substantial competition on a worldwide basis from established companies based in Japan, Korea, Singapore, China, various other Pacific Rim countries and the United States, many of which have greater financial, engineering, manufacturing and marketing resources than Besi. Besi believes that once a semiconductor manufacturer has decided to buy semiconductor assembly equipment from a particular vendor, the manufacturer often continues to use that vendor's

equipment in the future. Accordingly, it is often difficult to achieve significant sales to a particular customer once another vendor's products have been installed. Furthermore, some companies have historically developed, manufactured and installed back-end assembly equipment internally, and it may be difficult for Besi to sell its products to these companies.

Besi's ability to compete successfully in its markets depends on a number of factors both within and outside its control including:

- Price, product quality and system performance.
- Ease of use and reliability of its products.
- Manufacturing lead times, including the lead times of Besi's subcontractors.
- Cost of ownership.
- Success in developing or otherwise introducing new products.
- Market and economic conditions.

If Besi fails to compete effectively based upon these or other factors, its business and results of operations could be adversely affected.

### Besi must introduce new products in a timely fashion and its success is dependent upon the market acceptance of these products.

Besi's industry is subject to rapid technological change and new product introductions and enhancements. The success of Besi's business strategy and results of operations are largely based upon accurate anticipation of customer and market requirements. Besi's ability to implement its overall strategy and remain competitive will depend in part upon its ability to develop new and enhanced products and introduce them at competitive price levels in order to gain market acceptance. Besi must also accurately forecast commercial and technical trends in the semiconductor industry so that its products provide the functions required by its customers and are configured for use in their facilities. Besi may not be able to respond effectively to technological changes or to specific product announcements by competitors. As a result, the introduction of new products embodying new technologies or the emergence of new or enhanced industry standards could render Besi's existing products uncompetitive from a pricing standpoint, obsolete or unmarketable.

In addition, Besi is required to invest significant financial resources in the development of new products or upgrades to existing products and in its sales and marketing efforts before such products are made commercially available and before Besi is able to determine whether they will be accepted by the market. Revenue from such products will not be recognized until long after Besi has incurred the costs associated with designing, creating and selling such products. In addition, due to the rapid technological changes in its market, a customer may cancel or modify a product before it begins manufacture of the product and receives revenue from the customer. While Besi typically imposes a fee when its customers cancel an order, that fee may not be sufficient to offset the costs Besi incurred in designing and

manufacturing such product. In addition, the customer may refuse or be unable to pay the cancellation fee Besi assesses. It is difficult to predict with any certainty the frequency with which customers will cancel or modify their projects or the effect that any cancellation or modification would have on Besi's results of operations.

Besi cannot provide any assurance that it will be successful in developing new or enhanced products in a timely manner or that any new or enhanced products that it introduces will achieve market acceptance.

### Operational risks

#### Difficulties in forecasting demand for Besi's product lines may lead to periodic inventory shortages or surpluses.

The Company typically operates its business with limited visibility of future demand. As a result, it sometimes experiences inventory shortages or surpluses. Besi generally orders supplies and otherwise plans production based on internal forecasts for demand. The Company has in the past failed, and may fail again in the future, to accurately forecast demand for its products. This has led to and may in the future lead to, delays in product shipments or, alternatively, an increased risk of inventory obsolescence. If it fails to accurately forecast demand for its products, Besi's business, results of operations and financial condition may be materially and adversely affected.

#### Besi depends on its suppliers for critical raw materials, components and subassemblies on a timely basis. If our suppliers do not deliver their products to us on a timely basis, particularly during a large order ramp, our revenue, customer relationships and market share could be materially and adversely affected.

Besi's assembly equipment, particularly its advanced packaging product lines, is highly complex and requires raw materials, components, modules and subassemblies having a high degree of reliability, accuracy and performance. We rely on subcontractors to manufacture many of these components and subassemblies and in certain instances, on sole suppliers for such items, on a timely basis as our order ramps can be steep and industry cycle times are decreasing. As a result, we are exposed to a number of significant risks, including:

- Decreased control over the manufacturing process for components, modules and subassemblies.
- Changes in our manufacturing processes in response to changes in the market, which may delay our shipments.
- Potential for inadvertent use of defective or contaminated raw materials.
- The relatively small operations and limited manufacturing resources of some of our suppliers, which may limit their ability to manufacture and sell subassemblies, modules, components or parts in the volumes we require and at acceptable quality levels, prices and timetable.
- The potential inability of suppliers to meet customer demand requirements during volatile cycles.
- Reliability or quality issues with certain key components, modules and subassemblies provided by single source suppliers as to which we may not have any short-term alternative.

- Shortages caused by disruptions at our suppliers and subcontractors for a variety of reasons, including work stoppage or fire, earthquake, flooding or other natural disasters.
- Delays in the delivery of raw materials, modules or subassemblies, which, in turn, may delay shipments to our customers.
- Loss of suppliers as a result of consolidation of suppliers in the industry, bankruptcy or insolvency.

If Besi is unable to deliver products to its customers on time and at expected cost for these or any other reasons, or it is unable to meet customer expectations as to cycle time, or it is unable to maintain acceptable product quality or reliability, then its business relationships, market share, financial condition and operating results could be materially and adversely affected.

#### Undetected problems in Besi's products could directly impair its financial results.

If flaws in design, production, assembly or testing of its products (by Besi or its suppliers) were to occur, the Company could experience a rate of failure in its products that could result in substantial repair, replacement or service costs and potential damage to its reputation. Continued improvements in manufacturing capabilities, control of material and manufacturing quality and costs and product testing are critical factors to Besi's future growth. There can be no assurance that the Company's efforts to monitor, develop, modify and implement appropriate tests and manufacturing processes for its products will be sufficient to permit it to avoid a rate of failure in its products that results in substantial delays in shipments, significant repair or replacement costs and/or potential damage to its reputation, any of which could have a material adverse effect on Besi's business, results of operations and financial condition.

Costs of product defects and errata (deviations from product specifications) due to, for example, problems in Besi's design and manufacturing processes could include:

- Writing off the value of inventory.
- Disposing of products that cannot be fixed.
- Retrofitting products that have been shipped.
- Providing product replacements or modifications.
- Defending against litigation.

#### Besi's use of global and diverse information technology systems could result in ineffective or inefficient business management and could expose it to threats to the security of its data resources.

Besi currently utilizes a variety of information technology ("IT") systems to run its global operations. At present, Besi's operations rely on a range of different software systems to manage its sales, administrative and production functions. Some of these systems are proprietary and others are purchased from third party vendors. In addition, some of these systems are maintained on-site by Besi personnel while others are maintained off-site by third parties.



*Besi Netherlands: 60 years Fico diamond jubilee.*

We maintain and rely extensively on information technology systems and network infrastructures for the effective operation of our business. We also hold large amounts of data in data center facilities around the world upon which our business depends. We could experience a disruption or failure of our systems, or the third-party hosting facilities or other services that we use. Such disruptions or failures could include a major earthquake, fire, cyber-attack, act of terrorism or other catastrophic event, as well as power outages or telecommunications infrastructure outages, or a decision by one of our third-party service providers to close facilities that we use without adequate notice or other unanticipated problems with the third-party services that we use, including a failure to meet service standards. As a highly automated business, any such disruptions or failures could (i) result in the destruction or disruption of any of our critical business operations, controls or procedures, or information technology systems, (ii) severely affect our ability to conduct normal business operations, including delaying completion of sales and provision of services, (iii) result in a material weakness in our internal control over financial reporting, (iv) harm our reputation and (v) adversely affect our ability to attract and retain customers, any of which could materially adversely affect our future operating results.

Besi believes that there has been a global increase in IT security threats and higher levels of professionalism in computer crime which pose a greater risk to the confidentiality, availability, distribution and integrity of its internal data and information. Besi relies on commercially available systems, software, tools and monitoring to provide security for the processing, transmission and storage of confidential information. A disruption, infiltration or failure of our information technology systems or any of our data centers could occur as a result of technological error, computer viruses, or third-party action, including intentional misconduct by computer hackers, physical break-ins, the actions of state actors, industrial espionage, fraudulent

inducement of employees, or customers to disclose sensitive information such as user names or passwords, and employee or customer error or malfeasance.

A security breach could result in unauthorized access to or disclosure, modification, misuse, loss, or destruction of our or our customer's data (including proprietary information, intellectual property, or trade secrets). Because there are many different security breach techniques and such techniques continue to evolve, we may be unable to anticipate attempted security breaches and implement adequate preventative measures. Any security breach or successful denial of service attack could result in a loss of customer confidence in the security of our products and damage to our brand, reducing the demand for our offerings and our revenue, disrupt our normal business operations, require us to spend material resources to investigate or correct the breach, expose us to legal liabilities, including litigation, regulatory enforcement, and indemnity obligations, and materially adversely affect our operating results.

**Besi's business may be harmed if it fails to continue to attract and retain qualified personnel.**

Besi's future operating results depend in significant part upon the continued contribution of its senior executive officers and key employees including a number of specialists with advanced university qualifications in engineering, electronics and computing. In addition, Besi's business and future operating results depend in part upon its ability to attract and retain other qualified management, technical, sales and support personnel for operations, particularly to help expand its Asian production and technical capabilities. Besi believes that its ability to increase the manufacturing capacity of its subsidiaries has from time to time been constrained by the limited number of such skilled personnel. Competition for such personnel is intense and Besi may not be able to continue to attract and retain such personnel. The loss of any key executive or employee or the inability to attract and retain skilled executives and employees as needed could adversely affect Besi's business, financial condition and results of operations.

Besi may incur restructuring charges of a material nature that could adversely affect its results of operations.

Commencing in 2007, Besi has undergone an organizational transformation which has involved a series of related restructuring efforts and initiatives designed to reduce its cost structure, increase its profitability and enhance its competitive position. Between 2007 and 2016, Besi incurred net restructuring charges aggregating € 23.7 million of which restructuring charges of € 1.0 million were recognized in 2016. There can be no assurance that Besi's restructuring efforts will achieve the benefits it seeks, including lower quarterly structural cost levels without placing additional burdens on its management, design and manufacturing teams and operations. In addition, Besi may in the future engage in additional restructuring efforts that could result in additional charges in the future in amounts which could exceed specified estimates. Restructuring charges in future periods could adversely affect Besi's results of operations for the periods in which such charges are incurred.

Any significant disruption in Besi's operations could reduce the attractiveness of its products and result in a loss of customers.

The timely delivery and satisfactory performance of Besi's products are critical to its operations, reputation and ability to attract new customers and retain existing customers. Besi's administrative, design and systems manufacturing are located all over the world, including locations in the Netherlands, Malaysia, Singapore, Austria, China and Switzerland. Some of Besi's facilities are in locations that have experienced severe weather conditions, fire, natural disasters, political unrest and/or terrorist incidents. If the operations at any of its facilities were damaged or destroyed as a result of any of the foregoing, or as a result of other factors, Besi could experience interruptions in its service, delays in product deliveries and Besi would likely incur additional expense in arranging new production facilities which may not be available on timely or commercially reasonable terms, or at all. Any interruptions in Besi's operations or delays in delivering its products could harm its customer relationships, damage its brand and reputation, divert its employees' attention, reduce its revenue, subject it to liability and cause customers to cancel their orders, any of which could adversely affect Besi's business, financial condition and results of operations. It is unclear whether Besi's insurance policies would adequately compensate it for any losses that it would incur as the result of a service disruption or delay.

## Financial risks

Besi's revenue and operating results fluctuate significantly and may continue to do so in the future.

Besi's quarterly revenue and operating results have fluctuated in the past and may continue to fluctuate in the future. Besi believes that period-to-period comparisons of its operating results are not necessarily indicative of future operating results. Factors that have caused Besi's operating results to fluctuate in the past and which are likely to affect them in the future, many of which are beyond its control, include the following:

- The volatility of the semiconductor industry and its impact on semiconductor equipment suppliers.
- Industry capacity utilization, pricing and inventory levels.
- The timing of new customer device introductions and production processes which could require the addition of new assembly equipment capacity.
- The length of sales cycles and lead-times associated with Besi's product offerings.
- The timing, size and nature of Besi's transactions.
- The financial health and business prospects of Besi's customers.
- The impact on potential orders from consolidation trends among semiconductor producers.
- The proportion of semiconductor demand represented by corporate and retail end-user applications.
- Besi's ability to scale its operations on a timely basis consistent with demand for its products.
- The ability of Besi's suppliers to meet its needs for products on a timely basis.
- The success of Besi's research and development activities.
- The market acceptance of new products or product enhancements by Besi or its competitors.
- The timing of new personnel hires and the rate at which new personnel becomes productive.
- Changes in pricing policies by Besi's competitors.
- Changes in Besi's operating expenses.
- Besi's ability to adequately protect its intellectual property.
- Besi's ability to integrate any future acquisitions.
- The fluctuation of foreign currency exchange rates.

Because of these factors, investors should not rely on quarter-to-quarter comparisons of Besi's results of operations as an indication of future performance. In future periods, Besi's results of operations could differ from estimates of public market analysts and investors. Such discrepancies could cause the market price of its securities to decline.

Besi's backlog at any particular date may not be indicative of its future operating results.

Besi's backlog was € 76.3 million at December 31, 2016. Orders in Besi's backlog are subject to customer cancellation at any time upon payment of a negotiated cancellation fee. During market downturns, semiconductor manufacturers historically have cancelled or deferred additional equipment purchases. Besi's backlog may also be influenced by seasonal factors which typically cause backlog levels to decline in the second

half of the year from peak levels reached at the end of the second quarter. As a result of industry conditions and/or seasonal influences, Besi's backlog declined by approximately 21%, 14% and 26%, respectively, from highest to lowest quarterly level in 2014, 2015 and 2016. In addition, because of the possibility of changes in delivery schedules, expedited cycle times, order cancellations and delays in product shipments, Besi's backlog at any particular date may not be representative of actual revenue for any succeeding period. Besi's current and future dependence on a limited number of customers increases the revenue impact of each customer's delay or deferral activity.

**Besi may not be able to adjust its costs and overhead levels quickly enough to offset revenue declines that it may experience in the future.**

Besi's business is characterized by high fixed cost levels, including personnel, facility and general and administrative costs, as well as expenses related to the maintenance of its manufacturing equipment. Besi's expense levels in future periods will be based, in large part, on its expectations regarding future revenue sources and, as a result, its operating results for any given period in which material orders fail to occur, are delayed or deferred could vary significantly. Due to the nature of such fixed costs, Besi may not be able to reduce its fixed costs sufficiently or in a timely manner to offset any future revenue declines. Besi's inability to align revenue and expenses in a timely and sufficient manner will have an adverse impact on its gross margins and results of operations.

**A limited number of customers have accounted for a significant percentage of Besi's revenue, and its future revenue could decline if it cannot maintain or replace these customer relationships.**

Historically, a limited number of Besi's customers have accounted for a significant percentage of its revenue. In 2016, Besi's three largest customers accounted for approximately 19.8% of its revenue, with the largest customer accounting for approximately 8.1% of its revenue. Besi anticipates that its results of operations in any given period will continue to depend to a significant extent upon revenue from a relatively limited number of customers. In addition, Besi anticipates that the composition of such customers will continue to vary from year to year so that the achievement of its long-term goals will require the maintenance of relationships with Besi's existing customers and obtaining additional customers on an ongoing basis. Besi's failure to enter into and realize revenue from a sufficient number of customers during a particular period could have a significant adverse effect on Besi's revenue.

In addition, there are a limited number of customers worldwide interested in purchasing semiconductor manufacturing equipment. As a result, if only a few potential customers were to experience financial difficulties or file for bankruptcy protection, the semiconductor equipment manufacturing market as a whole, and Besi's revenue and results of operations specifically, could be negatively affected.

**Besi's results of operations have in the past and could in the future be affected by currency exchange rate fluctuations.**

The following tables set forth Besi's revenue and costs and expenses by principal functional currency for 2016, 2015 and 2014:

	Revenue		
	2016	2015	2014
Euro	25%	29%	34%
US dollar	74%	70%	65%
Malaysian ringgit	-	-	-
Swiss franc	-	-	-
Chinese renminbi	-	-	-
Singapore dollar	-	-	-
Other	1%	1%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

	Costs and Expenses		
	2016	2015*	2014
Euro	26%	30%	32%
US dollar	5%	5%	4%
Malaysian ringgit	30%	28%	37%
Swiss franc	21%	23%	18%
Chinese renminbi	11%	7%	5%
Singapore dollar	4%	4%	2%
Other	3%	3%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\* Excludes net restructuring benefit of € 3.3 million.

Besi's principal functional and reporting currency is the euro. In 2016, 2015 and 2014, Besi's revenue denominated in euro represented 25%, 29% and 34% of its total revenue, respectively, while its costs and expenses denominated in euro represented 26%, 30% and 32%, respectively, each year. A substantial majority of its revenue is denominated in US dollars while the majority of its costs and expenses is denominated in currencies such as the euro, Malaysian ringgit and Swiss franc. Costs in Singapore dollars and Chinese renminbi are also increasing in importance as Besi expands its operations in each location.

Due to its global operations and differences in the foreign currency composition of its revenue and costs and expenses, Besi's results of operations could be adversely affected by fluctuations in the values of, and the relationships between, the euro, the US dollar, Swiss franc, Malaysian ringgit, Singapore dollar and Chinese renminbi. The announcement by the Swiss National Bank in January 2015 to abandon its euro/Swiss franc peg caused a substantial and immediate increase in the value of the Swiss franc versus the euro. Such increase had an adverse effect on Besi's supply chain costs and operating expenses.

Besi seeks to manage its exposure to currency fluctuations in part by hedging firmly committed sales contracts denominated in US dollars. While management will continue to monitor its exposure to currency fluctuations and may use financial hedging instruments to minimize the effect of these fluctuations, Besi cannot assure that exchange rate fluctuations will not have a material adverse effect on its results of operations or financial condition.

Besi's principal competitors are domiciled in countries utilizing primarily US dollars and/or Japanese yen as their principal currencies for the conduct of their operations. Besi believes that a decrease in the value of the US dollar and US dollar linked currencies or Japanese yen in relation to the euro could lead to intensified price-based competition in its markets resulting in lower prices and margins and could have a negative impact on its business and results of operations.

**Weaknesses in its internal controls and procedures could result in material misstatements in Besi's financial statements and/or a deterioration of its financial condition.**

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal controls over financial reporting are processes designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS. A material weakness is a control deficiency, or combination of control deficiencies, that results in a more than remote likelihood that a material misstatement of annual or interim financial statements will not be prevented or detected. Besi's internal controls may not prevent all potential errors or fraud. Any control system, no matter how well designed and implemented, can only provide reasonable and not absolute assurance that the objectives of the control system will be achieved.

There were no indications that Besi's risk management and control systems did not function properly in 2016 or 2015. However, there can be no assurance that situations will not arise in the future that could compromise the integrity of Besi's internal controls and systems which could affect investor confidence in Besi and the price of its Ordinary Shares.

### **Governmental, legal and compliance risks**

**Recent regulations related to "conflict minerals" may force us to incur additional expenses, make our supply chain more complex and result in damage to Besi's customer reputation.**

Both US and European regulatory authorities have issued regulations for companies that use certain minerals and metals, known as conflict minerals, in their products, regardless of whether these products are manufactured by third parties. These regulations require companies to conduct due diligence and disclose whether or not such minerals originate from the Democratic Republic of

Congo and/or certain adjoining countries. The implementation of such regulations could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices and the assembly of such devices. In addition, since Besi's supply chain is complex, verification of the origins of these materials in its products through due diligence procedures that it implements may be difficult and costly and may not be possible at all, which may harm Besi's reputation. In such event, we may also face difficulties in satisfying customers who require that all of our product components are certified as "conflict-free."

**Besi is largely dependent upon its international operations.**

Besi has manufacturing and/or sales and service facilities and personnel in the Netherlands, Austria, Malaysia, Korea, Hong Kong, Singapore, China, the Philippines, Taiwan, Switzerland and the United States. Its products are marketed, sold and serviced worldwide. In addition, 88% of its sales in 2016 were to customers outside of Europe and 68% of its employees were located in facilities outside of Europe at year end 2016.

Besi's operations are subject to risks inherent in international business activities including, in particular:

- General economic, credit banking and political conditions in each country.
- The overlap of different tax structures and potentially conflicting interpretations of tax regulations.
- Management of an organization spread over various countries.
- Currency fluctuations which could result in increased operating expenses and reduced revenue and foreign currency controls.
- Greater difficulty in accounts receivable collection and longer collection periods.
- Difficulty in enforcing or adequately protecting Besi's intellectual property in foreign jurisdictions.
- Unexpected changes in regulatory requirements, compliance with a variety of foreign laws and regulations.
- Import and export licensing requirements, trade restrictions, restrictions on foreign investments and changes in tariff and freight rates.
- Political unrest and terrorist activities in the countries in which it operates.

Also each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period.

In addition, compliance with foreign laws and regulations that are applicable to our international operations is complex and may increase our cost of doing business in international jurisdictions, and our international operations could expose us to fines and penalties if we fail to comply with these regulations. These laws and regulations include anti-bribery laws and local laws prohibiting corrupt payments to governmental officials.

Although we have implemented policies and procedures designed to help ensure compliance with these laws, there can be no assurance that our employees, partners, and other persons with whom we do business will not take actions in violation of our policies or these laws. Any violations of these laws could subject us to civil or criminal penalties, including substantial fines or prohibitions on our ability to offer our products and services to one or more countries, and could also materially damage our reputation and our brand.

**Besi may not be able to protect its intellectual property rights which could make it less competitive and cause it to lose market share.**

Although Besi seeks to protect its intellectual property rights through patents, trademarks, copyrights, trade secrets, confidentiality and assignment of invention agreements and other measures, there can be no assurance that it will be able to protect its technology adequately, that Besi's competitors will not be able to develop similar technology independently, that any of Besi's pending patent applications will be issued or that intellectual property laws will protect Besi's intellectual property rights. In addition, Besi operates internationally and intellectual property protection varies among the jurisdictions in which it conducts business. Litigation may be necessary in order to enforce Besi's patents, copyrights or other intellectual property rights, to protect its trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Litigation could result in substantial costs and diversion of resources, distract Besi's management from operating the business and could have a material adverse effect on its business and operating results. Due to the competitive nature of its industry, it is unlikely that Besi could increase its prices to cover such costs.

In addition, third parties may seek to challenge, invalidate or circumvent any patent issued to Besi, the rights granted under any patent issued to Besi may not provide competitive advantages and third parties may assert that Besi's products infringe patent, copyright or trade secrets of such parties. Also third parties may challenge, invalidate or circumvent technology which Besi licenses from third parties. If any party is able to successfully claim that Besi's creation or use of proprietary technology infringes upon their intellectual property rights, Besi may be forced to pay damages. In addition to any damages Besi may have to pay, a court could require Besi to stop the infringing activity or obtain a license which may not be available on terms which are favorable to Besi or may not be available at all.

**Besi is subject to environmental rules and regulations in a variety of jurisdictions.**

Besi is subject to a variety of governmental regulations relating to the use, storage, discharge and disposal of chemical by-products of, and water used in, its manufacturing processes. Environmental claims or the failure to comply with any present or future regulations could result in the assessment of damages or imposition

of fines against Besi, suspension of production or a cessation of operations. New regulations could require Besi to acquire costly equipment or to incur other significant expenses. Any failure by Besi to control the use or adequately restrict the discharge of hazardous substances could subject it to future liabilities.

### Ordinary share related risks

**Anti-takeover provisions could delay or prevent a change of control including a takeover attempt that might result in a premium over the market price for Besi's Ordinary Shares.**

Besi's articles of association provide for the possible issuance of Preference Shares. In April 2000, Besi established the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") whose board consists of four members, three of whom are independent of Besi. Besi has granted the Foundation a call option pursuant to which the Foundation may purchase Preference Shares up to a maximum amount equal to the total number of outstanding Ordinary Shares. If the Foundation were to exercise the call option, it may result in delaying or preventing a takeover attempt including a takeover attempt that might result in a premium over the market price for Besi's Ordinary Shares.

**We may not declare dividends at all or in any particular amount in any given year.**

Besi aims to pay an annual dividend in accordance with its dividend policy that it hopes will grow over time. On an annual basis, the Board of Management (with Supervisory Board approval) will submit a proposal for approval at the AGM with respect to the amount of dividend to be declared for the prior fiscal year. The proposal in any given year will be subject to (i) Besi's review of its annual and prospective financial performance, liquidity and financing needs, the prevailing market outlook, its strategy, market position and acquisition strategy and/or (ii) a dividend payout ratio in the range of 40-80% relative to net income to be adjusted accordingly if the factors referred to under (i) so require.

Accordingly, the Board of Management may decide not to pay a dividend, or a lower dividend, with respect to any particular year in the future which could have a material adverse effect on the price of its Ordinary Shares.

# Corporate Responsibility



CORPORATE RESPONSIBILITY

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## Grosse Méta-Maxi-Maxi-Utopia (1987)

**Jean Tinguely**

Born: Fribourg, Switzerland, 1925

Died: Bern, Switzerland, 1991

The artist is a Swiss painter and sculptor, who is best known for his sculptural machines or kinetic art in the Dada tradition.

The work: iron parts, wooden wheels, aluminum steps, curtain, carousel horse, clay vase by Ursi Luginbühl, plastic flowers, garden gnome, electric motors.

Museum Tinguely, Basel, Donation Niki de Saint Phalle.

Photo © Museum Tinguely, Basel; photo: Christian Baur  
Artist copyrights for Jean Tinguely: © Pictoright Amsterdam 2017

# Corporate Responsibility

## 1. Vision and ambition

The world is experiencing several global challenges which affect our business in a strategic way. Besi monitors these challenges and assesses their impact on its strategy and business operations. As a responsible citizen, we address these challenges in an appropriate way and contribute solutions to our people, our stakeholders and to the locations and communities in which we operate.

Besi's business is the development and sale of semiconductor assembly equipment utilized in end use applications such as smart phones, tablets, high end sensors, intelligent automotive electronics, cloud computing, data mining, artificial intelligence and the Internet of Things ("IoT"). Our leading edge equipment forms a part of production processes and systems used in the digital revolution. In our vision, the digital revolution and digitization of society is only in its infancy phase although the digital world is already deeply incorporated in the world's daily life. We anticipate that the digital revolution will play an increasingly important role in our lives over the next decade.

Besi's objective is to be a meaningful partner in this digital supply chain adding value by facilitating the development of the digital economy and society as well as the advancement of information and communication technology ("ICT"). ICT can help stimulate the share-economy and reduce material consumption with accompanying environmental benefits. For example, the Global e-Sustainability Initiative ("GeSI") issued the GeSiSMARTer2030 report in which it estimates that ICT has the potential to generate by 2030 a 20% reduction of global CO<sub>2</sub> emissions from 2015 levels and decouple economic growth rates from emissions growth rates.

In the social domain, access to information can enhance education and individual freedom which holds the potential to create opportunities and improve living standards. It is our belief that the advent of the IoT for smart cities, smart manufacturing, smart mobility and self-driving, electric cars with artificial intelligence will lead to real breakthroughs in how society functions in a safer, more ecologically responsible manner. We seek to encourage such progressive societal developments in a way that enriches society as a whole. As such, Besi's corporate responsibility ("CR") policy is to balance ecological, social and economic interests and outcomes in promoting its business development to benefit all stakeholders, partners and communities in the locations and supply chains in which we operate.

We are also committed to running our operations in accordance with recognized international standards for all human aspects related to Besi's business, such as safeguarding safe and healthy working conditions and respecting human rights in the supply chain. In addition, we are committed to reducing the impact on the environment of our operational footprint.

## 1.1. Important societal trends related to our business

We believe that CR requires vigilance, obligation and active engagement. Our corporate responsibility is motivated by global trends which affect our business such as a growing and aging world population, the scarcity of critical raw materials, a growing concern about climate change and many challenges in the social domain such as poverty, child labor and human rights. Besi observes several societal developments and challenges which influence our CR strategy.

Some current global trends will influence our business direction and CR strategy in the years to come. A renewed focus on clean technology is one such topic for which semiconductors could play an important role. In November 2015, the issue of climate change became a more important agenda topic as a result of the COP21 Paris conference. World leaders agreed that:

- Average global temperatures should not rise more than 2 degrees.
- Emissions should be reduced such that maximum temperatures do not rise by more than 1.5 degrees by century end.
- A balance between global CO<sub>2</sub> emissions and the earth's absorption capacity should be reached by 2050.

The Intergovernmental Panel on Climate Change ("IPCC") calculated that a maximum global warming of 2 degrees means that CO<sub>2</sub> emissions must return back to 1990 levels by 2050. In 2018, the IPCC will present an overview for which reductions by members will be required to limit global warming to 1.5 degrees. As a responsible citizen, Besi agrees to use its best efforts to reduce its CO<sub>2</sub> emissions in accordance with such objectives.

In our view, global governmental and industrial initiatives will accelerate the so called low carbon economy for which semiconductors are important contributors. For example, the United Nations launched its Global Goals for Sustainable Development in September 2015, for which companies were asked to make contributions to address the pressing challenges outlined. In addition, research and new product development have proliferated in recent years in the healthcare and automotive sectors, for example, which will also favorably influence our business as they require more advanced semiconductors and assemblies for leading edge applications. The expanded use of semiconductors in the IoT - making our homes, offices, hospitals, factories, mobility and municipalities more intelligent - is also an area that will contribute to the more efficient utilization of energy, water and other natural resources in the global environment. Other new consumer product applications such as virtual reality, wearable devices and ever more intelligent smart phones and mobile devices also hold similar promise for ecological benefits.

Another trend potentially affecting Besi's business is the circular economy. As opposed to a linear economy in which we make, use and dispose of materials, a circular economy emphasizes (i) the usage of materials for as long as possible, (ii) the extraction of their maximum value while in use and (iii) the recovery and regeneration of products and materials at the end of each service life. Besi has already participated to a degree in this concept as it continually looks for opportunities to extend the useful lives of its materials, facilities and products from both a business and ecological perspective.

The rapid development of Asian economies in recent years and associated increase in semiconductor demand also is an important influence affecting our business and CR. Underlining this point, revenue from Asian customers represented 78.2% of Besi's revenue in 2016. Similarly, production and supply chains are moving to Asia to reduce expenses and transport costs which have the beneficial effect of supporting local economies. In recent years, Besi has significantly increased its production, engineering and supply chain capabilities in Malaysia, China and Singapore to increase its local customer presence and make its operations more efficient. As a more active Asian participant, Besi will also have more interaction with local communities and governments and may be confronted with issues of corruption and human rights violations which is a significant topic in the region.

The topic of conflict minerals has been growing as a corporate issue over the past few years. Several countries have been or are developing laws and regulations regarding the use of these materials which have increased attention on the semiconductor supply chain as well. Companies are expected to develop policies and mechanisms to eliminate conflict minerals in their supply chain. Besi has developed a Conflict Minerals Policy and develops products that do not contain conflict minerals.

## 1.2. Stakeholders

Stakeholder appreciation is at the core of our CR strategy. We strive to understand and exceed stakeholder expectations whenever possible. Engagement with stakeholders helps Besi identify the opportunities, issues and risks that affect its business and performance. We gather vital intelligence through internal and external audits, supplier audits and customer dialogue, management reviews and surveys.

**Shareholders** are engaged through quarterly and annual conference calls, presentations, roadshows, conferences and participation at its Annual General Meeting of Shareholders ("AGM"). Shareholders expect Besi to protect their investment and provide a competitive return on invested capital while operating responsibly as a corporate citizen. Our investor relations activities ensure that we remain in close contact with investors, invite them to attend meetings and encourage them to ask questions during our earnings calls and AGM. Investor interest in CR is growing as a consideration. Investors, particularly large European pension funds, are increasingly considering CR as part of their investment

process and requesting more CR information from us than in previous years particularly in the areas of conflict minerals and climate change as well as fossil fuel and CO<sub>2</sub> reduction strategies.

**Customer relationships** are vital to Besi's growth and its ability to improve its sustainability efforts. Providing superior customer support is central to our corporate philosophy. We aim to maintain close, strategic relationships with key customers as they provide valuable insight into semiconductor device roadmaps, assembly requirements and future market trends. Moreover, they provide partnership opportunities to develop new assembly systems and sustainability solutions for the market. We see an increasing number of customers paying attention to CR topics as evidenced by our 2016 interactions. Special topics include conflict minerals, labor conditions, human rights, environmental performance, innovation and compliance with the Electronic Industry Citizenship Coalition ("EICC") code of conduct.

**Employees** expect Besi to use high social and ethical standards and to provide inspiring and safe working conditions with competitive terms and conditions. A high level of employee satisfaction is a basic precondition to achieve our revenue and profit growth. The main topics addressed with employees in 2016 were talent management initiatives and the staffing and training of new personnel in Singapore and China.

**Suppliers** expect a long-term relationship that is mutually beneficial and based on trust. We engage with our suppliers through direct dialogue and constructive audits. Besi performs a third-party external audit annually for all significant production facilities with respect to its ISO 9001 and ISO 14001 capabilities. Social and ethical CR topics are put on the agenda as well. But most of all, we try to work together with suppliers to lower our joint environmental footprint and create sustainable products. In 2016, special attention was also paid to conflict minerals topics.

**Society** expects Besi to respect national and international laws and regulations, minimize negative outcomes and provide transparency on economic, environmental and social issues. Besi abides by appropriate social, ethical and environmental standards for its operations which typically exceed minimum legal and regulatory compliance levels.

**Local governments** expect compliance with local laws, regulations and care for the health, safety and security of their communities. In Asian countries such as China, CR topics such as clean technologies are being given higher priority particularly in light of serious environmental issues in local communities. In all its operations, Besi uses European social and ethical standards and participates in dialogue with local chambers of commerce wherever possible.

Besi relies on healthy and stable **local communities** in the regions where it operates. We aim to have a positive impact on communities through good corporate and employee conduct and invest in several community projects, particularly in Asia. Besi senior managers review concerns raised by local communities and try to communicate issues and best practices to all stakeholders.

We listen to the concerns of our stakeholders and try to be as responsive as possible in the context of our business conduct. To date, we believe that information on our website and annual report has been responsive to stakeholder concerns. In 2015, Besi developed a Conflict Minerals Policy and made information available on the website to satisfy stakeholder requests. In 2016, Besi updated its Whistleblower procedure to meet market best practices. Besi continually seeks to identify CR and performance related topics of interest to its various stakeholders to define new CR goals and activities for the coming years in a pragmatic step by step manner.

### 1.3. CR materiality assessment and key themes

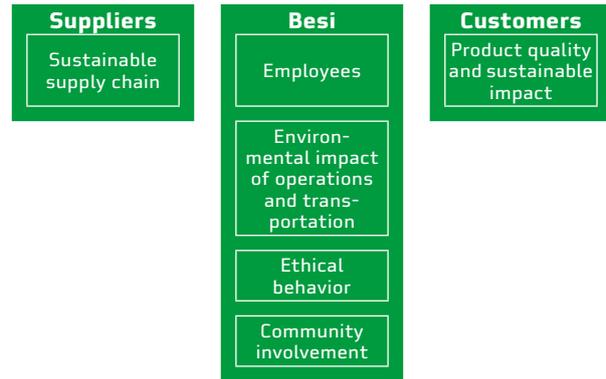
Besi regularly evaluates CR topics deemed important to the conduct of its operations. We reassess periodically CR priorities and our societal impact, taking into account stakeholders' expectations. In our evaluation, we utilize GRI G4, the international guideline for sustainability reporting, which provides an overview of potential CR related themes of a material nature. Initially, a list of relevant topics was created for which high and medium assessment priorities were defined based on relative significance to Besi and its most important stakeholders. We have broadened the scope of the assessment in recent years by asking 20 senior Besi managers to participate and rate the topics against two axes:

- Significance of the theme for Besi
- Significance of the theme for stakeholders

The survey resulted in a number of slight adjustments to the ranking of high and medium assessment priorities and allowed us to further refine Besi's CR strategy and strategic CR themes. In 2016, we made no adjustment to the outcomes of the 2015 assessment as we observed no material change nor feedback from key stakeholders. We will again revisit this topic in 2017 in close cooperation with senior management and external stakeholders.

As a result of its materiality assessment, Besi's CR strategy focuses on a limited number of specific themes applicable to our business for which we gradually develop programs appropriate to Besi's size, nature and culture. Each theme is addressed and monitored by a number of key performance indicators ("KPIs") to highlight any requisite actions. Our key themes are represented in the following chart.

## OVERVIEW OF STRATEGIC CR THEMES



### 1.3.1. Sustainable supply chain

We feel a shared responsibility for sustainability issues not only in our operations but also in our upstream supply chain including the sourcing of virgin materials and semi-finished products. We discuss and audit our suppliers on a number of sustainability issues such as conflict free minerals, human rights and child labor conditions as well as environmental issues. By dialogue and auditing, we hope to enhance sustainability throughout the entire supply chain.

### 1.3.2. Employees

We can only assure our profitability, sustainability and long-term growth if our employees are engaged and motivated. Besi strives to be a good employer by engaging, supporting and developing its people and treating their safety and well-being as a paramount concern. The issue of human well-being deserves considerable attention especially given our increased presence in Asian countries. By applying European labor norms to our Asian operations, we hope to improve workers' human rights, provide better working conditions and enhance living standards through attractive remuneration.

### 1.3.3. Environmental impact of operations and transportation

Besi recognizes the environmental impact of its operations and aims to significantly and systematically decrease its environmental footprint through both reduced CO<sub>2</sub> emissions and costs. Our internal energy program encourages and helps employees make positive changes in work place energy consumption. We also focus on water usage and efficiency and a reduction of the total waste generated from our operations. Besi places particular emphasis on transportation and packaging activities where we have identified significant potential for reductions of CO<sub>2</sub> emissions, waste and cost.



*Besi Austria celebrating Datacon 30 years.*

#### 1.3.4. Ethical behavior

Besi operates with proper ethical standards and in compliance with all relevant laws and regulations in the jurisdictions in which it operates. Because of growing semiconductor demand, Besi has shifted its production and supply chain network to Asia to increase efficiency, improve its local customer presence and to support local economies. As a more active Asian participant, Besi will also have more interaction with local communities and governments and may be confronted with issues of compliance and corruption. We aim to minimize these risks in our operations.

#### 1.3.5. Community involvement

We contribute to the well-being of those living in the environments in which we operate and consider it an important aspect of our CR strategy. For each of our operations, we develop tailor made activities addressing the needs and customs of the local society.

#### 1.3.6. Product quality and sustainable impact

We contribute to a more efficient and cleaner industry through our products, particularly low carbon products and services. Besi continually seeks potential opportunities to develop new ways to assemble semiconductors and components used in advanced electronic applications such as smart mobile internet devices, logistical systems, cloud servers, intelligent automotive electronics, the IoT, advanced medical equipment, wearables, artificial intelligence, solar and renewable energy, high end rechargeable batteries and LED devices. We invest in the development of low carbon products and services to help our customers operate more efficiently and in a more environmentally friendly and cost saving manner, for instance by introducing products with fewer and lighter materials.

Besi works closely together with its suppliers to reduce the customer's total cost of ownership by means of higher accuracy, greater throughput, smaller footprint, lower energy consumption and lead-free board usage, all of which should favorably influence a customer's usage of environmental resources.

#### 1.4. Organizational governance

Accountable to the Supervisory Board and to shareholders, Besi's Board of Management is responsible for achieving its strategy and CR objectives. Our CR management approach is fully aligned with Besi's hierarchical structure. Line managers are responsible for CR issues in their respective departments. Besi has assigned independent staff officers in the fields of human resources, environment, quality and integrity at all locations to support line managers. In addition, we have implemented externally certified ISO 9001 and ISO 14001 management systems in order to manage quality and environmental issues in our production operations. Health and safety have been included in our ISO 14001 management system. Besi APac in Malaysia has its own Health & Safety Committee as required by law.

Progress and developments in the field of CR are discussed between the Board of Management and the Supervisory Board regularly and are reported in the Annual Report on an annual basis. We intend to introduce an internal CR monitoring and review system with data presented twice a year in order to better monitor progress. This initiative has not yet been implemented given operational restructuring and strategic planning activities which have required a substantial amount of senior management time and attention. However, a third party CR consultant was hired in Q4-16 to assist in the development of such analyses and systems and is scheduled to complete its assignment by the end of 2017.

Our Remuneration Policy (see Corporate Governance section) describes our compensation system. Several non-financial goals are included in the determination of variable remuneration payable to management.

## 2. 2016 activities and results

### 2.1. Quality and sustainable impact of products

#### 2.1.1. Customer satisfaction

The semiconductor industry is a fast paced, ever changing business which can be seasonal and highly volatile in nature. Customer requirements and expectations are becoming more demanding in terms of accuracy, size, cycle time, cost, throughput and quality. Besi has a very experienced sales and service team that works closely with customers to understand their needs and fulfill their requirements. Customer satisfaction is an important measure to determine if customer needs are being fulfilled along with areas for improvement.

We receive ongoing feedback about our products and services through Besi's sales and service departments. Many of our customers regularly perform supplier performance evaluations in which we are asked to perform self-assessments and be audited. Increasingly, these evaluations include CR aspects, such as human rights, labor practices, conflict minerals and the environment. We are pleased to participate in such evaluations.

Once a year, we perform our own customer satisfaction survey through which we measure our performance with customers on service and support, technological issues and quality and product management. The survey results form part of the management review per product group. The 2016 survey included 101 respondents, the highest figure ever. Overall customer satisfaction in 2016 "exceeded customer expectations" with particular strength in Project Management and Commercial and Administration aspects this year. In general, Besi has experienced improving customer satisfaction survey results since 2013.

Perhaps the best indicator of customer satisfaction is the amount, breadth and diversity of customer orders as only a satisfied customer will generate increasing, repetitive order volume. In addition to the clearest indicator of satisfaction represented by increased revenue and unit production in 2016 versus 2015, we also gained share of wallet at some customers and increased the breadth of product revenue through new products, customers and end user market opportunities. Another external objective indicator of product quality is warranty cost, which remains at historically low levels as a percentage of revenue. Lower after sales warranty cost implies improved product quality and fewer service calls.

Besi's target for 2017 is to realize "exceeding customer expectations" for all categories.

#### 2.1.2. Sustainability impact of products

Besi contributes to a more efficient and cleaner industry through its low carbon products and services. We continually seek opportunities to develop new ways to assemble semiconductors and components used in advanced electronic applications such as mobile internet devices, logistical systems, cloud servers, intelligent

automotive electronics, electric and hybrid electric cars, the IoT, wearable devices, artificial intelligence, advanced medical equipment, solar and renewable energy, high end rechargeable batteries and LED devices.

Besi invests in the development of environmentally friendly products and services to help its customers operate more efficiently and in a more environmentally friendly manner. We have introduced in recent years new systems with significantly higher accuracy and throughput with fewer, lighter and non hazardous materials and improved energy efficiency. Such efforts have served to reduce the customer's total cost of system ownership. In 2016, we began an investigation into the replacement of lead used in our systems with a more environmentally friendly option. In addition, Besi reviewed and revised its R&D requirements and criteria in 2016. Increased emphasis was given to (i) energy efficiency, (ii) the recycling potential of applied materials utilized in our operations, (iii) increasing the recycled content of our products, (iv) minimizing the usage of hazardous components in our systems and (v) an explicit exclusion in the usage of conflict materials in the design process. For 2017, Besi will examine its usage of scarce materials (such as virgin versus recycled content) by monitoring its material streams in terms of volume and character.

Besi's products also co-exist well with the new emphasis on the circular economy. Our systems typically have a long life span of approximately 10 to 15 years, can be re-used and repurposed by customers depending on end use applications and can be upgraded via the purchase of kits, additional parts and/or software without a new system purchase. The use of upgrade kits can add more value to the customer in certain lower technology applications by extending system life versus a new purchase as it reduces cost, materials usage and delivery time. At present, Besi's evo 2200 multi module die attach series and its 8800 flip chip die bonding series have commercially available upgrade kits. Management is evaluating the potential of introducing system upgrade kits for other product series as well.

#### 2.1.3. Product safety

Besi responsibly designs its products so that customers can use them safely at high levels of performance. We have hired an external agency that performs audits of newly developed products according to local and international regulations and standards. In addition, customers can specify additional features to further enhance product safety and usage for which audits can be performed. In 2016, Besi did not receive any customer complaints concerning product safety.

## 2.2. Employees

### 2.2.1. HR organizational hierarchy

HR managers are responsible for a region and/or product group and oversee local HR officers per country. The regional HR managers report to product group or global operations SVPs, who further report to the CEO. Twice a year, all HR managers meet to discuss corporate HR procedures and timelines.

Besi is registered with the EICC. We apply EICC policies to our supply chain as well as our own organization including labor and human rights conditions, discrimination and safety and health management. We observe EICC policies and will include compliance therewith in our employment policy.

### 2.2.2. Diversity

Besi values and encourages cultural, age and gender diversity in its workforce and management. We try to create an all-inclusive workplace to help broaden our perspective and contribute to growth. Equal opportunities are provided to all employees and applicants which is embodied in our Code of Conduct. Besi aims to increase the number of young employees and female employees in its operations, but, despite all efforts, this process has gone slowly. Diversity was encouraged in 2016 through targeted hiring programs at both Besi's Singapore and Malaysia facilities. In general, the available pool of female engineers in the communities in which we operate is still relatively low, particularly in Europe.

Indicator	2014	2015	2016
<b>Female employees</b>			
Malaysia	25%	22%	24%
China	10%	11%	12%
Singapore	36%	33%	33%
Switzerland	13%	13%	14%
Austria	11%	11%	10%
Netherlands	9%	10%	9%
Other	6%	6%	6%
<b>Total</b>	<b>16%</b>	<b>16%</b>	<b>16%</b>
<b>Female employees in management positions</b>			
Malaysia	6%	18%	21%
China	28%	22%	16%
Singapore	38%	43%	29%
Switzerland	13%	11%	12%
Austria	3%	4%	8%
Netherlands	8%	8%	10%
Other	0%	0%	0%
<b>Total</b>	<b>11%</b>	<b>14%</b>	<b>14%</b>

### 2.2.3. Harmonizing HR policies

Besi's HR policies can vary per region because of the different work performed per facility, local circumstances, customs and government regulations. Besi's largest product group is Die Attach which is headquartered in Cham, Switzerland. The principal focus of the Die Attach group has been to harmonize its HR policies and accompanying systems and procedures under the direction of the HR manager. Previously, Die Attach sites in Switzerland, Austria, Singapore, China and the US all had their own HR policies. The harmonization process is ongoing. Besi's Packaging and Plating groups are based in the Netherlands whose HR departments were integrated in 2014.

### Training and development

Besi performs semi-annual and annual employee reviews and has a performance management system with KPIs for all employees. Individual training needs are identified and a program formulated based on functional requirements and competency profiles. These are communicated in annual reviews. Training is organized and provided both at the department level and by the HR department.

Besi provides a variety of education and training programs to its employees. Many training programs are offered to employees through sessions at recognized training facilities. We also encourage technical knowledge exchanges amongst our employees and the development of cross functional skills by organizing training and short or long-term overseas exchange projects. Besi APac offers employees an online training application program under which they can browse training programs offered and propose to managers any listed training that is deemed beneficial. In addition, local and international students have the opportunity to work at Besi as an intern.

In 2016, Besi implemented a talent management and succession planning program for key employees in all Besi locations worldwide whose purpose is a systematic identification, development and retention of talent. The objective is to build a talent pool of eligible candidates for successful short, mid and long-term succession planning. Particular attention will be paid to the development of talented personnel for whom a career path and personal development plan will be created. In 2016, Besi senior management hosted a Meet the Talent program, an informal event where key personnel of Besi APac could meet and interact casually with Besi's CEO and Supervisory Board members. The event was well received and is planned again for 2017.

Besi APac, the Company's largest employer, introduced in 2016 an internal mobility metric as one of its key performance indicators to highlight its commitment to internal talent development. The unit seeks to promote the movement of highly performing employees by providing opportunities internally for promotion either to fill vacancies within their group, to change groups or perform different functions. As a result, approximately 30% of all job openings at Besi APac in 2016 were filled internally. In addition, 37 employees from Besi APac were placed to fill openings available at Besi Singapore and Besi China, all of which served to significantly reduce aggregate recruiting and training costs.

The next chart presents some important metrics related to Besi's headcount development between 2014 and 2016. The table shows a reduction in aggregate employee turnover in 2016 as well as a reduction in new hires in 2016 due to internal job placement for many open positions.

Indicator	2014	2015	2016
Total headcount fixed	1,510	1,499	1,585
Employee turnover	11%	12%	9%
New employee hires	20%	12%	13%

#### 2.2.4. Employee satisfaction

Engaged and satisfied employees are critical to the success of our Company. As such, Besi monitors employee satisfaction across regional operations through periodic employee surveys.

In the Netherlands, the Works Council conducted a survey in 2015 on employee reactions to Besi's business strategy including the development of European centers of excellence and Besi's Asian production transfer. The survey was finalized in 2016 with results and actions discussed thereafter.

At Besi APac, employee surveys are conducted typically on a bi-annual basis. The main concerns expressed in prior surveys were performance management, compensation, benefits, communication and collaboration. As a result, a focus group was set up to discuss how these topics could be improved. Management also organized a dialogue with employees on compensation and benefits to be more transparent in the context of current policies. The focus group established action plans that include coaching sessions via one-on-one employee/supervisor meetings, dialogue on communication and performance management and other engagement activities. Based on feedback, some benefit changes were made and lower turnover rates were observed, particularly in comparison to market turnover rates. The next survey is scheduled for 2017.

At the Die Attach product group, an evaluation of employee satisfaction is included in the yearly performance appraisal. Results are analyzed and discussed with the Works Council and local management. When required, appropriate measures are taken to improve issues addressed by employees. Prior surveys indicated that internal communication could be improved and, as a result, a monthly information session for employees with the SVP was introduced. In addition, the frequency of meetings between the Works Council and the SVP was increased from quarterly to monthly. In Singapore, Korea and Taiwan, an employee dialogue and survey is done annually. The HR department discusses concerns raised in the surveys with line managers and develops a responsive action plan. Each year, the HR department follows up on the action plans to ensure that all issues are being addressed and staff feedback is given. Based on the most recent survey, 95% of employees in Singapore, Korea and Taiwan are satisfied with employee conditions. 99% of them feel motivated to work for Besi and 98% feel that their employment position meets their expectations.

In 2016, the Board of Management requested that the regional HR managers develop a global employee engagement survey to replace the current surveys conducted at the country levels in order to better harmonize employee assessments and management's response thereto.

#### 2.2.5. Health, safety and well-being

Besi treats its employees' safety and health with the utmost importance. All of Besi's production sites have environment, health and safety ("EHS") officers and committees and a health and safety management system. These committees have representatives from each department and are responsible for inspection, enforcement and promotion of health and safety within the workplace. EHS Committee inspections are conducted quarterly to identify and address any unsafe acts and conditions that exist. Employees regularly receive EHS training.

Besi regularly monitors industrial and traffic accident cases. In 2016, we had a limited number of incidents, one of which was a non work place related fatality. When incidents happen, causes are analyzed and measures are taken to prevent repetition.

Besi also tracks sick leave rates to monitor employees' health status. During particularly busy periods, Besi pays extra attention to the well-being of its employees and tries to recognize their commitment to the Company. In 2016, we implemented some measures to help improve international employee travel. We registered at International SOS, which provides medical, clinical, and security advice and assistance to organizations with international travelers and set up a vaccination program for employees.

Indicator	2014	2015	2016
<b>Sickness Rate</b>			
Total	1.7%	1.8%	1.6%
Asia	0.2%	1.1%	1.0%
Europe	2.4%	2.7%	2.4%

In Malaysia and China, medical insurance is provided to employees although there is no formal requirement by law. In Malaysia, benefits for employees with critical illnesses are not defined by law. In contrast, Besi provides critical illness benefits to Malaysian employees in which full salary is provided for a period ranging from two to six months. Subsequently, employees receive half salary payments for a period of time based on their years of company service. We also implemented a health check-up program for our Dutch employees in 2016.

### 2.2.6. Communication and dialogue

Besi considers open and constructive labor relations as a key ingredient for success. We encourage an atmosphere of open dialogue between managers and employees and apply several ways to safeguard such a dialogue. During performance appraisal conversations, we encourage employees to raise their concerns and interests to their managers and vice versa. Employee interests are communicated in a more institutional way via Works Council representation. In Europe, we hold meetings with Joint Works Councils twice a year to listen to the views of employees and communities.

A large and growing share of Besi's operations is now located in Malaysia, China and Singapore. At present, there are neither labor unions nor Works Councils in those jurisdictions. However, each quarter a 'town hall meeting' is held to inform employees of corporate developments. Some have a general character and others address a special theme such as safety. In addition, Besi APac employees are represented by a member of the Company's Health & Safety Committee. This committee monitors workplace conditions and informs employees of measures taken to ensure their health and safety. In Singapore, China, Taiwan and Korea, quarterly employee sessions are organized where the SVP shares information about Besi's progress.

In 2016, Besi hosted two company-wide events. The first celebrated the 60th anniversary of Fico, the predecessor to Besi's Packaging group and the second, to celebrate the 30th anniversary of Datacon, the predecessor company to Besi Austria and an important unit in Besi's Die Attach group. The history and accomplishments of each unit were communicated to all employees and was another means of promoting team building in the context of the One Besi program.

### 2.3. Sustainable supply chain

Besi adheres to high ethical standards and expects the same from its suppliers. Our Supplier Code of Conduct outlines the standards we expect our suppliers to meet in areas such as human rights, product quality, health and safety and the environment. All of our suppliers need to sign our Supplier Code of Conduct. We also ask these organizations to have their own suppliers understand and promote the Besi Supply Chain Policy.

Besi has registered with the Electronic Industry Citizenship Coalition, a leading industry collective established in 2004, to develop its sustainable supply chain network. Amongst other activities, the EICC provides tools such as audit schemes and collective initiatives for improvements to sustainable supply chain networks. In addition, the EICC requires participating members to follow specified social and environmental guidelines, labor and ethics management practices and health and safety management procedures. As of 2016, our Supply Chain Policy and Suppliers Code of Conduct were fully in accordance with EICC requirements.

All Besi's suppliers are required to meet EICC standards although certain suppliers do not sign the Besi Supplier Code of Conduct as they adhere to their own codes of conduct covering the same issues and principles.

#### 2.3.1. Defining risk suppliers and self-assessments

In 2016, Besi performed the EICC supply chain risk assessment to identify high, medium and low risk suppliers in accordance with EICC methodology and definitions. Subsequently, we asked our 41 high and medium risk suppliers (approximately 80% of our purchasing volume) to update the EICC self-assessment of which 10% complied fully in 2016. Our target is full compliance by 2021.

In 2015, we also performed this self-assessment for Besi itself. Besi scored 80.3% on the total evaluation score. Management did not perform a self-assessment in 2016 as its supply chain approach was considered consistently applied in both 2015 and 2016. In recent years, Besi has organized several information and training sessions to inform suppliers of its supply chain policy and the importance of compliance. Two such meetings with major suppliers were organized in 2016.

#### 2.3.2. Supplier audits

We regularly perform audits of our suppliers. All of Besi's key suppliers were audited in 2016, representing 85% of our total purchases. Potential new suppliers are also evaluated by an on-site audit against set criteria. If the audit results meet such requirements, a new supplier is registered. Otherwise, a new supplier must be selected.

For existing suppliers, two types of audits are currently being performed, initial audits and operational audits. In the initial audit, the supplier is given a score on several topics to assess their competency in the corresponding area. The EICC self-assessment results are part of the audit scorecard. Any findings will be communicated back to the supplier including proposed follow up actions and deadlines for improvement. After the initial audit is completed, the scorecard is reviewed every quarter.

The table below shows our progress in applying and implementing the EICC Code of Conduct (“CoC”) with suppliers.

KPI EICC Code of Conduct	Target 2016 (number)	Current status 2016 (number)	Target 2016 (%)	Target achievement 2016 (%)	Target 2017 (number)	Target 2017 (%)
Suppliers informed of EICC CoC	41	41	100%	100%	41	100%
Supplier feedback collected and condensed	41	30	100%	73%	41	100%
Supplier signature GWA* EICC CoC Agreement	28	8	68%	29%	28	68%
Supplier self-assessment questionnaire updated	22	4	54%	18%	22	54%
Supplier Performance Scorecard with EICC CoC criteria established	30	30	100%	100%	30	100%
Supplier corrective actions initiated	30	0	73%	0%	30	73%
Supplier EICC CoC status report delivered	30	17	73%	57%	30	73%
Supplier policy checked and rated	22	5	54%	23%	22	54%

\*General Work Agreement.

The KPI measurements indicate that there is still work to be done to organize full supplier compliance with EICC standards, despite all our efforts over the past two years. Not all suppliers have fully participated given the time, cost and administrative effort for full compliance. In addition, Besi moved its supply chain from Europe to Asia over the past three years and scaled Chinese die bonding production capabilities and associated vendor identification and qualification processes. These initiatives have resulted in significant changes to Besi’s vendor profile and diverted management time and resources from securing full compliance. Management intends to improve its performance metrics over the next two years.

### 2.3.3 Conflict minerals

The issue of so-called conflict minerals utilization is an important supply chain topic currently, particularly in Europe and the United States. In late 2016, the EU announced their intention to ban conflict minerals by 2021.

Profits from conflict minerals found in the Democratic Republic of Congo (“DRC”) have supported armed conflict, human rights violations and labor and environmental abuses in the region for years. Besi is dedicated to the elimination of conflict minerals in its supply chain. The term “conflict mineral” includes coltan (from which tantalum is derived), cassiterite (tin), gold, wolframite (tungsten), or collectively “3TG”. These minerals are commonly used in the electronics industry. The supply chain of conflict minerals is highly complex, consisting of many tiers formed by traders and producers before the smelter is reached, and even more tiers that lead to the actual mine. Besi buys its feedstock from parts manufacturers and is therefore positioned several tiers away from the smelter. Besi has assessed that it is not adding any conflict minerals itself to its customers’ products.

Besi supports the use of conflict free minerals from the DRC and its neighboring countries so that responsible mining in the area is encouraged. We developed a Conflict Minerals Policy in 2015 which forms an integral part of Besi’s Supply Chain Policy and is available on our website. Our Conflict Minerals Policy requires suppliers to:

- Make a commitment to eliminate conflict minerals from the DRC or one of its neighboring countries in its supply chain.
- Identify and disclose all smelters or refiners of tantalum, tin, tungsten or gold.
- Utilize smelters validated by an independent private sector audit firm.

Compliance by suppliers with Besi’s Conflict Minerals Policy can be fulfilled by officially signing a Conflict Minerals Review Template (“CFRT”) declaration, the EICC Code of Conduct and the Conflict Mineral Due Diligence Agreement. As such, Besi is fully aligned with the Conflict Free Sourcing Initiative (“CFSI”), as empowered by EICC and GeSi. Upon contract or GWA renewal, Besi requires its suppliers to sign this CFRT declaration. In addition, Besi requires that all suppliers in between itself and the smelter must adopt its policy and take the same measures for compliance.

In our 2015 due diligence, we selected the most important suppliers for which conflict minerals could be a risk. In 2016, we conducted a conflict mineral due diligence process whose objective was to identify smelters for 3TG minerals. The table below tracks Besi's progress during 2016 applying and implementing its conflict mineral ("CM") free policy in its supply chain as well as targets for 2017.

<b>KPI conflict mineral free policy</b>	<b>Target 2016 (number)</b>	<b>Current status 2016 (number)</b>	<b>Current status (%)</b>	<b>Target 2017 (number)</b>	<b>Target 2017 (%)</b>
Suppliers informed of new policy	56	56	100%	56	100%
Supplier feedback collected and condensed	56	40	71%		
Supplier policy checked and rated	56	6	11%		
Supplier policy signed GWA/CM agreement	56	8	14%	40	71%
Supplier risk assessment updated and corrective action proposed	56	0	0%	30	54%
Suppliers reminded to sign CFRT declaration	56	40	71%		
Suppliers signed CFRT declaration	56	20	36%	30	54%

It is difficult to predict how much time it will take to eliminate conflict minerals from Besi's supply chain. Even though Besi's product specifications to suppliers specifically prohibit the usage of conflict materials, it is difficult to assess definitively whether 3TG materials have been actually used during the smelting, component or subassembly process before arrival at Besi due to the variety of potential unspecified or upstream processes utilized by a variety of supply chain participants. Despite such obstacles, Besi will actively seek the elimination of CM from its supply chain and seek dialogue with its peers to help reach this goal.

#### 2.3.4. Local sourcing

The substantial majority of Besi's supply chain has been moved to Asia consistent with its Asian production transfer and the geographic revenue mix of its customers. In addition, our objective is to (i) be closer to our customers to increase potential revenue opportunities and direct shipments and (ii) reduce transportation costs and the environmental impact from the extra transportation and packaging steps involved in shipping systems back and forth from Europe to Asia prior to final customer delivery. Wherever possible, Besi intends to source as many materials, components and subassemblies as possible in the country where its production facilities are located. Local sourcing both stimulates local economies and reduces transportation costs and the environmental impact on our upstream supply chain. In 2016, we sourced approximately 70% of the material needs of our Asian operations from Asian vendors. We anticipate that the local sourcing percentage will increase significantly in the years to come.

#### 2.4. Environmental impact of operations and transportation

Besi attempts to limit its impact on the environment at all subsidiaries and facilities from initial marketing and sales through product development, purchasing, assembly, final delivery and after sales customer service. All operations have a certified ISO 14001 management system in place ensuring a high level of quality and safety in the production process. In 2016, Besi commenced the renewal process for its ISO 14001 certification in compliance with current standards. Besi has already realized 100% conformance with ISO 14001:2015 contractor management requirements in 2016 and expects to complete the process in 2017.

##### 2.4.1. Climate change and energy

Besi wants to combat climate change wherever possible in its operations by reducing its energy usage and CO<sub>2</sub> footprint. Besi's energy consumption can be detailed as follows: (i) energy required for facilities (light, air conditioning, PCs etc.) and (ii) energy for production processes (machines, engines, motors etc.). The majority of our energy consumption is represented by air conditioning for facilities, storage and offices. Sophisticated climate control is essential to protect against corrosion and damage to our systems, particularly in Asian locations that have a high degree of heat and humidity during much of the year. We implemented in 2013 the Besi Energy Saving Program to increase our energy savings and CO<sub>2</sub> emissions. The program helps employees make small changes to workplace energy consumption that can make a big difference ultimately. In 2016, the program focused primarily on the replacement of traditional fluorescent lighting with LED lighting.

Besi APac, Besi's principal manufacturing operations, realized savings in 2015 and 2016 primarily by replacing fluorescent tubes with energy efficient LED tubes. Due to the success at Besi APac, we extended the program to Besi Leshan which resulted in significant savings in lighting costs from the replacement of virtually all fluorescent tubes. European energy costs reduced in 2016 primarily due to a reduction in production capacity and office space. In 2017, Besi will perform an energy audit at Besi APac to investigate additional potential energy savings pursuant to a grant from the Malaysian government.

We are also exploring other avenues to lessen energy usage and combat climate change throughout the organization. One such area is the usage of renewable energy. To date, we have had limited success in this area as a result of factors which are out of our control in the Asian jurisdictions in which our production is predominantly located. For example, there is no renewable energy available on the market in Malaysia as it is a local fossil fuel driven economy. In addition, it is impossible to put solar panels on the roof of our Malaysian facilities. In China, Besi's facilities are not suitable to generate renewable energy currently. However, we will explore in 2017 the possibility of purchasing green energy in the country to help reduce our CO<sub>2</sub> footprint.

The table below details our energy consumption both in absolute and relative terms:

Indicator	Unit	2014	2015	2016
Electricity	GWh	13.2	13.9	9.2
Other energy use	GWh	1.8	2.5	2.5
Total energy use	GWh	15.0	16.4	11.7
Relative energy use	GWh/revenue (in euro millions)	0.040	0.047	0.031

*Besi APac: Production 2200 evo.*



#### 2.4.2. Packaging and waste

Besi wants to reduce the generation of material waste in its operations and has encouraged a high degree of waste conservation among its employees. In all facilities, waste separation systems are in place and the recycling, re-use and reduce ("3R") concept is communicated to employees.

Additional company-wide efforts to reduce waste are mainly focused on the packaging process. Besi carefully packages all parts and equipment for transport in order to ensure their quality and performance and uses materials such as plastic, wood and cardboard to ensure their proper protection. To minimize waste, packaging quality has been improved to better protect products during transport and existing packaging is re-used multiple times. In general, inbound packaging is either returned to the supplier or re-used for product shipment to customers (outbound packaging). In some cases, if a supplier is located close to our operations, inbound packaging can be eliminated completely.

In 2016, Besi introduced some new initiatives to reduce packaging waste in its operations. Besi introduced circular packaging in Malaysia for almost all modules and subassemblies to reduce the amount of packaging materials utilized as well as the structural re-use of packaging for the evo 2200 (one of Besi's most significant

product lines). This latter action reduced the number of system packages by 300. In addition, we introduced a double-use packaging system in close cooperation with our suppliers. In such a system, a supplier delivers a system and, upon final assembly by Besi, the original packaging is re-used for shipment to the customer. Besi APac also eliminated the usage of all polystyrene packaging materials from its dining and recreational facilities. As a result of our efforts, we achieved a reduction of packaging material usage by suppliers (inbound packaging) of approximately 50% in 2016 as compared to 2012.

Indicator	Unit	2014	2015	2016
Hazardous waste	Ton	15	21	10
Non-hazardous waste	Ton	204	134	152
Total waste ton	Ton	219	155	162
Relative waste	kg/revenue*	579	443	432

\* In euro millions.

For 2017, we have organized additional initiatives to reduce relative waste in our operations including (i) an assessment of how extensively recycled materials can be used in the organization, (ii) increased usage of sea container shipments for goods above 100kg (150kg currently) and (iii) a 5% increase in the usage of re-usable packaging from current levels.

#### 2.4.3. Transportation activities

The transportation of Besi's equipment, spare parts and assemblies has been a particular focus in terms of requisite speed, reliability, cost and environmental impact necessary for the proper conduct of our operations. We have implemented a number of measures to increase direct shipments and improve delivery times to our predominantly Asian installed base of customers and to reduce transportation costs and their environmental impact. First, Besi is procuring more on a local level, because sourcing products, materials and components locally decreases aggregate transport cost as well as its associated environmental impact and results in shorter lead times for delivery to customers. Second, the transportation of heavy parts (>100 kg) is now carried out by boat instead of by plane. Finally, we are encouraging suppliers to follow our transportation and logistics methods to both reduce related costs and minimize any adverse environmental impact. As a result, we were able to reduce freight costs by 95% between 2012 and 2016.

#### 2.4.4. Water usage

Water usage is also an important component of our production processes. Considerable effort is put into the prevention of leaks and spills of contaminated water at all production sites. We are proud that there have been no material leakages or spills at Besi facilities for at least the past five years. At present, Besi's Chinese facility is the only one which uses water as part of its production process. In 2015, we bought several new machines with better water management, recycling and filtering

capabilities. In 2016, Besi installed new water filtration systems at its Leshan facility which enabled us to reduce water consumption in our operations via increased recycling.

Neither of Besi's principal Asian production facilities operates in locations with serious water issues such as scarcity or flooding. In addition, in each facility worldwide, the effluent of water utilized is discharged into the municipal water sewage system. Besi is also in compliance with all local requirements regulating concentrations of contamination substances.

Indicator	Unit	2014	2015	2016
Water usage	m <sup>3</sup>	30,020	28,820	18,283
Water usage efficiency	m <sup>3</sup> /revenue*	79	83	49

\* In euro millions.

As per the table above, there was a significant reduction in Besi's water usage and efficiency between 2014 and 2016.

## 2.5. Ethical behaviour

### 2.5.1. Anti-corruption

The importance of appropriate anti-corruption policies and measures has increased with Besi's expansion of its Asian operations and supply chain activities. In 2015, we appointed a Director of Internal Control for both Europe and Asia who reports to the SVP Finance and Chairman of the Audit Committee. We also completed an internal risk assessment of anti-corruption policies and procedures in the organization. In addition, an external assessment was conducted by an outside accountant of policy content and implementation, the initial results of which were discussed and implemented in 2016. A second phase of this assessment focusing on detailed testing of identified fraud risks was initiated at the end of 2016 and will be finalized by year end 2017.

### 2.5.2. Code of Conduct

Besi has a Code of Conduct to guide the activities of all Besi employees. The Whistleblower procedure sets out responsibilities, steps to take and support for reporting violations of the Company's Code of Conduct. Besi's Code of Ethics for Senior Financial Officers sets out further responsibilities for those employees in positions of leadership across the business. These procedures are made known to employees through the website, intranet, employee handbook and via new employee orientation. Employees can raise concerns through help lines, the HR department and management. The Whistleblower procedure was updated in 2016 to meet best practice standards and published on the Company's website. In 2016, violations of the Code of Conduct were reported by means of the Whistleblower procedure. These incidents were promptly responded to by Besi senior management, adjudicated in a satisfactory manner and were immaterial to our 2016 financial results. No other violations of the Code of Conduct were reported in 2016.

### 2.5.3. Responsible tax practices

Besi follows the principle of responsible tax practices, meaning full compliance with tax obligations in the areas where the factual economic activities of its operations take place. Besi's production and sales activities determine where taxes need to be paid.

### 2.6. Community involvement

Besi supports several activities in the local communities in which it operates, particularly in Asia where the support is more greatly needed. Besi also supports local technical universities in the regions in which it operates through interchange and dialogue.

Since 2014, Besi APac has supported the IDEAS Academy (Education is for ALL), a local non-profit organization which provides education to underprivileged Malaysian youth. Besi supports the organization financially as well as through the provision of laptops. Three Besi employees are also part of the organization's Executive Committee. Besi also supports local orphanage homes and schools in Malaysia and China by providing food, toiletries and school supplies and organizing special activities for children. In a Health & Safety week that was organized in Malaysia, Besi employees donated blood. In addition, money was donated by Besi APac and its employees for the floods on the east coast of Malaysia. In 2016, Besi APac also commenced participation in a tree planting program in collaboration with the Forest Research Institutes Malaysia to increase tree preservation in the country which is expected to continue in 2017.

In the past three years, Besi and some of its employees in the Netherlands have also supported elementary schools in the Philippines, the Innocent Smile Foundation in India aiding mentally disabled children and Kanjers voor Kanjers, an initiative to enable disabled children in the Benelux region to participate in sports activities.

### 3. Outlook

Besi is committed to further expand and refine its CR initiatives and management. In consultation with the Supervisory Board, we hired in the fourth quarter of 2016 a third party CR consultancy firm to perform a strategic study of Besi's sustainability policies. The strategic study is anticipated to be completed by year end 2017 and will serve as the basis for further development of our CR vision and strategy. Other objectives include the development of a company-wide CR program and topics, key-performance indicators, and the formulation of short and long-term initiatives and priorities. In addition, Besi intends to improve its CR data-management, reporting and monitoring procedures including more frequent internal reporting of most relevant KPIs and quantitative targets.

By such actions, we hope to earn the continuing appreciation of stakeholders and exceed their expectations.

Richard W. Blickman  
Chief Executive Officer

February 22, 2017

# Supervisory Board

## **Tom de Waard (male, 1946)**

Chairman  
Dutch nationality  
Member since 2000  
Appointed 2016 - 2020

Lawyer, arbitrator, mediator DeWaardSinke Advocaten

### **Additional function**

Chairman of the Board of Administratiekantoor Aandelen Telegraaf Media Group N.V.

## **Douglas J. Dunn (male, 1944)**

Vice Chairman  
British nationality  
Member since 2009  
Appointed 2015 - 2019

### **Additional functions**

Non-Executive Director of the Board of Global Foundries, member of the Supervisory Boards of TomTom N.V. and Soitec S.A.

## **Mona ElNaggar (female, 1967)**

British and American nationality  
Member since 2012  
Appointed 2016 - 2020

### **Additional function**

Director and treasurer for a non-profit board (Bay Area Arabic school)

## **Kin Wah Loh (male, 1954)**

Malaysian nationality  
Member since 2015  
Appointed 2015-2019

Managing Partner Beijing Jianguang Asset Management Co. Pte., member of the Management Board of Ampleon Netherlands B.V.

### **Additional function**

Member of the Supervisory Board of AMS AG, Austria

## **Jan E. Vaandrager (male, 1943)**

Dutch nationality  
Member since 2009  
Appointed 2014 - 2018

### **Additional function**

Member of the Supervisory Board of Hydratec Industries N.V.

The Supervisory Board has formed the following committees:

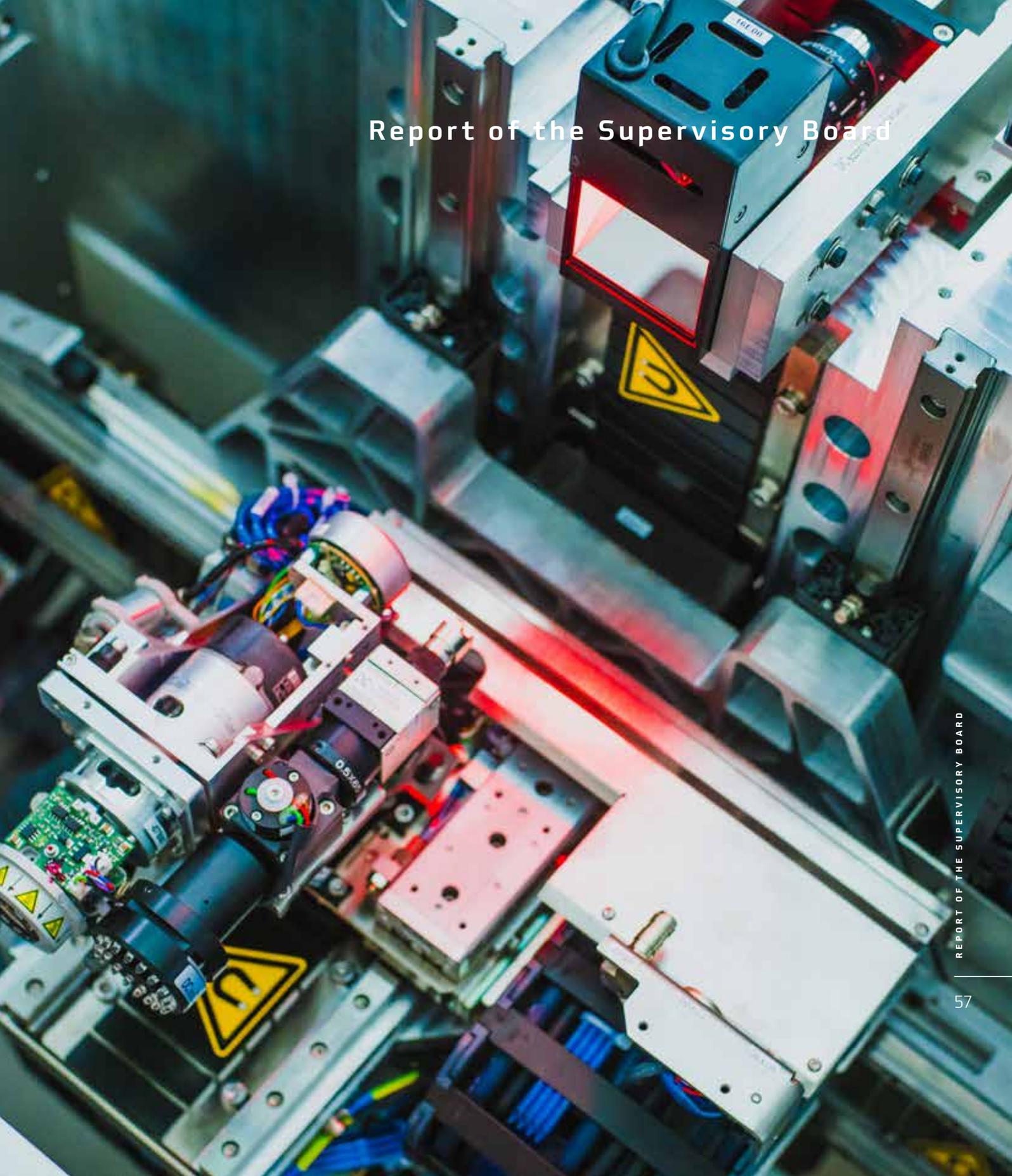
### **Audit Committee**

Members: Jan Vaandrager (Chairman), Douglas Dunn, Mona ElNaggar, Kin Wah Loh and Tom de Waard.

### **Remuneration and Nomination Committee**

Members: Douglas Dunn (Chairman), Mona ElNaggar, Kin Wah Loh and Tom de Waard.

The remuneration of the members of the Supervisory Board does not depend on the results of the Company. None of the members of the Supervisory Board personally maintains a business relationship with Besi other than as a member of the Supervisory Board. One member of the Supervisory Board owned as of December 31, 2016, in total 24,610 shares of the Company.



# Report of the Supervisory Board

# Report of the Supervisory Board

Besi is pleased to present its 2016 Annual Report prepared by the Board of Management. The Annual Report includes Besi's Financial Statements as prepared by the Board of Management for the financial year ended December 31, 2016. At its meeting on February 22, 2017, the Supervisory Board approved these Financial Statements. Deloitte Accountants B.V., independent external auditors, duly examined the 2016 Besi Financial Statements and issued an unqualified opinion thereon.

The Supervisory Board recommends that the General Meeting of Shareholders adopts the 2016 Financial Statements as submitted by the Board of Management and approved by the Supervisory Board. The Board of Management has also submitted a proposal stating that a cash dividend of € 1.74 per share will be declared for the year ended December 31, 2016.

## Supervision

Besi has a two-tier board structure consisting of a Board of Management and a Supervisory Board that is responsible for supervising and guiding the Board of Management. The Board of Management is currently comprised of one member, Mr Richard Blickman. The Supervisory Board is currently comprised of five members, all of whom are considered independent within the meaning of best practice provision III.2.2. of the Dutch Corporate Governance Code.

At the Annual General Meeting of Shareholders held on April 30, 2016, Mr Tom de Waard and Ms Mona ElNaggar were reappointed for four-year terms.

Name	Year elected	Term end
Mr Tom de Waard, Chairman	2016	2020
Mr Douglas Dunn, Vice Chairman	2015	2019
Ms Mona ElNaggar	2016	2020
Mr Kin Wah Loh	2015	2019
Mr Jan Vaandrager	2014	2018

The Supervisory Board considers its current composition to be aligned with its aim to have sufficient business, financial, legal, geographic and other experience amongst its members. All Supervisory Board members have the requisite experience to supervise Besi in such respective areas. In addition, all members of the Supervisory Board have adequate time available to give proper attention to their tasks and duties.

Gender and age diversity were enhanced in 2012 by the appointment of Ms ElNaggar as a Supervisory Board member and her reappointment in 2016. As such, the current composition of the Supervisory Board and the Board of Management is materially compliant with Dutch law.

During 2016, the Supervisory Board met five times. In addition, it made two full week trips to visit Besi Leshan, China, Besi Singapore and Besi APac in Shah Alam, Malaysia. The Supervisory Board also attended and participated in two strategy workshops with an independent consultant during the year. In 2016, no members were absent for Supervisory Board meetings.

## Supervisory Board Meeting Topics

Key topics discussed by the Supervisory Board during 2016 included:

- Formal approval of the annual budget as well as the quarterly revised estimates throughout the year.
- Quarterly business reviews and a review and discussion of Besi's 2017 budget with the Board of Management, certain members of senior management and key Besi staff.
- Besi's technology roadmap and related R&D programs.
- Succession planning and related development programs for Executive Committee members and other key members of management.
- The ongoing transfer of operations from Europe to Asia and reductions to Besi's cost structure.
- Potential strategic alliances and acquisitions.
- The general risks associated with Besi's operations.
- Corporate Responsibility related topics including the Corporate Responsibility section of the Annual Report.
- The assessment and review provided by the Board of Management of the structure and operation of Besi's internal risk management and control systems as well as any significant changes thereto.
- The ongoing operational alignment of all Besi's processes, procedures, ERP and IT systems.
- The placement of € 125 million of Senior Unsecured Convertible Notes due 2023 as reported in the press release dated November 30, 2016.
- The functioning of the Board of Management and its performance during the year were also discussed by the Supervisory Board without the member of the Board of Management being present.
- The remuneration of the Board of Management and senior management, the Remuneration Report as well as the proposal to prolong and extend the Remuneration Policy. This proposal was approved at Besi's Annual General Meeting of Shareholders held on April 29, 2016.
- Approval of filings with the Dutch Authority for the Financial Markets (Autoriteit Financiële Markten, or "AFM").
- The Supervisory Board's self-evaluation of its performance, composition, succession and functioning. In 2016, the Supervisory Board concluded that there is a proper mix of background and skills at the Supervisory Board level and that the Supervisory Board works well as a team with open and direct communication. Another self-assessment is planned for 2017 in association with a third party consulting firm.

Other meeting topics discussed in 2016 included Besi's capital allocation policy and a strategic planning update discussed below.

## Capital allocation policy

The Board of Management is responsible for Besi's optimal capital allocation and has adopted a policy which aims to enhance shareholder returns via dividends and share repurchases.

Due to Besi's earnings and cash flow generation in 2016, the Board of Management has proposed a cash dividend of € 1.74 per share for 2016, of which € 0.35 per share represents a special dividend, for approval at Besi's Annual General Meeting of Shareholders on May 1, 2017. In addition, Besi completed its 2015 share repurchase program in October 2016 under which it repurchased 1.0 million shares for approximately € 22.5 million. The Board of Management proposed, and the Supervisory Board authorized, a new share repurchase program in October 2016 up to a maximum of 1.0 million shares through October 2017 for capital reduction purposes and to offset potential dilution from employee share issuance according to Besi's long-term incentive compensation plans.

### Strategic Planning Review 2017-2021

An important topic in 2016 was the review of Besi's business, strategic positioning and revenue/cost opportunities over the next five years. The Board of Management retained an independent consultant to assist in a comprehensive assessment which was completed and presented to the Supervisory Board in December 2016.

### Supervisory Board committees

The Supervisory Board has established two committees, the Audit Committee and the Remuneration and Nomination Committee. These committees operate under charters that have been approved by the Supervisory Board. Members of these committees are appointed from and among the Supervisory Board members.

### Audit Committee

The Audit Committee consists of all five Supervisory Board members. The Chairman is Mr Jan Vaandrager. The Audit Committee fulfills its responsibilities by carrying out the activities enumerated in its charter including assisting the Supervisory Board in fulfilling its oversight responsibilities by:

- Reviewing the design and effectiveness of internal risk management and control systems and the internal audit function as described under "Risks and Risk Management" on pages 31 to 41 and in the chapter "Internal risk management and control" under Corporate Governance in this Annual Report. In view of increased business and risk management activities in Malaysia, Singapore and specifically China, Besi enhanced its internal audit function, the progress of which was closely monitored in 2016. In addition, Besi enhanced its fraud prevention systems in the Asia Pacific region through both internal and third party external assessments and investigations.
- Reviewing the analysis and assessment provided by the Board of Management of the structure and operation of Besi's internal risk management and control systems and any significant changes thereto.
- Reviewing Besi's capital structure, financing and treasury operations. In addition, the Audit Committee reviewed the terms of Besi's issuance of Convertible Notes and potential cash management options related to the use of proceeds therefrom.
- Reviewing Besi's European and global tax structure and transfer pricing policy including, in particular, developments affecting fiscal Base Erosion and Profit Shifting ("BEPS"). Besi does not have a fiscal structure in which profits are allocated to places where no economic activities take place.
- Reviewing auditing, accounting and financial reporting processes and critical accounting policies, new accounting pronouncements and the further development of International Financial Reporting Standards as adopted by EU ("IFRS"). In 2016, particular attention was paid to the preparation for the implementation of IFRS 9 Financial Instruments, IFRS 15 Revenue from Contracts with Customers and IFRS 16 Leases.
- Reviewing on a regular basis the quality of work, reporting, independence and expertise of Deloitte Accountants B.V., Besi's independent external auditor.
- Recommending to the Supervisory Board all audit fees and terms and all non-audit services provided by the independent auditor. During 2016, no non-audit services took place in the Netherlands. Non-audit services outside the Netherlands were kept to a minimum in order to prevent a potential conflict of interest.
- Maintaining procedures for (i) the receipt, retention and treatment of complaints and (ii) the anonymous submission of confidential concerns by employees involving accounting matters. Besi's Whistleblower procedure was updated in 2016 and can be found on the Company's website: [www.besi.com](http://www.besi.com).
- Updating Besi's Audit Committee terms of reference, Code of Conduct, Code of Ethics for Senior Financial Officers, all of which can be viewed on its website.
- Deploying information and communication technology, including the ongoing implementation of the global ERP system and monitoring enhancements made to the SAP system in 2016.
- Reviewing Besi's cybersecurity profile including risks and measures available to counter the rising threat of cybercrime.

In 2016, the Audit Committee met four times to discuss the items above as well as the scope and results of the audit of the Financial Statements by Deloitte Accountants B.V., Besi's independent external auditor since 2015. Deloitte attended two meetings of the Audit Committee in 2016. The Audit Committee separately met with Deloitte twice without the presence of the Board of Management.

The Board of Management proposed to the Supervisory Board in 2015 a strengthening of its internal control function over financial reporting that operates under management's responsibility by means of a direct line of communication between the Internal Control function and the Chairman of the Audit Committee. As a result, the Company enhanced its global internal audit function in 2016. Reference is made to the chapter "Internal control and risk management" under Corporate Governance.

The Audit Committee Charter is posted on Besi's website: [www.besi.com](http://www.besi.com).



*Besi Leshan: The first direct shipment of the Datacon 2200 evo<sup>plus</sup>.*

### Remuneration and Nomination Committee

The Chairman of the Remuneration and Nomination Committee is Mr Douglas Dunn and its members include Mr Tom de Waard, Ms Mona ElNaggar and Mr Kin Wah Loh.

The Remuneration and Nomination Committee shall have the following duties with respect to remuneration:

- Making a proposal to the Supervisory Board for the Remuneration Policy to be pursued.
- Annually reviewing and proposing the corporate goals and objectives related to the compensation of the Board of Management.
- Making a proposal for the remuneration of the Board of Management within the scope of the Remuneration Policy adopted by the General Meeting of Shareholders for adoption by the Supervisory Board. Such proposal shall, in any event, deal with:
  - The remuneration structure.
  - The amount of fixed remuneration, shares to be granted and/or other variable remuneration components, pension rights, severance pay and other forms of compensation to be awarded as well as the performance criteria and their application.
- Overseeing Besi's equity incentive plans.
- Making recommendations to the Supervisory Board with respect to the Board of Management.
- Preparing the Remuneration Report as referred to in best practice provisions set out in section 7 of the Regulations of the Supervisory Board.

The Remuneration and Nomination Committee shall with respect to the selection and nomination of Supervisory Board members and members of the Board of Management have the following duties:

- Drawing up selection criteria and appointment procedures for Supervisory Board members and members of the Board of Management.
- Periodically assessing the size and composition of the Supervisory Board and the Board of Management and making proposals for the composition profile of the Supervisory Board.

- Periodically assessing the functioning of individual Supervisory Board members and members of the Board of Management and reporting on this to the Supervisory Board.
- Making proposals for appointments and reappointments.
- Supervising the policy of the Board of Management on the selection criteria and appointment procedures for senior management.

The Committee met twice in 2016 to discuss the topics above. The Remuneration Report is included on pages 62 to 69 of this Annual Report.

The Remuneration and Nomination Committee's regulations are posted on the Company's website: [www.besi.com](http://www.besi.com).

### Corporate governance

The Supervisory Board acknowledges the importance of good corporate governance, the most important elements of which are transparency, independence and accountability. The Supervisory Board continuously reviews important corporate governance developments. Reference is made to the Corporate Governance section in this Annual Report on pages 61 to 72. Deviations from the Dutch Corporate Governance Code are explained elsewhere in this Annual Report under Corporate Governance.

The Supervisory Board would like to express its thanks and appreciation to all involved for their hard work and dedication to the Company in 2016.

The Supervisory Board  
Tom de Waard, Chairman

February 22, 2017



# Corporate Governance

Besi acknowledges the importance of good corporate governance, the most important elements of which are transparency, independence and accountability. Important corporate governance developments in applicable jurisdictions are followed closely and rules are implemented where appropriate.

Besi's Ordinary Shares (the "Shares") are listed on Euronext Amsterdam. Accordingly, Besi complies with all applicable listing rules of Euronext Amsterdam.

In 2016, Besi applied the Dutch Corporate Governance Code as revised in 2008. Deviations from the Dutch Corporate Governance Code are explained below under "Explanation of Deviations from the Dutch Corporate Governance Code". The Dutch Corporate Governance Code can be found at [www.mccg.nl](http://www.mccg.nl).

## Board of Management

The role of the Board of Management is to manage the Company, which means, among other things, that it is responsible for ensuring that Besi is achieving its aims, strategy and associated risk profile, policy results and corporate responsibility issues that are relevant to the Company's business. The Board of Management is accountable to the Supervisory Board and to the shareholders of Besi.

The Board of Management is also responsible for (i) overseeing the Company's compliance with all applicable rules and regulations that govern the Company, (ii) managing the risks associated with its business activities and (iii) ensuring that the Company is properly capitalized. The Board of Management informs the Supervisory Board and its Audit Committee about Besi's internal risk management and control systems and any updates or developments related thereto.

The Board of Management takes into account the interests of the Company and its affiliated enterprises as well as the interests of its shareholders and other stakeholders when making decisions about the operation of the business. Members of the Board of Management are required to put the interests of the Company ahead of their own interests and to act critically and independently when carrying out their responsibilities. The Board of Management is also charged with providing the Supervisory Board all material information required to permit the Supervisory Board to exercise its duties. The Company's articles of association provide that certain resolutions of the Board of Management require prior approval of the Supervisory Board. Pursuant to Dutch law and the Company's articles of association, decisions of the Board of Management involving a major change in the Company's identity or character are subject to the approval of the General Meeting of Shareholders.

## Appointment and replacement of members of the Board of Management

Members of the Board of Management are appointed by the General Meeting of Shareholders. A resolution of the General Meeting of Shareholders to appoint a member of the Board of Management requires an absolute majority of the votes validly cast in the event and to the extent the appointment occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. Such resolution requires at least two thirds of the votes validly cast representing more than one third of the issued capital in the event and to the extent the appointment does not occur pursuant to a proposal thereto of the Supervisory Board.

Members of the Board of Management may at any time be suspended or dismissed by the General Meeting of Shareholders. A resolution for suspension or dismissal of a member of the Board of Management requires an absolute majority of the votes validly cast in the event and to the extent that the suspension or dismissal occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. A resolution for suspension or dismissal requires at least two thirds of the votes validly cast representing more than one third of the issued capital in the event and to the extent that the suspension or dismissal does not occur pursuant to, and in accordance with, a proposal thereto of the Supervisory Board. Members of the Board of Management may also be suspended by the Supervisory Board.

## Remuneration Report

This Remuneration Report is issued by the Supervisory Board upon recommendation by its Remuneration and Nomination Committee. The Committee reports an overview of the Remuneration Policy, the remuneration structure, the application of the Remuneration Policy and the components of the remuneration of the Besi Board of Management. In addition, the Committee is informed about the remuneration of the direct reports to the CEO including the Short-Term and Long-Term Incentive Plans applicable thereto.

## Remuneration Policy

The Remuneration Policy applicable for the year 2016, as outlined in the revised Remuneration Policy 2011-2016, has been developed in view of changes in legislation and a review of external market best practices, taking into account the principles and best practice provisions of the Dutch Corporate Governance Code. This revised Remuneration Policy 2011-2016 was approved at the Annual General Meeting of Shareholders held on April 30, 2015. During the Annual General Meeting of Shareholders held on April 29, 2016 it was approved to prolong the current Remuneration Policy for the annual periods 2017, 2018 and 2019 and to include two additional elements (Remuneration Policy 2017-2019).

The Supervisory Board seeks to achieve three broad goals in connection with Besi's Remuneration Policy and decisions regarding individual compensation:

- First, the Supervisory Board structures the Company's remuneration programs in a manner that it believes will enable Besi to attract, motivate and retain executives who are capable of leading the Company to achieve its business objectives.
- Second, the Supervisory Board establishes remuneration programs that are designed to reward members of the Board of Management for the achievement of specified business objectives as a whole or the individual executive's particular business unit. By linking remuneration to specific goals, the Supervisory Board believes that it creates a performance-oriented environment for the Company's executives.
- Finally, the Company's remuneration programs are intended to provide members of the Board of Management with an equity interest in the Company so as to link a portion of executive remuneration with the long-term performance of Besi's Ordinary Shares and to align their interests with those of shareholders.

The Supervisory Board regularly (i) reviews Besi's business objectives, (ii) undertakes risk assessments, (iii) assesses Besi's overall performance with respect to its business objectives and (iv) considers the performance of individual members of the Board of Management compared to their own specific business objectives. Based on these objectives, the Supervisory Board determines a balanced mix between fixed and variable remuneration components and a set of key performance indicators linked to the variable remuneration components that are aligned with the Company's business objectives.

In its evaluation of the efficacy of Besi's Remuneration Policy, the Supervisory Board has performed in-depth scenario analyses of the variable remuneration components under the revised and prolonged policy. The probability of vesting and pay-out of the Performance Share awards have been taken into account in these scenario analyses. The Supervisory Board has set the performance targets on the basis of the outcome of the scenario analyses. Pay differentials and the executive's position within Besi have also been taken into account and have been considered in this respect.

#### Remuneration structure

The total remuneration package of the members of the Board of Management is established on an annual basis by the Supervisory Board, upon proposal of its Remuneration and Nomination Committee, and consists of five components based on the goals set forth above:

1. Base Salary
2. Short-Term Incentive (annual performance based cash bonus)
3. Long-Term Incentive (annual conditional award of Performance Shares)
4. Pension
5. Other Benefits

The above components are regularly compared with a balanced remuneration reference group of companies selected based on industry, size and geographical spread to determine the total remuneration package for the members of the Board of Management. The following companies are included in this remuneration reference group:

#### Remuneration Reference Group

Kendrion N.V.	Lam Research Corporation
Nova Measuring Instruments Ltd.**	Aalberts Industries N.V.
Kulicke & Soffa Industries, Inc.	STMicroelectronics N.V.
Axcelis Technologies, Inc.	Ultratech, Inc.
Veeco Instruments, Inc.	Arcadis N.V.
SÜSS MicroTec, AG	Koninklijke Wessanen N.V.**
Brooks Automation, Inc.	Corbion N.V.*
Cohu, Inc.	Aixtron SE
Infineon Technologies AG	ASM International N.V.
TKH Group N.V.	Accell Group N.V.

#### Notes

\* Further to the delisting of Royal Ten Cate N.V. on March 17, 2016, Royal Ten Cate N.V. has been replaced by Corbion N.V. in the remuneration reference group.

\*\* Further to the delisting of Mattson Technology, Inc. (on May 2, 2016) and USG People N.V. (on June 7, 2016), Mattson Technology, Inc. has been replaced by Nova Measuring Instruments Ltd. and USG People N.V. has been replaced by Koninklijke Wessanen N.V.

The composition of this remuneration reference group will be reviewed by the Supervisory Board on a regular basis and updated if necessary to ensure an appropriate composition. Any substantial changes to the composition of the remuneration reference group will be subject to the approval of the Annual General Meeting of Shareholders.

In establishing the remuneration for members of the Board of Management, the Supervisory Board consults a professional external remuneration consultant in carrying out its duties. The Supervisory Board will verify that the consultant concerned does not similarly provide advice to the Board of Management so that no conflicts of interest exist.

### 1. Base Salary

Each year, the Supervisory Board reviews the annual base salaries for members of the Board of Management and considers whether to adjust base salary levels. Base salaries of the members of the Board of Management will be determined by comparing the base salary levels within median and upper quartile levels of the above mentioned remuneration reference group. The Supervisory Board also considers the historic salary levels of the individual and the nature of the individual's roles and responsibilities.

### 2. Short-Term Incentive (annual cash bonus)

The annual cash bonus opportunity is linked to the achievement of pre-determined performance conditions based on financial and non-financial objectives as determined by the Supervisory Board. The following performance measures apply:

- *Net Income/Revenue, i.e. Net Income expressed as a percentage of Revenue.* The financial measure net income is preferred over other financial ratios for the Short-Term Incentive of Besi as Net Income is:
  - a key indicator for evaluating the overall performance of Besi for the year and therefore an important contributor to shareholder value;
  - a key factor given the cyclical market that Besi is operating in; and
  - a financial measure that can be influenced by the members of the Board of Management.
- *Personal performance of the respective members of the Board of Management.* The annual criteria to measure the personal performance of the members of the Board of Management are at the sole discretion of the Supervisory Board, enabling the Supervisory Board to focus on certain targets that are considered important for the upcoming year. The Remuneration and Nomination Committee will propose to the Supervisory Board annually both financial and non-financial criteria to measure the personal performance of each member of the Board of Management.

The total annual cash bonus opportunity per individual member of the Board of Management shall be determined on the basis of the following performance/pay-out grid. However, the Supervisory Board will apply a total annual voluntary bonus cap of 80% of such individuals' gross annual salary over the Company's

financial year preceding the year in which such Annual Cash Bonus is awarded, except if the Supervisory Board uses its discretionary power to adjust (upwards or downwards) or decides to not apply this total annual voluntary bonus cap in the event that extraordinary and/or sustainable performance is delivered:

<b>Short-Term Incentive: Performance versus pay-out</b>	<b>At minimum</b>	<b>At target performance</b>
in % of the individual's gross annual base salary		
Net Income as % of Revenue <sup>1</sup>	0%	70%
Personal Performance Targets <sup>2</sup>	0%	30%
<b>Total annual bonus pay-out<sup>3</sup></b>	<b>0%</b>	<b>80%</b>

#### Notes

<sup>1</sup> Net Income/Revenue: the actual pay-out ranges from 0% to 70% of the individual's gross annual base salary.

<sup>2</sup> Personal performance: the actual pay-out ranges from 0% to maximum 30% of the individual's gross annual base salary.

<sup>3</sup> A cumulative annual voluntary cash bonus cap of 80% based on the individual's gross annual salary is applicable. The composition may vary depending on the Net Income and personal performance. The Supervisory Board holds the discretionary power to decide to not apply this value cap.

### 3. Long-Term Incentive (annual conditional award of Performance Shares)

The Long-Term Incentive consists of a conditional award of Performance Shares. The award represents a conditional right to receive a certain number of shares in Besi depending on the achievement of pre-determined financial performance objectives set by the Supervisory Board over a three-year performance period, which are:

- *Net Income/Revenue over three calendar years, i.e. Net Income expressed as a percentage of Revenue over the three-year performance period.* Net Income/Revenue is considered a key measure for creating sustainable long-term shareholder value.
- *Relative Total Shareholder Return ('TSR').* The development of Besi's share price including the reinvestment of dividends during a three-year performance period will be compared to a comparator group of 19 listed companies operating in the semiconductor equipment industry, whereby three-month share price averaging is being applied at the start and at the end of the TSR performance period. The TSR over the three-year performance period is also considered a key measure for indicating the development of shareholder value and Besi's TSR relative to its comparators in the semiconductor equipment industry and is an appropriate performance measure to align the interests of the members of the Board of Management with those of shareholders. The composition of the comparator group will be reviewed annually by the Supervisory Board and, if required, will be adjusted due to changes in the performance, size and market value, among other considerations, of the companies involved which could affect comparability. Adjustments to the comparator group, including replacements, will be based on predetermined internal guidelines. The TSR comparator group currently consists of the following companies:

## TSR comparator group (including Besi)

Nova Measuring Instruments Ltd. <sup>2</sup>	Cohu, Inc.
Kulicke & Soffa Industries, Inc.	Applied Materials, Inc.
Axcelis Technologies, Inc.	Entegris, Inc. <sup>1</sup>
Veeco Instruments, Inc.	Lam Research Corporation
Aixtron SE	Tokyo Electron Ltd.
ASM International N.V.	Disco Corporation
SÜSS MicroTec AG	Tokyo Seimitsu Co., Ltd.
ASM Pacific Technology Ltd.	ASML Holding N.V.
Brooks Automation, Inc.	Shinkawa Ltd.
	Ultratech, Inc.

<sup>1</sup> Entegris Inc. completed its acquisition of ATMI, Inc. on April 30, 2014. In accordance with the predetermined guidelines for adjustments to the comparator group, ATMI, Inc. has therefore been replaced by Entegris Inc. in the TSR comparator group with retrospective effect as from January 1, 2014.

<sup>2</sup> Further to the delisting of Mattson Technology, Inc., Mattson Technology, Inc. is replaced by Nova Measuring Instruments Ltd. as per the business day prior to the day Beijing E-Town Dragon announced the acquisition.

### Conditional award

The number of Performance Shares conditionally awarded will be determined by the Supervisory Board based on at target level equal to 100% of the individual's gross annual base salary, as follows:

At target number of Performance Shares to be awarded is determined based on (i) 100% of the individual's gross annual base salary, divided by (ii) the average closing price of the shares for all trading days in the calendar quarter immediately preceding the start of the three-year performance period.

### Vesting

At the end of the three-year performance period, depending on the actual performance of Besi during the performance period, the number of shares that become unconditional (i.e. number of shares vesting) will be determined. The vested shares are subject to a two-year lock-up period which means that the members of the Board of Management will have to retain them for two years following the vesting date. However, they will be allowed to sell sufficient shares to cover their income tax liability upon vesting of the Performance Shares.

The actual number of Performance Shares which will vest at the end of the three-year performance period will be determined on the basis of the following grid:

The Performance Shares awarded subject to Besi's TSR performance are based on the actual absolute ranking of Besi within the comparator group and vest in a range between 0% and 75% of the total number of Performance Shares awarded to the individual. The vesting is determined based on the following schedule:

Ranking of Besi in comparator group based on relative TSR during performance period versus pay-out	Vesting percentage Performance Shares
Rank 13 - Rank 20	0%
Rank 7 - Rank 12	25%
Rank 4 - Rank 6	50% (at target)
Top 3	75%

### Performance adjustment

The Supervisory Board may at its absolute discretion determine after the three-year performance period for awards made as from 2017 to adjust either upward or downward the number of Performance Shares that will vest with a maximum of 20%. This discretionary performance adjustment may be applied by the Supervisory Board to reflect the overall performance achieved and market developments, and further aligns the interests of members of the Board of Management with those of the shareholders.

Long-Term Incentive: Performance versus vesting	At minimum	At target performance	At maximum (stretched performance)
	in % of the number of Performance Shares awarded		
Net Income as % of Revenue <sup>1</sup>	0%	50%	75%
Relative TSR performance <sup>2</sup>	0%	50%	75%
<b>Total number of shares vesting</b>	<b>0%</b>	<b>100%</b>	<b>150%</b>

#### Notes

<sup>1</sup> Half of the Performance Shares awarded is linked to Besi's Net Income relative to its revenue over the three-year performance period; the vesting range is between 0% and 75% of the total number of Performance Shares awarded to the individual.

<sup>2</sup> Half of the Performance Shares awarded is linked to Besi's relative TSR performance.



*Esec 2100 Die Bonder.*

#### Clawback and ultimate remedium

The Short-Term Incentive and Long-Term Incentive components for the members of the Board of Management as described above are subject to clawback provisions. In addition, risk assessment tests are in place and measures are included in the variable remuneration documentation for members of the Board of Management to ensure that shareholders' interests are protected. In this respect, the Supervisory Board holds the discretionary authority to reclaim all or part of the Short-Term Incentive and Long-Term Incentive if such variable remuneration has been made based on incorrect financial data or other data or in the case of fraud, gross negligence, wilful misconduct or any activity detrimental to the Company. This clawback is applicable to both the vested and unvested part of the Long-Term Incentive components.

The Short-Term Incentive and Long-Term Incentive components for members of the Board of Management are also subject to ultimate remedium clauses. The Supervisory Board holds the discretionary authority to adjust the value of the conditional variable remuneration components downwards as well as upwards. The adjustment can be made if the Supervisory Board is of the opinion that an unfair result due to extraordinary circumstances would be produced and in this assessment the overall Besi performance is taken into consideration.

#### Additional discretionary Performance Share awards

The Supervisory Board may at its absolute discretion, upon recommendation of the Remuneration and Nomination Committee, award additional Performance Shares to members of the Board of Management as a reward for extraordinary achievements or exceptional performance in a year, up to a maximum of 60,000 shares per financial year which may be subject to additional terms and conditions as determined by the Supervisory

Board. In case the Supervisory Board in any year decides to apply an upward performance adjustment in respect of the vesting of the Long-Term Incentive Performance Shares, as referred to under "Performance adjustment" above, such additional Performance Shares that will vest upon this performance adjustment are included in the maximum of 60,000 additional Performance Shares that can be awarded to members of the Board of Management at the discretion of the Supervisory Board.

#### Number of shares available

The aggregate total number of Performance Shares available for awards shall not exceed 1.5% of the total number of outstanding shares as at 31 December of the year prior to the year in which the Performance Shares are awarded.

#### 4. Pensions

Different pension arrangements are provided to members of the Board of Management based on their salaries, local customs, and the rules existing in their countries of origin. A defined contribution scheme is in place for statutory directors, of whom the CEO is currently the only one. Due to legislative changes enacted in the Netherlands as from the beginning of 2015, part of the pension contribution is no longer tax exempt. As such, in order to provide for a market competitive pension arrangement for Dutch members of the Board of Management, the pension contribution commencing 2015 is based on a premium ladder as in effect in 2014. However, commencing in 2015, a portion of this contribution is funded directly to the personal pension account of the statutory director as a tax exempt contribution and the remaining balance is paid to the statutory director as a taxable pension allowance which can be used by the statutory director to build up his net pension on a voluntary basis.

## 5. Other benefits

Other benefits awarded to members of the Board of Management are linked to base pay and in line with general prevailing market practice.

## Loans

As a policy, the Company does not provide loans to members of the Board of Management.

## Employment contracts/service contracts

Service contracts with any new member of the Board of Management will in principle be entered into for a period of four years. Existing employment contracts for an indefinite period of time will not be replaced by contracts with a limited period or by contracts with different conditions.

## Severance payment

The remuneration paid to members of the Board of Management in the event of dismissal may not exceed the individual's gross annual base salary (fixed component). If the maximum of one year's salary would be manifestly unreasonable for a member of the Board of Management who is dismissed during his first term of office, such Board of Management member shall be eligible for severance pay not exceeding twice his annual base salary.

## Application of the Remuneration Policy in 2016

The Supervisory Board upon recommendation of its Remuneration and Nomination Committee applied the Remuneration Policy in 2016 as set forth below. The only member of the Board of Management in 2016 was Richard W. Blickman, Besi's CEO.

### 1. Base Salary

At the end of 2014, the Remuneration and Nomination Committee reviewed the base salary of the CEO taking into consideration the remuneration reference group as listed in the revised Remuneration Policy 2011-2016. Based on this review, the 2015 base salary of the CEO was set at € 520,000 as of January 1, 2015 and this base salary was maintained during 2016.

At the end of 2016, the base salary of the CEO was reviewed, taking into consideration the remuneration reference group. The Remuneration and Nomination Committee has analyzed and considered the outcome of this review and recommended to the Supervisory Board to increase the base salary of the CEO just above median market levels of the remuneration reference group in line with the Remuneration Policy 2017 - 2019. The Supervisory Board, following the recommendation of the Remuneration and Nomination Committee, decided that the 2017 base salary of the CEO will be set at € 565,000. This adjustment will be effectuated after the AGM on May 1, 2017 with retrospective effect as per January 1, 2017.

### 2. Short-Term Incentive

The Short-Term Incentive (cash bonus) awarded to the member of the Board of Management is based on the following pre-determined performance conditions: (i) Net Income expressed as a percentage of Revenue and (ii) personal performance expressed in certain financial and non-financial targets that were considered important for 2016.

Besi's 2016 Net Income as a percentage of Revenue was 17.39%. Based on pre-defined target ranges that have been achieved above the maximum target range set and upon recommendation by its Remuneration and Nomination Committee, the Supervisory Board awarded the member of the Board of Management for the first financial performance condition a cash bonus equal to 70% of his annual base salary for the year 2016. Furthermore, the Remuneration and Nomination Committee thoroughly reviewed the performance of the member of the Board of Management in relation to six pre-defined personal financial and non-financial performance objectives including sustainability, next generation product strategy, strategic organizational development focused on reducing the breakeven level, while increasing production flexibility, succession planning and creation of shareholder value. Based on this review and upon the recommendation by the Remuneration and Nomination Committee, the Supervisory Board decided to award the member of the Board of Management a cash bonus related to personal performance equal to 30% of his annual base salary for 2016. Consequently, the sum of the financial and non-financial targets comprising the total cash bonus for the year 2016 amounts to 100% of the gross base annual salary. This total cash bonus percentage is higher than the voluntary bonus cap of 80% of the gross base annual salary for the member of the Board of Management in 2016. Based on the Company's pro-active and robust responses to changing market conditions (which proved to be successful and sustainable) and the organizational actions taken, which resulted in an excellent financial performance in a continued turbulent market environment, the Supervisory Board unanimously decided, upon recommendation of the Remuneration and Nomination Committee, to use its discretionary power and not to apply the voluntary bonus cap of 80% and to award the maximum cash bonus for 2016 equal to 100% of base salary (€ 520,000).

### 3. Long-Term Incentive

As from 2014, the Long-Term Incentive (annual conditional award of Performance Shares) is subject to continued employment and based on the following pre-determined performance conditions: (i) Net Income as a percentage of Revenue over three calendar years and (ii) the development of Besi's share price including the reinvestment of dividends during a three-year performance period compared to a comparator group of 19 listed companies operating in the semiconductor equipment industry.



*Besi Leshan Quality Control.*

For the three-year performance periods 2014-2016, 2015-2017 and 2016-2018, the “at target (100%)” number of Performance Shares conditionally awarded equaled 54,526, 33,070 and 28,224 shares, respectively. The number of at target shares awarded is calculated based on the gross annual base salary divided by the average closing share price for all trading days in the fourth quarter of the year immediately preceding the start of the performance period. The Performance Shares conditionally awarded will vest in 2017, 2018 and 2019. The number of shares that will actually vest will be based on the above mentioned pre-determined performance conditions.

The number of Performance Shares which could vest for the three-year performance periods 2014-2016, 2015-2017 and 2016-2018 will range between nil (in the case of below threshold performance) to a maximum of 81,789 shares (2014-2016 award), 49,605 shares (2015-2017 award) and 42,336 shares (2016-2018 award). The member of the Board of Management could receive 150% of the “at target” number of Performance Shares awarded if stretched performance is achieved with respect to both performance measures during each respective performance period.

Based on the actual performance realized for the 2014-2016 Performance Share award based on the Net Income as a percentage of Revenue (50% of the award) and Relative TSR performance (50% of the award) during the three-year performance period 2014-2016, the Net Income as a percentage of Revenue has been overachieved resulting in the maximum vesting of 75% of this part of the Performance Shares awarded. For the Relative TSR performance condition, Besi ranked within the comparator group at the first position in the comparator group resulting in a vesting of 75% of the Performance Shares awarded. Based on this maximum performance achieved resulting in a total vesting of 150%, 81,789 shares of the 2014-2016 Performance Shares awarded will vest on April 30, 2017, subject to continued

employment until this date. The vested shares are subject to a two-year lock-up period, except for the shares that may be sold to cover their withholding/income tax liability upon vesting of the Performance Shares.

Under the initial Incentive Plan 2011, the Supervisory Board may, at its own discretion and upon recommendation of the Remuneration and Nomination Committee, award additional shares to the member of the Board of Management as a reward for extraordinary achievements or exceptional performance, up to a maximum of 60,000 shares. For the year 2015, which is the last year that such additional shares may be awarded under the Incentive Plan 2011 (i.e. relating to the performance period 2013-2015), the Supervisory Board conditionally awarded the member of the Board of Management the maximum of 60,000 shares. This extraordinary conditional award is made in recognition for the accelerated implementation of the business strategy in advance and well ahead of future strategic milestones, objectives and challenges. This accelerated implementation positions the Company so that it is fit for purpose well ahead of expected future developments within the Company and the market. This extraordinary award vested in two equal instalments, whereby 30,000 shares vested as of the date of the Annual General Meeting of Shareholders in 2016 (April 29, 2016) and the remaining 30,000 shares vested on November 30, 2016, subject to continued service until that date unless, based on a further assessment, there was a compelling reason to the contrary considering the sustainability and success of the accelerated implementation of the business strategy. Based on this further assessment and upon the recommendation of the Remuneration and Nomination Committee, the Supervisory Board unanimously decided at the end of October 2016 that the accelerated implementation of the business strategy was very robust and proved to be sustainable and successful. This means that the remaining 30,000 shares vested on November 30, 2016.

#### 4. Pensions

Prior to 2015, a defined contribution scheme with an annual contribution (based on a maximum allowed percentage of base salary for tax purposes) was in place for the member of the Board of Management. As a result of the legislative changes applicable for Dutch pension arrangements as from January 1, 2015, the Remuneration and Nomination Committee reviewed Besi's pension policy for Board of Management members during 2014.

Based on the outcome of this review, as from January 1, 2015 pension contributions for members of the Board of Management continue to be based on contributions applicable for 2014. However, a portion of this contribution is funded directly to the personal pension account of the member of the Board of Management as a tax exempt contribution and the remaining balance is paid as a taxed pension allowance, which can be used by the member of the Board of Management to build up his pension on a voluntary basis.

#### Remuneration of the Board of Management for the year 2016

(in euro, except for Performance Shares)	R.W. Blickman (CEO)
Base salary	520,000
Annual cash bonus	520,000
Other benefits <sup>1</sup>	204,304
<b>Total cash benefits</b>	<b>1,244,304</b>
Pension contribution	38,913
Share-based payment <sup>2</sup> :	1,987,140
Discretionary grant made in 2016 <sup>3</sup>	1,083,300
Outstanding Long-Term Incentive Plan <sup>4</sup>	903,840
<b>Total remuneration</b>	<b>3,270,357</b>
Conditional Performance Shares awarded in 2016 <sup>5</sup>	28,224

#### Notes

<sup>1</sup> Other benefits include a taxable pension allowance of € 148,312.

<sup>2</sup> Expense for the period as determined in accordance with IFRS 2, Share-based Payment.

<sup>3</sup> Discretionary grant of 30,000 shares vested and transferred on April 29, 2016 and discretionary grant of 30,000 shares vested on November 30, 2016 in recognition of the Company's extraordinary financial performance, more scalable and flexible business model and increased market share in a difficult market climate.

<sup>4</sup> Expenses recognized in 2016 for the 2014, 2015 and 2016 grants made under the Incentive Plan.

<sup>5</sup> Performance Shares may vest in 2019, subject to continued service and the actual performance during the performance period 2016-2018.

#### 5. Other benefits

Other benefits include expense compensation, medical insurance and social security premiums.

#### Loans

At the end of 2016, no loans, advances or guarantees were outstanding.

#### Conflicts of interests – members of the Board of Management

Any conflicts of interest or apparent conflicts of interest between the Company and members of the Board of Management shall be avoided. If a member of the Board of Management has a direct or indirect personal conflict of interest with the Company, he or she shall not participate in the deliberations and the decision-making process of the Board of Management for such matter. If, as a result thereof, no resolution of the Board of Management can be adopted, the resolution may be adopted by the Supervisory Board. No conflict of interest of material significance to Besi and/or the members of the Board of Management was reported in 2016.

#### Supervisory Board

The role of the Supervisory Board is to supervise the Board of Management, oversee the general affairs of the Company and its affiliated enterprises and assist the Board of Management by providing advice. In discharging its role, the Supervisory Board is guided by the interests of Besi and its affiliated enterprises, and takes into account the relevant interests of Besi's stakeholders. The Supervisory Board also has due regard for corporate responsibility issues that are relevant to Besi. The Supervisory Board annually evaluates its own performance. Supervisory Board members are required to put the best interests of Besi ahead of their own interests and to act critically and independently when carrying out their responsibilities as Supervisory Board members.

The Dutch Corporate Governance Code allows one Supervisory Board member not to be independent. However, each member of the Supervisory Board currently qualifies as an "independent director" as defined by provision III.2.2 of the Dutch Corporate Governance Code.

Each Supervisory Board member has the expertise required to fulfill the duties assigned to the role designated to him/her within the framework of the Supervisory Board profile. The composition of the Supervisory Board shall be such that it is able to carry out its duties properly and aim for a diverse composition in terms of such factors as gender and age. A Supervisory Board member shall be reappointed only after careful consideration. The profile criteria referred to above shall also be taken into account in the event of a reappointment.

Regulations governing Supervisory Board members ("Regulations Supervisory Board") are posted on our website: [www.besi.com](http://www.besi.com).

#### Appointment and replacement of members of the Supervisory Board

Members of the Supervisory Board are appointed with due observance of the requisite profile for its size and composition as adopted by the Supervisory Board from time to time, subject to provisions of Dutch law and Besi's articles of association.

Members of the Supervisory Board are appointed by the General Meeting of Shareholders. A resolution for appointment requires an absolute majority of the votes validly cast in the event and to the extent the appointment occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. Such resolution requires at least two thirds of the votes validly cast representing more than one third of the issued capital in the event and to the extent that the appointment does not occur pursuant to a proposal thereto of the Supervisory Board.

Members of the Supervisory Board may be suspended or dismissed by the General Meeting of Shareholders at all times. A resolution for suspension or dismissal requires an absolute majority of the votes validly cast in the event and to the extent the suspension or dismissal occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. A resolution for suspension or dismissal requires at least two thirds of the votes validly cast representing more than one third of the issued capital in the event and to the extent the suspension or dismissal does not occur pursuant to a proposal thereto of the Supervisory Board.

#### **Supervisory Board committees**

The Supervisory Board has two committees: the Audit Committee and the Remuneration and Nomination Committee. The function of the committees is to prepare and facilitate the decision-making of the Supervisory Board. In its report, the Supervisory Board comments on how the duties of the committees have been carried out in the most recent financial year.

The charters of the committees are posted on Besi's website: [www.besi.com](http://www.besi.com).

#### **Remuneration Supervisory Board**

The General Meeting of Shareholders shall determine the remuneration of Supervisory Board members. The Notes to the Financial Statements on page 107 contain the information prescribed by applicable law on the level and structure of the remuneration of individual Supervisory Board members. Besi does not grant the Supervisory Board members any personal loans or guarantees.

#### **Conflicts of interests – members of the Supervisory Board**

Any conflicts of interest or apparent conflicts of interest between the Company and Supervisory Board members shall be avoided. If a member of the Supervisory Board has a direct or indirect personal conflict of interest with the Company, he or she shall not participate in the deliberations and the decision-making process of the Supervisory Board for such matter. The Supervisory Board is responsible for deciding how to resolve conflicts of interest between members of the Board of Management, members of the Supervisory Board, major shareholders or the external auditor on the one hand and the Company on the other hand.

No conflict of interest of material significance to Besi and/or the members of the Supervisory Board was reported in 2016.

#### **Director's and Officer's insurance policy**

Members of the Board of Management, the Supervisory Board and certain senior management members are covered under Besi's Directors and Officers insurance policy. Although the insurance policy provides for broad coverage, directors and certain senior management members may be subject to uninsured liabilities. Besi has agreed to indemnify members of the Board of Management and the Supervisory Board and certain senior management members against certain claims brought against them in connection with their position with the Company provided that such individual acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of Besi and, with respect to any criminal action or proceedings, such individual had no reasonable cause to believe his conduct was unlawful.

#### **Shareholders and the General Meeting of Shareholders**

Good corporate governance requires the full participation of shareholders. It is in the interest of the Company that as many shareholders as possible participate in Besi's decision making at the Annual General Meeting of Shareholders or any Extraordinary General Meeting of Shareholders. Pursuant to applicable law, any decisions of the Board of Management on a major change in the identity or character of the Company or its enterprise shall be subject to the approval of the General Meeting of Shareholders.

The Board of Management or, where appropriate, the Supervisory Board provides shareholders and other parties in the financial markets with equal and simultaneous information about matters that may influence Besi's share price. Contacts between the Board of Management on the one hand and the press, analysts and shareholders on the other hand are carefully handled and structured, and Besi is prohibited from engaging in any acts that compromise the independence of analysts in relation to the Company and vice versa.

The Board of Management and the Supervisory Board shall provide the General Meeting of Shareholders with the information that it requires for the exercise of its powers subject to such limitations allowable under applicable law. If price-sensitive information is provided during a General Meeting of Shareholders or if a response to shareholders' questions has resulted in the disclosure of price-sensitive information, then such information will be made public without delay.

Good corporate governance requires significant attendance by shareholders at Besi's General Meeting of Shareholders. Therefore, Besi is actively involved in proxy solicitation as a means of increasing the attendance and participation of its shareholders at its General Meeting of Shareholders.

### Amendment of Besi's articles of association

Besi's articles of association may be amended by a resolution of the General Meeting of Shareholders. A resolution of the General Meeting of Shareholders to amend the articles of association may only be adopted at the proposal of the Board of Management, which proposal requires the approval of the Supervisory Board. Those who have convened a General Meeting of Shareholders at which a proposal to amend the articles of association will be brought up for discussion must deposit simultaneously with the convocation a copy of the proposal in which the proposed amendment has been included at Besi's office for inspection by every person entitled to attend the General Meeting of Shareholders until the end of the relevant meeting. The persons entitled to attend meetings must be given the opportunity to obtain a copy of the proposal free of charge. The proposal will also be published on Besi's website: [www.besi.com](http://www.besi.com).

### External audit

The Board of Management is primarily responsible for the quality and completeness of publicly disclosed financial reports. The Supervisory Board oversees the Board of Management as it fulfills this responsibility.

The General Meeting of Shareholders appoints the external auditor after recommendation for appointment by the Audit Committee and the Board of Management to the Supervisory Board and nomination of the Supervisory Board to the shareholders. The Supervisory Board approves the remuneration of the external auditor based on a recommendation by the Audit Committee and after consultation with the Board of Management. The Audit Committee acts as the principal contact for the auditor if it discovers irregularities in the content of financial reporting.

The external auditor attends the meeting of the Audit Committee of the Supervisory Board, at which the annual accounts are reviewed for subsequent approval by the Supervisory Board. The external auditor reports its findings from the audit of the annual accounts to the Supervisory Board and the Board of Management simultaneously.

### Internal control and risk management

Besi has an internal control and risk management system that is suitable for the Company. The form and structure of this system is outlined under "Risks and Risk Management" on pages 31 to 41 of this Annual Report.

The Company's internal control and risk management function operates under the responsibility of the Board of Management which is monitored on an ongoing basis. The Board of Management reviews the design and effectiveness of the internal control and risk management system twice a year as part of Besi's internal control procedures.

Besi's internal control system consists of a formal framework defining key risks and key controls over financial reporting. Operational, IT, compliance and fraud controls are included in Besi's system. The internal control system over financial reporting also contains

clear accounting rules, has been implemented in substantially all operations and material subsidiaries and supports common accounting and regular financial reporting in standard forms.

Besi's finance staff carried out all internal control activities and reported its findings to the Board of Management and the Audit Committee in 2016. In view of increased business and risk management activities in Malaysia, Singapore and specifically China, Besi enhanced its global internal audit function in 2016.

In consideration of the above factors, Besi's internal control and risk management system is adequately designed and worked effectively in 2016 and provided reasonable assurance that the 2016 Financial Statements do not contain any material inaccuracies. At present, there are no indications that this system will not function properly in 2017.

### Explanation of deviations from the Dutch Corporate Governance Code

Deviations from the Dutch Corporate Governance Code are listed and explained in the sections below.

#### Provision II.1.1

The Company respects the rights of the member of the Board of Management who was a member at the time of the first implementation of the Dutch Corporate Governance Code. For that reason, there was no adjustment of his employment agreement.

#### Provision II.2.5

Based on Besi's Remuneration Policy and the Plan as outlined on pages 62 to 69 of this Annual Report, the Supervisory Board upon recommendation of its Remuneration and Nomination Committee may award conditional Performance Shares that vest after three years. The shares vested are subject to a two-year lock up period provided, however, that the member of the Board of Management will be allowed to sell sufficient shares to cover income tax liability upon vesting of the Performance Shares.

#### Provision II.2.8

The Company respects the rights of the member of the Board of Management who was a member at the time the Dutch Corporate Governance Code came into force. For that reason, it did not adjust his employment agreement as it was signed prior to that date.

#### Provision III.3.5

Mr De Waard (1946) was first appointed as a Supervisory Director in 2000 and has served on the Supervisory Board for a period of more than 12 years. Pursuant to best practice provision III.3.5 of the Dutch Corporate Governance Code (the "Code"), a member of the Supervisory Board may only serve for a maximum of 12 years.

However, the Company and the Supervisory Board are of the opinion that in the case of the proposal to reappoint Mr De Waard for a new term in 2016, a deviation from the Code is justified because it is in the best interest of the Company. Since 2009, Mr De Waard has established

as Chairman a well balanced and highly functioning Supervisory Board. Furthermore, Mr De Waard has extensive experience as a Supervisory Director and therefore understands Besi's industry and the Company, and, as a well-known legal professional, he provides legal expert knowledge of specific Dutch and international corporate governance codes to the Company.

#### **Provision III.5**

In order to simplify and enhance the efficiency of Besi's governance structure, the Supervisory Board decided to reduce the number of Committees to two committees: the Audit Committee and the Remuneration and Nomination Committee.

#### **Provision IV.3.1**

The Company acknowledges the importance of disclosing material information to all shareholders similarly at the same moment in time. It is currently not practically possible to make every meeting and presentation to analysts and investors accessible to all shareholders. As far as practicably possible, meetings and presentations will be announced and posted on Besi's website: [www.besi.com](http://www.besi.com).



**People in Turmoil (1961)**

**Karel Appel**

Born: Amsterdam, the Netherlands, 1921  
Died: Zürich, Switzerland, 2006

A Dutch painter, sculptor, and poet, who was one of the founders of the avant-garde movement Cobra in 1948.

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## Consolidated Statement of Financial Position

(euro in thousands)	Note	December 31, 2016	December 31, 2015
<i>Assets</i>			
Cash and cash equivalents	3	224,790	157,818
Deposits	3	80,000	-
Trade receivables	4	89,845	80,640
Inventories	5	55,054	53,877
Income tax receivable		395	446
Other receivables	6	7,325	3,746
Prepayments	7	2,670	2,309
<b>Total current assets</b>		<b>460,079</b>	<b>298,836</b>
Property, plant and equipment	8	26,993	26,718
Goodwill	9	45,867	45,542
Other intangible assets	10	37,844	40,374
Deferred tax assets	11	14,265	18,545
Other non-current assets	12	2,521	2,711
<b>Total non-current assets</b>		<b>127,490</b>	<b>133,890</b>
<b>Total assets</b>		<b>587,569</b>	<b>432,726</b>
<i>Liabilities and equity</i>			
Notes payable to banks	13	11,855	8,000
Current portion of long-term debt and financial leases	18	2,240	-
Trade payables	15	38,949	27,529
Income tax payable		4,116	692
Provisions	14	5,232	3,956
Other payables	16	22,903	19,336
Other current liabilities	17	12,243	7,866
<b>Total current liabilities</b>		<b>97,538</b>	<b>67,379</b>
Long-term debt and financial leases	18	122,603	13,352
Deferred tax liabilities	11	6,716	6,201
Provisions	19, 20	15,675	13,574
<b>Total non-current liabilities</b>		<b>144,994</b>	<b>33,127</b>
Share capital	21	400	36,031
Share premium		224,482	195,524
Retained earnings		60,722	39,244
Other reserves	21	57,807	59,817
<b>Equity attributable to owners of the Company</b>		<b>343,411</b>	<b>330,616</b>
<b>Non-controlling interest</b>		<b>1,626</b>	<b>1,604</b>
<b>Total equity</b>		<b>345,037</b>	<b>332,220</b>
<b>Total liabilities and equity</b>		<b>587,569</b>	<b>432,726</b>

# Consolidated Statement of Comprehensive Income

(euro in thousands, except share and per share data)	Note	Year ended December 31,	
		2016	2015
Revenue	23	375,375	349,206
Cost of sales		183,894	178,766
<b>Gross profit</b>		<b>191,481</b>	<b>170,440</b>
Selling, general and administrative expenses		80,454	74,088
Research and development expenses		35,859	38,457
<b>Total operating expenses</b>		<b>116,313</b>	<b>112,545</b>
<b>Operating income</b>		<b>75,168</b>	<b>57,895</b>
Financial income	26	463	490
Financial expense	26	(2,077)	(1,283)
<b>Financial income (expense), net</b>		<b>(1,614)</b>	<b>(793)</b>
<b>Income before income tax</b>		<b>73,554</b>	<b>57,102</b>
Income tax	11	8,259	8,147
<b>Net income</b>		<b>65,295</b>	<b>48,955</b>
<i>Other comprehensive income</i>			
Actuarial gain (loss), net of income tax		(2,289)	(640)
<b>Items that will not be reclassified to profit and loss</b>		<b>(2,289)</b>	<b>(640)</b>
Currency translation differences		1,892	10,161
Unrealized hedging results, net of income tax		12	235
<b>Items that may be reclassified subsequently to profit or loss</b>		<b>1,904</b>	<b>10,396</b>
<b>Other comprehensive income, net of income tax</b>		<b>(385)</b>	<b>9,756</b>
<b>Total comprehensive income</b>		<b>64,910</b>	<b>58,711</b>
<i>Net income attributable to:</i>			
Equity holders of the parent company		65,223	48,980
Non-controlling interest		72	(25)
<b>Total net income</b>		<b>65,295</b>	<b>48,955</b>
<i>Total comprehensive income attributable to:</i>			
Equity holders of the parent company		64,888	58,635
Non-controlling interest		22	76
<b>Total comprehensive income</b>		<b>64,910</b>	<b>58,711</b>
Income per share attributable to the equity holders of the parent company	27		
Basic		1.74	1.29
Diluted		1.70 <sup>1, 2</sup>	1.27 <sup>1</sup>
Total comprehensive income per share attributable to the equity holders of the parent company			
Basic		1.73	1.55
Diluted		1.69 <sup>1, 2</sup>	1.52 <sup>1</sup>
Weighted average number of shares used to compute income per share			
Basic		37,600,854	37,931,201
Diluted		38,508,080 <sup>1, 2</sup>	38,503,786 <sup>1</sup>

<sup>1</sup> The calculation of the diluted income per share for the year 2016 and 2015 assumes the exercise of equity-settled share-based payments.

<sup>2</sup> The calculation also assumes the conversion of the Company's Convertible Notes due 2023 as such conversion would have a dilutive effect.

## Consolidated Statement of Changes in Equity

(euro in thousands, except for share data)	Number of Ordinary Shares outstanding <sup>1</sup>	Share capital	Share premium	Retained earnings	Other reserves (Note 21)	Total attributable to equity holders of the parent	Non-controlling interest	Total equity
Balance at January 1, 2016	40,033,921	36,031	195,524	39,244	59,817	330,616	1,604	332,220
Total comprehensive income for the period	-	-	-	65,223	(335)	64,888	22	64,910
Decline of par value	-	(35,631)	35,631	-	-	-	-	-
Dividend paid to owners of the Company	-	-	-	(45,420)	-	(45,420)	-	(45,420)
Legal reserve	-	-	-	1,675	(1,675)	-	-	-
Equity-settled share-based payments	-	-	7,247	-	-	7,247	-	7,247
Purchase of Treasury Shares	-	-	(22,389)	-	-	(22,389)	-	(22,389)
Re-issued Treasury Shares	-	-	40	-	-	40	-	40
Equity component convertible	-	-	8,429	-	-	8,429	-	8,429
<b>Balance at December 31, 2016</b>	<b>40,033,921</b>	<b>400</b>	<b>224,482</b>	<b>60,722</b>	<b>57,807</b>	<b>343,411</b>	<b>1,626</b>	<b>345,037</b>
Balance at January 1, 2015	40,033,921	36,431	193,562	47,609	49,694	327,296	1,528	328,824
Total comprehensive income for the period	-	-	-	48,980	9,655	58,635	76	58,711
Decline of par value	-	(400)	400	-	-	-	-	-
Dividend paid to owners of the Company	-	-	-	(56,877)	-	(56,877)	-	(56,877)
Legal reserve	-	-	-	(468)	468	-	-	-
Equity-settled share-based payments	-	-	5,193	-	-	5,193	-	5,193
Purchase of Treasury Shares	-	-	(4,031)	-	-	(4,031)	-	(4,031)
Re-issued Treasury Shares	-	-	400	-	-	400	-	400
<b>Balance at December 31, 2015</b>	<b>40,033,921</b>	<b>36,031</b>	<b>195,524</b>	<b>39,244</b>	<b>59,817</b>	<b>330,616</b>	<b>1,604</b>	<b>332,220</b>

<sup>1</sup> The outstanding number of Ordinary Shares includes 2,707,612 and 2,170,465 Treasury Shares at December 31, 2016 and December 31, 2015, respectively.

# Consolidated Statement of Cash Flows

<b>(euro in thousands)</b>	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
<i>Cash flows from operating activities</i>		
Operating income	75,168	57,895
Depreciation and amortization	14,616	14,777
Impairment	-	330
Share-based payment transactions	7,247	5,193
Curtailment gain	-	(5,626)
Loss on disposal of assets	-	(16)
<i>Effects on changes in assets and liabilities</i>		
Decrease (increase) in trade receivables	(8,151)	18,602
Decrease (increase) in inventories	(1,641)	17,924
Increase (decrease) in trade payables	11,789	(10,258)
Changes in provisions	(798)	(6,492)
Changes in other working capital	2,680	(2,947)
Income tax paid	(2,482)	(3,146)
Interest received	376	573
Interest paid	(73)	(302)
<b>Net cash provided by operating activities</b>	<b>98,731</b>	<b>86,507</b>
<i>Cash flows from investing activities</i>		
Capital expenditures	(4,488)	(4,168)
Capitalized development expenditures	(6,737)	(5,627)
Proceeds from sale of property, plant and equipment	7	15
<b>Net cash used for investing activities</b>	<b>(11,218)</b>	<b>(9,780)</b>
<i>Cash flows from financing activities</i>		
Proceeds from (payments of) bank lines of credit	3,855	(5,679)
Proceeds from Convertible Notes	122,670	-
Proceeds from (payments of) long-term debt and financial leases	-	9,559
Deposit	(80,000)	-
Purchase Treasury Shares	(22,019)	(3,500)
Re-issued Treasury Shares	40	400
Dividend paid to shareholders	(45,420)	(56,877)
Other financing activities	(63)	-
<b>Net cash used for financing activities</b>	<b>(20,937)</b>	<b>(56,097)</b>
Net change in cash and cash equivalents	66,576	20,630
Effect of changes in exchange rates on cash and cash equivalents	396	1,866
Cash and cash equivalents at beginning of the period	157,818	135,322
<b>Cash and cash equivalents at end of the period</b>	<b>224,790</b>	<b>157,818</b>

# Notes to the Consolidated Financial Statements

## 1. Basis of presentation

### General

BE Semiconductor Industries N.V. was incorporated in the Netherlands in May 1995 as the holding company for a worldwide business engaged in the development, production, marketing and sales of back-end equipment for the semiconductor industry. BE Semiconductor Industries N.V.'s principal operations are in the Netherlands, Austria, Switzerland, Malaysia, Singapore and China. BE Semiconductor Industries N.V.'s principal executive office is located at Ratio 6, 6921 RW Duiven, the Netherlands. Statutory seat of the Company is Amsterdam.

The Consolidated Financial Statements of BE Semiconductor Industries N.V. ("Besi" or "the Company") for the year ended December 31, 2016, were authorized for issue in accordance with a resolution of the directors on February 22, 2017. The Consolidated Financial Statements of the Company as at December 31, 2016, will be presented to the Annual General Meeting of Shareholders for their adoption on May 1, 2017.

### Statement of compliance

The Company's Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. They also comply with the financial reporting requirements included in section 9 of Book 2 of the Netherlands Civil Code, as far as applicable.

## 2. Summary of significant accounting principles

### Presentation

The accompanying Consolidated Financial Statements include the accounts of BE Semiconductor Industries N.V. and its consolidated subsidiaries (collectively, "the Company"). The financial statements are presented in thousands of euro, rounded to the nearest thousand. The accounting principles the Company uses to prepare the Consolidated Financial Statements are based on historical cost, unless stated otherwise. Exceptions to the historical cost basis include derivative financial instruments, share-based compensation and cash and cash equivalents which are based on fair value. In addition, for pensions and other post-retirement benefits, actuarial present value calculations are used.

### Principles of consolidation

The Consolidated Financial Statements comprise the financial statements of BE Semiconductor Industries N.V. and its subsidiaries as at December 31, 2016. Subsidiaries are entities controlled by the Company. The Company controls an entity when it is exposed to, or has right to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the Consolidated Financial Statements from the date on which control commences until the date on which control ceases. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-group balances, income and expenses and unrealized gains and losses resulting from intra-group transactions are eliminated in full. Accounting policies, as set out below, have been applied consistently for all periods presented in these Consolidated Financial Statements and by all subsidiaries.

Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date. Changes in the Company's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

On the loss of control, the Company derecognizes the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. Any surplus or deficit arising on the loss of control is recognized in profit or loss. If the Company retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost.

As of December 31, 2016, the following subsidiaries are included in the accompanying Consolidated Financial Statements:

Name	Location and country of incorporation	Percentage of ownership
BE Semiconductor Industries USA, Inc.	Chandler, Arizona, USA	100%
BE Semiconductor Industries Holding GmbH	Radfeld, Austria	100%
Besi USA, Inc.	Chandler, Arizona, USA	100%
Besi Singapore Pte. Ltd.	Singapore, Singapore	100%
Besi Korea Ltd.	Seoul, South Korea	100%
Besi Asia Pacific Holding B.V.	Duiven, the Netherlands	100%
Besi Philippines, Inc.	Muntinlupa City, Philippines	100%
Besi Netherlands B.V.	Duiven, the Netherlands	100%
Fico International B.V.	Duiven, the Netherlands	100%
Besi Leshan Co., Ltd.	Leshan, China	87%
Besi APac Sdn. Bhd.	Shah Alam, Malaysia	100% <sup>1</sup>
ASM Fico (F.E.) Sdn. Bhd.	Shah Alam, Malaysia	99.9% <sup>2</sup>
Fico Hong Kong Ltd.	Hong Kong, China	100%
Meco International B.V.	Drunen, the Netherlands	100%
Meco Equipment Engineers B.V.	Drunen, the Netherlands	100%
Besi North America, Inc.	Chandler, Arizona, USA	100%
Datacon Eurotec GmbH i.L.	Berlin, Germany	100%
Datacon Beteiligungs GmbH	Radfeld, Austria	100%
Besi Austria GmbH	Radfeld, Austria	100%
Esec International B.V.	Duiven, the Netherlands	100%
Besi Switzerland AG	Cham, Switzerland	100%
Esec China Financial Ltd.	Hong Kong, China	100%
Besi (Shanghai) Trading Co., Ltd.	Shanghai, China	100%
Esec (Singapore) Pte. Ltd.	Singapore, Singapore	100%
Besi Spares and Tooling AG	Cham, Switzerland	100%

<sup>1</sup> In order to comply with local corporate law, a non-controlling shareholding (less than 0.1%) is held by Company Management.

<sup>2</sup> In order to comply with local corporate law, a non-controlling shareholding is held by Company Management.

All intercompany profits, transactions and balances have been eliminated in the consolidation.

### Foreign currency translation

The Consolidated Financial Statements are presented in euros, which is the parent company's functional and presentation currency. Each entity in the group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. The principal exchange rates against the euro used in preparing the Consolidated Statement of Financial Position and the Consolidated Statement of Comprehensive Income are:

	Consolidated Statement of Financial Position		Consolidated Statement of Comprehensive Income	
	2016	2015	2016	2015
US dollar	1.05	1.09	1.11	1.12
Swiss franc	1.07	1.09	1.09	1.08
Malaysian ringgit	4.73	4.69	4.59	4.31
Chinese yuan	7.32	7.09	7.33	7.02

Transactions in foreign currencies are initially recorded at the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the balance sheet date. All differences are accounted for into the Consolidated Statement of Comprehensive Income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. Any goodwill arising on the acquisition of a foreign operation and any fair-value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate. The assets and liabilities of foreign operations are translated into euros at the rate of exchange ruling at the balance sheet date and their Statement of Comprehensive Income is translated at the weighted average exchange rates for the year. The exchange differences arising on the translation of assets and liabilities are recognized in other comprehensive income, and presented in the foreign currency translation reserve (translation reserve) in equity. On disposal of a foreign entity, the deferred cumulative amount recognized in equity relating to that particular foreign operation is recognized in the Consolidated Statement of Comprehensive Income.

### Cash and cash equivalents

Cash and cash equivalents consist of highly liquid investments with an original maturity date at the date of acquisition of three months or less. Cash and cash equivalents are measured at fair value.

### Deposits

Deposits consist of cash and cash equivalents which have been put on deposit with a maturity between 3 and 12 months.

### Trade receivables and other receivables

Trade and other receivables are initially measured at fair value and subsequently at amortized cost less any impairment loss. An allowance for impairment of trade and other receivables is established if the collection of a receivable becomes doubtful. Such receivable becomes doubtful when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganization, and default or delinquency in payments are considered indicators that the receivable is impaired. The amount of the allowance is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. An impairment loss and its subsequent reversals are recognized in the Consolidated Statement of Comprehensive Income.

### Inventories

Inventories are stated at the lower of cost (using moving weighted average costs) or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and costs to make the sales. Cost includes net prices paid for materials purchased and all expenses to bring the inventory to its current location, charges for freight and custom duties, production labor costs and factory overhead.

### Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment charges. Costs include expenditures that are directly attributable to the acquisition of the asset, including financing expenses of capital investment projects under construction. Government grants to compensate for the cost of an asset are deducted from the cost of the related asset.

Depreciation is calculated using the straight-line method, based on the following estimated useful lives:

Category	Estimated useful life
Land	Not depreciated
Buildings	15-30 years
Leasehold improvements <sup>1</sup>	10-15 years
Machinery and equipment	2-10 years
Office furniture and equipment	3-10 years

<sup>1</sup> Leasehold improvements are depreciated over the shorter of the lease term or economic life of the asset.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment. The residual value, if not insignificant, is reassessed annually.

The Company recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefit relating to that subsequent expenditure will flow to the Company and the cost can be measured reliably. Other costs are recognized in the Consolidated Statement of Comprehensive Income as expense, as incurred.

### Leased assets

Assets acquired under financial leases are included in the Statement of Financial Position at the present value of the minimum future lease payments and are depreciated over the shorter of the lease term or their estimated economic lives. A corresponding liability is recorded at the inception of the financial lease and the interest element of financial leases is charged to interest expense. Operating lease payments are recognized as an expense in the Consolidated Statement of Comprehensive Income on a straight-line basis over the lease term.

### Intangible assets

Intangible assets are valued at cost less accumulated amortization and impairment charges. All intangible assets are tested for impairment whenever there is an indication that the intangible asset may be impaired. Other intangible assets, such as goodwill and intangible assets not yet in use, are not amortized, but tested for impairment annually. In cases where the carrying value of the intangibles exceeds the recoverable amount, an impairment charge is recognized in the Consolidated Statement of Comprehensive Income.

### Business combinations and goodwill

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Company. Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, the Company takes into consideration potential voting rights that currently are exercisable.

The Company measures goodwill at the acquisition date as:

- The fair value of the consideration transferred; plus
- The recognized amount of any non-controlling interests in the acquiree; plus
- If the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree; less
- The net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Company incurs in connection with a business combination are expensed as incurred.

Any contingent consideration payable is recognized at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not measured and settlement is accounted for within equity. Otherwise, subsequent changes to fair value of the contingent consideration are recognized in profit or loss.

### Capitalized development expenses

Expenditures for research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in the Consolidated Statement of Comprehensive Income as an expense, as incurred. Expenditure for development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalized if the product or process is technically and commercially feasible, the Company has the intention and sufficient resources to complete development, the Company has the ability to use or sell the development and the ability to reliably measure the expenditure attributable to the development during its process.

The expenditure capitalized includes the cost of materials, direct labor and other directly attributable costs. Other development expenditures are recognized in the Consolidated Statement of Comprehensive Income as an expense, as incurred. Government grants to compensate for the cost of an asset are deducted from the cost of the related asset. Capitalized development expenditures are stated at cost less accumulated amortization and impairment losses.

### Other identifiable intangible assets

Other intangible assets that are acquired by the Company are stated at cost (i.e. fair value of the consideration given) at the date of acquisition less accumulated amortization and impairment losses.

### Amortization

Amortization is charged to the Consolidated Statement of Comprehensive Income on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Amortization of capitalized development expenses commences at the moment of revenue recognition for the first machine delivered in which the newly developed technology is applied. Acquired order backlog is amortized based on revenue from the associated backlog. Other intangible assets are amortized from the date they are available for use.

The estimated useful lives are as follows:

Category	Estimated useful life
Patents and trademarks	8-16 years
Customer relationships	12 years
Development expenses	3-7 years

The Company does not have any other intangible assets with indefinite lives.

The amortization is recognized in the Consolidated Statement of Comprehensive Income in cost of sales, selling, general and administrative expenses and research and development expenses.

### Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets are reviewed at each year's end balance sheet date to determine whether there is any indication of impairment. If such indication exists, the asset's recoverable amount is estimated. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each balance sheet date.

An impairment loss is recognized whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognized in the Consolidated Statement of Comprehensive Income. Impairment losses recognized in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units (group of units) and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro-rata basis.

### Calculation of recoverable amount

The recoverable amount of other assets is the higher of their fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

### Reversals of impairment

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. Impairment losses in respect of goodwill are not reversed. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

### Other non-current assets

Other non-current assets are stated at fair value.

### Other current liabilities

Other current liabilities consist of notes payable to banks, trade payables and other payables and are initially measured at fair value and subsequently at amortized cost, using the effective interest method.

### Financial assets and liabilities

All financial assets and liabilities have been valued in accordance with the loans and receivable category as defined in IAS 39 unless indicated otherwise.

### Financial assets

Non-derivative financial assets are recognized initially at fair value plus directly attributable transaction costs.

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognized when:

- The rights to receive cash flows from the asset have expired.
- The Company retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a "pass-through" arrangement.
- The Company has transferred its rights to receive cash flows from the asset and either (i) has transferred substantially all the risks and rewards of the asset, or (ii) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.
- When the Company has transferred its rights to receive cash flows from an asset and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Company's continuing involvement in the asset. Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Company could be required to repay.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognized on the trade date, i.e. the date that the Company commits to purchase or sell the asset.

### Impairment of financial assets

The Company assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if and only if, there is objective evidence of impairment as a result of one or more events that have occurred after the initial recognition of the asset (an incurred "loss event") and that loss event has an impact on the estimated future cash flows of the financial asset of the group of assets that can be reliably estimated. Evidence of impairment may include indicators that the debtor or group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in areas or economic conditions that correlate with defaults.

### Derivative financial instruments and hedge accounting

The Company uses derivative financial instruments to hedge its exposure to foreign currency exchange rate fluctuations relating to operational activities denominated in foreign currencies. In accordance with its treasury and risk policy, the Company does not hold or issue derivative financial instruments for trading purposes. The Company uses hedge accounting. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

The Company recognizes derivative financial instruments initially at fair value; attributable transaction costs are recognized in profit or loss as incurred. Subsequent to initial recognition, derivative financial instruments are measured at fair value. The gain or loss on remeasurement to fair value is recognized immediately in the Consolidated Statement of Comprehensive Income. The derivative financial instruments designated at fair value through Consolidated Statement of Comprehensive Income are securities that otherwise would have been classified as available for sale. However, where derivatives qualify for hedge accounting, recognition of any gain or loss depends on the nature of the item being hedged.

The Company applies the cash flow hedge accounting model. In this hedging model, the effective part of a hedge transaction is reported as a component of other comprehensive income, which is reclassified to earnings in the same period(s) in which the hedged forecasted transaction affects earnings. The ineffective part of the hedge is recognized directly in the Consolidated Statement of Comprehensive Income in financial income (expense).

### **Loans and receivables**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognized initially at fair value plus any attributable transaction costs. Subsequent to initial recognition, loans and receivables are valued at amortized costs using the effective interest method, less any impairment losses. Gains and losses are recognized in the Consolidated Statement of Comprehensive Income when the loans and receivables are derecognized or impaired, as well as through the amortization process.

### **Financial liabilities**

Non-derivative financial liabilities are initially measured at fair value and subsequently at amortized cost, using the effective interest method. The Company's financial liabilities include trade and other payables, bank overdrafts, loans and borrowings and compound financial instruments, such as Convertible Notes.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the Consolidated Statement of Comprehensive Income.

Compound financial instruments issued by the Company comprise Convertible Notes denominated in euro that can be converted to share capital at the option of the holder, when the number of shares to be issued is fixed and does not vary with changes in fair value. The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option. The equity component is recognized initially at the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts. Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest method. The equity component of a compound financial instrument is not re-measured. Interest related to the financial liability is recognized in profit or loss. On conversion, the financial liability is reclassified to equity and no gain or loss is recognized.

### **Employee benefits**

#### **Pension plans**

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

The Company's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets is deducted. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability (asset).

The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Company, the recognized asset is limited to the present value of economic benefits available in the form of any future refund from the plan or reductions in future contributions paid to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Company. An economic benefit is available to the Company if it is realizable during the life of the plan, or on settlement of the plan liabilities.

Remeasurements arising from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Company recognizes them immediately in other comprehensive income and all other expenses related to defined benefit plans in employee benefit expenses in profit or loss.

When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognized immediately in profit or loss when the plan amendment or curtailment occurs.

A majority of the Company's Dutch employees participate in a pension plan operated by an industry-wide pension fund, which classifies as a defined contribution plan under IAS 19.

### **Severance provisions**

A provision for severance obligations is recognized in the Statement of Financial Position if the Company is obligated to severance payments, even if future termination of the contract is initiated by the employee. For some of our subsidiaries this is mandatory by law.

### **Share-based payments**

The fair value of equity-settled options granted is recognized as an employee expense with a corresponding increase in equity. The fair value is measured at grant date and expensed over the period during which the employees become unconditionally entitled to the shares.

In 2011, the Company established the BE Semiconductor Industries Incentive Plan 2011-2016 (the "Incentive Plan 2011-2016"), which contains specific conditions for the Performance Shares awarded to the Board of Management. In 2012, the Company established the BE Semiconductor Industries N.V. Long-Term Incentive plan for Employees (Non-Board Members) 2012-2016 (the "LTI Plan 2012-2016"). For more details, reference is made to Note 20.

The grant date fair value of the Performance Shares granted to Board Members and Non-Board Members is measured taking into account the impact of any market performance conditions and non-vesting conditions, but excludes the impact of any service and non-market performance conditions.

The grant date fair value of the equity-settled share-based payment awards ("Performance Shares") is recognized as an employee expense, with a corresponding increase in equity, over the period between the grant date and the vesting date of the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service condition and any non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

### **Provisions**

A provision is recognized in the Statement of Financial Position when the Company has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

### **Warranties**

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

### **Restructuring**

A provision for restructuring is recognized when the Company has approved a detailed and formal restructuring plan, the restructuring has either commenced or has been announced publicly and is irrevocable. The restructuring plan includes workforce reduction, asset write-offs and building closure obligations. Future operating costs are not provided for.

### **Onerous contracts**

A provision for onerous contracts is recognized when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract.

### **Revenue recognition**

Revenue from the sale of products in the course of ordinary activities is measured at the fair value of the consideration received or receivable, net returns, trade discounts and volume rebates. Revenue is recognized when persuasive evidence exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the products and the amount of revenue can be measured reliably. Discounts are recognized as a reduction of revenue as the sales are recognized. The timing of the transfers of risks and rewards varies depending on the individual terms of the sales agreement. Revenue related to training and technical support is recognized when the service is rendered. Revenue from the sale of spare parts and materials is recognized when the risk and rewards are transferred to the buyer, which is mostly the case when the goods are shipped.

The main portion of our revenue is derived from contractual arrangements with our customers that have multiple deliverables, such as installation and training services, service contracts and free of charge spares deliveries. The revenue relating to the undelivered elements of the arrangements is deferred until delivery of these elements. Revenue from installation and training services is recognized when the services are completed. Revenue from service contracts is recognized over the term of the contract. Revenue from free of charge spares is recognized when the goods are shipped. Revenue from new technology is deferred until acceptance test at the customer's site has passed.

#### **Subsidies and other governmental credits**

Subsidies and other governmental credits to cover research and development costs relating to approved projects are recorded as research and development credits in the period when the research and development costs to which such subsidy or credit relates occurs. If the related development costs are capitalized, the subsidies and other governmental credits will be offset against capitalization.

#### **Net financing expenses and borrowing costs**

Net financing costs comprise interest payable on borrowings calculated using the effective interest rate method, foreign exchange gains and losses and gains and losses on hedging instruments that are recognized in the Consolidated Statement of Comprehensive Income. Interest income is recognized in the Consolidated Statement of Comprehensive Income as it accrues, using the effective interest method. The interest expense component of finance lease payments is recognized in the Consolidated Statement of Comprehensive Income using the effective interest rate method. Borrowing costs that are not directly attributable to the acquisition or production of a qualifying asset are recognized in the Consolidated Statement of Comprehensive Income using the effective interest method.

#### **Income taxes**

The Company applies the liability method of accounting for taxes. Under the liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using substantively enactment tax rates expected to apply to taxable income in the years which these temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the Consolidated Statement of Comprehensive Income in the period that includes the enactment date. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

#### **Segment reporting**

The Company is engaged in one line of business, the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries. The Company identifies three operating segments (Product Groups). Each Product Group is engaged in business activities from which it may earn revenues. Consequently, the Company has defined each Product Group as individual cash-generating unit. The three Product Groups are aggregated into a single reporting segment, the development, manufacturing, marketing, sales and service of assembly equipment for the semiconductor's back-end segment. Since the Company operates in one segment and in one group of similar products and services, all financial segment information can be found in the Consolidated Financial Statements.

#### **Indicators**

The similarity of economic characteristics can be evaluated based on future prospects. Within the semiconductor back-end segment the market information is based on VLSI forecasts. Industry trends are captured in these forecasts and always used as a source when referring to the future developments (e.g. press releases). Demand for semiconductor devices and expenditures for the equipment required to assemble semiconductors is cyclical, depending in large part on levels of demand worldwide for computing and peripheral equipment, telecommunications devices and automotive and industrial components as well as the production capacity of global semiconductor manufacturers. All operating segments move up or down in the same response to the same positive and negative factors like general economic upturns and downturns, changes in interest rates and currency exchange rates.

The nature of products and services within the Besi group is very much the same, all captured in the semiconductor back-end industry and served by one service organization, which is designing and supporting that equipment.

Furthermore, all production processes are organized as manufacturing and assembly of projects and are mainly produced in our Asian production facility in Malaysia and China. This means that the production of the different Product Groups shares the same facility, employees and processes. Also, similar materials are used to produce the systems (e.g. displays).

The evaluation of the type or class of customer for products and services leads to the conclusion that the risk exposure profile of the customers is similar because of the fact that all customers are leading U.S., European and Asian semiconductor manufacturers and assembly subcontractors which in their turn depend on the global market conditions.

One worldwide responsible person for Sales & Customer Support, indicates the centralization of the Sales organization and the method used to distribute our products. The Besi name is used throughout the global operations and the Besi logo has been adopted to be used by all Product Groups. As from January 1, 2013, legal entity names have been changed, amongst others, to put more emphasis on this uniformed global operating, like Besi Austria GmbH, Besi Switzerland AG and Besi Netherlands B.V.

Furthermore, in order to assess performance and to make resource allocation decisions based on sufficient detailed information, the Chief Operating Decision Maker ("CODM") must have financial information which covers all of the Product Groups, including corporate functions, meaning full Consolidated Financial Statements. For example, the total external financing of the Besi group is evaluated on consolidated level and not split into business operations.

Accordingly, all information consolidated is the operating segment under IFRS 8, reported in the semiconductor back-end industry.

### **Characteristics**

The Company identifies three operating segments (Product Groups) that the CODM reviews in detail. These Product Groups are engaged in business activities from which it may earn revenues. Those operating segments are the following Product Groups: Die Attach, Packaging and Plating. All operational functions are allocated to these Product Groups: 1) Product Marketing, 2) Research and Development, 3) Product Group management, 4) Customer Project management and 5) Operations. Corporate functions (Finance, Legal, Human Resources and Sales & Service) do not qualify as operating segments. Hence, Besi identifies three operating segments which meet the IFRS 8 criteria.

### **Significant accounting judgements, estimates and assumptions**

The preparation of the Company's Consolidated Financial Statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the reporting date. However, uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future.

### **Judgements**

In the process of applying the Company's accounting policies, management has made the following judgements, apart from those involving estimations, that have the most significant effect on the amounts recognized in the Consolidated Financial Statements:

### **Impairment of non-financial assets**

The Company assesses whether there are any indicators of impairment for all non-financial assets at each reporting date. Goodwill and other indefinite life intangibles are tested for impairment annually and at other times when such indicators exist. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. When value-in-use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and determine a suitable discount rate in order to calculate the present value of those cash flows. Further details are contained in Notes 8, 9 and 10.

### **Deferred tax assets**

Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. Further details are contained in Note 11.

### **Pension and other post-employment benefits**

The costs of defined benefit pension plans and other post-employment medical benefits are determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, expected rates of return on assets, future salary increases, mortality rates and future pension increases. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty. Further details are given in Note 20.

### **Development costs**

Development costs are capitalized in accordance with the accounting policy as reflected before. Initial capitalization of costs is based on management judgement that technological and economic feasibility is confirmed, usually when a product development project has reached a defined milestone according to an established project management model. In determining the amounts to be capitalized, management makes assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits. Further details are contained in Note 10.

### **Inventory obsolescence**

Provisions for obsolete inventories are recognized for inventories which are deemed obsolete. Significant management judgement is required to determine the amount which is considered obsolete. Further details are contained in Note 5.

## New IFRS standards and interpretations

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after January 1, 2016. Those which may be relevant to the Company are set out below.

### IFRS 9 Financial Instruments

IFRS 9, published in July 2014, replaces the existing guidance in IAS 39 *Financial Instruments: Recognition and Measurement*. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. IFRS 9 is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted. The Company is assessing the potential impact on its Consolidated Financial Statements resulting from the application of IFRS 9 and it is estimated that the implementation will not have a material impact on the Consolidated Statement of Comprehensive Income.

### IFRS 15 Revenue from contracts with customers

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognized. It replaces existing revenue recognition guidance, including IAS 18 *Revenue*, IAS 11 *Construction Contracts* and IFRIC 13 *Customer Loyalty Programmes*. IFRS 15 is effective for annual reporting periods beginning on or after 1 January 2018, with early adoption permitted. The Company is assessing the potential impact on its Consolidated Financial Statements resulting from the application of IFRS 15 and it is estimated that the implementation of IFRS 15 will not have a material impact on the Consolidated Statement of Comprehensive Income.

### IFRS 16 Leases

IFRS 16 specifies how an IFRS reporter will recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17. IFRS 16 was issued in January 2016 and applies to annual reporting periods beginning on or after January 1, 2019. The Company is assessing the potential impact on its Consolidated Financial Statements resulting from the application of IFRS 16.

### IFRS Amendments

Several IFRS amendments have been published by the IASB. However, the Company expects no material impact on the Consolidated Financial Statements.

## 3. Cash and cash equivalents

(euro in thousands)	December 31, 2016	December 31, 2015
Short-term deposits	-	83,115
Cash on hand at banks	224,790	74,703
<b>Total cash and cash equivalents</b>	<b>224,790</b>	<b>157,818</b>

Interest rates are variable. At December 31, 2016, an amount of € 1.9 million in cash and cash equivalents was restricted (2015: € 1.8 million). These cash and cash equivalents have been restricted due to a cash cover.

In December 2016 an amount of € 80 million has been put on deposit for one year and is therefore presented separately on the face of the balance sheet.

## 4. Trade receivables

Trade receivables, generally with payment terms of 30 to 90 days, with impairment losses amounting to € 713 and € 878 at December 31, 2016 and 2015, respectively, are shown as follows:

(euro in thousands)	Total	Impaired	Neither past due nor impaired	< 30 days	30-60 days	60-90 days	90-120 days	Past due > 120 days
2016	89,845	(713)	67,768	7,974	4,080	1,696	1,296	7,744
2015	80,640	(878)	55,097	8,983	5,436	3,036	1,732	7,234

The movements in the allowance for doubtful accounts are as follows (see credit risk disclosure in Note 28 for further guidance):

(euro in thousands)	2016	2015
Balance at January 1	878	953
Additions (releases)	(197)	(59)
Utilized	(31)	(59)
Foreign currency translation	63	43
<b>Balance at December 31</b>	<b>713</b>	<b>878</b>

For trade receivables that have been pledged as collateral for the borrowing facilities and long-term debt, reference is made to Note 13.

## 5. Inventories

Inventories consist of the following:

(euro in thousands)	December 31, 2016	December 31, 2015
Raw materials and spare parts	24,238	23,799
Work in progress	28,347	25,500
Finished goods	2,469	4,578
<b>Total inventories, net</b>	<b>55,054</b>	<b>53,877</b>

In 2016 raw materials and changes in work in progress and finished goods included in cost of sales amounted to € 159.0 million (2015: € 153.0 million). For inventories that have been pledged as collateral for the borrowing facilities and long-term debt, reference is made to Note 13.

The movements in the provision for obsolescence are as follows:

(euro in thousands)	2016	2015
Balance at January 1	14,837	19,210
Additions (releases)	1,400	(1,672)
Usage	(2,722)	(3,674)
Foreign currency translation	68	973
<b>Balance at December 31</b>	<b>13,583</b>	<b>14,837</b>

## 6. Other receivables

Other receivables consist of the following:

(euro in thousands)	December 31, 2016	December 31, 2015
VAT receivables	4,016	1,391
Interest receivable	110	49
Deposits	205	206
Forward exchange contracts	258	466
Insurance receivable	-	175
R&D grants	2,218	1,001
Receivables from employees	97	129
Other	421	329
<b>Total other receivables</b>	<b>7,325</b>	<b>3,746</b>

Other receivables do not include any amounts with expected remaining terms of more than one year. Reference is made to Note 28 (Financial instruments) for additional information with respect to forward foreign currency exchange contracts.

## 7. Prepayments

Prepayments consist of the following:

(euro in thousands)	December 31, 2016	December 31, 2015
Prepaid insurance	90	91
Prepaid rent	169	23
Prepaid annual maintenance contracts	75	68
Prepaid pensions	550	506
Prepaid social security	181	109
Prepaid licences	582	544
Prepaid suppliers	148	494
Prepaid exhibitions	71	70
Prepaid payroll related	-	80
Other prepayments	804	324
<b>Total prepayments</b>	<b>2,670</b>	<b>2,309</b>

Prepayments do not include any amounts with expected remaining terms of more than one year.

## 8. Property, plant and equipment

Property, plant and equipment, net consist of the following:

(euro in thousands)	Land, buildings and leasehold improvements	Machinery and equipment	Office furniture and equipment	Assets under construction	Total
<i>Balance at January 1, 2016</i>					
Cost	26,953	34,950	10,199	122	72,224
Accumulated depreciation	(12,533)	(24,123)	(8,850)	-	(45,506)
<b>Property, plant and equipment, net</b>	<b>14,420</b>	<b>10,827</b>	<b>1,349</b>	<b>122</b>	<b>26,718</b>
<i>Changes in book value in 2016</i>					
Capital expenditures	1,249	1,639	591	759	4,238
Transfers from/to inventory	-	1,013	-	-	1,013
Disposals (cost)	(6)	(531)	(149)	-	(686)
Disposals (accumulated depreciation)	6	531	143	-	680
Depreciation	(1,128)	(2,947)	(667)	-	(4,742)
Foreign currency translation	(99)	(122)	(4)	(3)	(228)
<b>Total changes</b>	<b>22</b>	<b>(417)</b>	<b>(86)</b>	<b>756</b>	<b>275</b>
<i>Balance at December 31, 2016</i>					
Cost	28,090	36,322	10,726	878	76,016
Accumulated depreciation	(13,648)	(25,912)	(9,463)	-	(49,023)
<b>Property, plant and equipment, net</b>	<b>14,442</b>	<b>10,410</b>	<b>1,263</b>	<b>878</b>	<b>26,993</b>

(euro in thousands)	Land, buildings and leasehold improvements	Machinery and equipment	Office furniture and equipment	Assets under construction	Total
<i>Balance at January 1, 2015</i>					
Cost	29,918	32,590	10,179	1,315	74,002
Accumulated depreciation	(14,682)	(23,353)	(8,719)	-	(46,754)
<b>Property, plant and equipment, net</b>	<b>15,236</b>	<b>9,237</b>	<b>1,460</b>	<b>1,315</b>	<b>27,248</b>
<i>Changes in book value in 2015</i>					
Capital expenditures	875	3,014	574	(1,273)	3,190
Transfers from/to inventory	-	1,560	-	-	1,560
Disposals (cost)	(3,631)	(2,772)	(650)	-	(7,053)
Disposals (accumulated depreciation)	3,710	2,690	653	-	7,053
Depreciation	(1,553)	(2,833)	(797)	-	(5,183)
Foreign currency translation	(217)	(69)	109	80	(97)
<b>Total changes</b>	<b>(816)</b>	<b>1,590</b>	<b>(111)</b>	<b>(1,193)</b>	<b>(530)</b>
<i>Balance at December 31, 2015</i>					
Cost	26,953	34,950	10,199	122	72,224
Accumulated depreciation	(12,533)	(24,123)	(8,850)	-	(45,506)
<b>Property, plant and equipment, net</b>	<b>14,420</b>	<b>10,827</b>	<b>1,349</b>	<b>122</b>	<b>26,718</b>

For company-owned property, plant and equipment which have been pledged as security for loans, reference is made to Note 13.

### Depreciation

The depreciation is recognized in the following line items in the Consolidated Statement of Comprehensive Income:

(euro in thousands)	Year ended December 31,	
	2016	2015
Cost of sales	1,765	1,787
Selling, general and administrative expenses	2,400	2,706
Research and development expenses	577	690
<b>Total depreciation</b>	<b>4,742</b>	<b>5,183</b>

### 9. Goodwill

Goodwill, net consists of the following:

(euro in thousands)	2016	2015
<i>Balance at January 1</i>		
Cost	65,742	64,753
Accumulated impairment	(20,200)	(20,200)
<b>Goodwill, net</b>	<b>45,542</b>	<b>44,553</b>
<i>Changes in book value</i>		
Foreign currency translation	325	989
<b>Total changes</b>	<b>325</b>	<b>989</b>
<i>Balance at December 31</i>		
Cost	66,067	65,742
Accumulated impairment	(20,200)	(20,200)
<b>Goodwill, net</b>	<b>45,867</b>	<b>45,542</b>

## Impairment tests for cash-generating units containing goodwill

The Company annually carries out impairment tests on capitalized goodwill, based on the cash-generating units.

The aggregate carrying amounts of goodwill with indefinite lives allocated to each cash-generating unit are as follows:

(euro in thousands)	December 31, 2016	December 31, 2015
Die Attach	43,886	43,562
Plating	1,981	1,980
<b>Total</b>	<b>45,867</b>	<b>45,542</b>

The value in use of the cash-generating units subject to impairment testing is calculated based on the discounted cash flow method (income approach). The value in use calculations use discounted cash flow projections based on the budget for the year 2017 and financial projections per Product Group approved by management for the projection period (2018-2021).

The key assumptions used by management underlying the value in use calculation per cash-generating unit are as follows:

- Cash flows per cash-generating unit for the five-year projection period are based on:
  - The Company's budget for 2017.
  - Revenue forecasts for 2018-2021 as per market growth estimates from VLSI Research, a leading independent analyst for the semiconductor and semiconductor equipment industries, and the Company's estimated market shares.
  - Bottom-up estimates for gross profit, research and development and selling, general and administrative expenses as per management's strategic planning.
- A pre-tax discount rate of 11.6% (Die Attach) to 14.5% (Plating) representing the pre-tax weighted average cost of capital (WACC) is determined using the Capital Asset Pricing Model (in 2015 a pre-tax discount rate between 11.4% and 11.8%).
- Residual value is based on a 1.0% perpetual growth rate (in 2015: 1.0%).
- The risk free rate of 0.9% (in 2015: 0.5%) and equity risk premium of 6.5% (in 2015: 6.3%).

All assumptions used reflect the current market assessment and are based on published indices and management estimates which are challenged by a third party financial advisor. Based on this analysis, management believes that the value in use of the cash-generating units subject to impairment testing substantially exceeded their carrying values and that, therefore, goodwill was not impaired as of December 31, 2016.

The outcome of a sensitivity analysis was that reasonably possible adverse changes in key assumptions of 100 basis points (lower growth rates and higher discount rates respectively) would not result in other conclusions for the impairment test performed.

## 10. Other intangible assets

Other intangible assets, net consist of the following:

(euro in thousands)	Software	Customer relationships	Development expenses	Total
<i>Balance at January 1, 2016</i>				
Cost	10,491	6,083	51,997	68,571
Accumulated impairment	(330)	-	-	(330)
Accumulated amortization	(8,967)	(5,577)	(13,323)	(27,867)
<b>Other intangible assets, net</b>	<b>1,194</b>	<b>506</b>	<b>38,674</b>	<b>40,374</b>
<i>Changes in book value in 2016</i>				
Capitalized development expenses	-	-	6,737	6,737
Capitalized expenditures	250	-	-	250
Disposals (cost)	(1,383)	(6,083)	(3,550)	(11,016)
Disposals (accumulated amortization)	1,383	6,083	3,550	11,016
Amortization	(628)	(506)	(8,740)	(9,874)
Foreign currency differences	29	-	328	357
<b>Total changes</b>	<b>(349)</b>	<b>(506)</b>	<b>(1,675)</b>	<b>(2,530)</b>
<i>Balance at December 31, 2016</i>				
Cost	9,422	-	56,283	65,705
Accumulated impairment	(330)	-	-	(330)
Accumulated amortization	(8,247)	-	(19,284)	(27,531)
<b>Other intangible assets, net</b>	<b>845</b>	<b>-</b>	<b>36,999</b>	<b>37,844</b>

(euro in thousands)	Software	Customer relationships	Development expenses	Total
<i>Balance at January 1, 2015</i>				
Cost	9,386	6,083	42,574	58,043
Accumulated amortization	(8,331)	(5,070)	(4,368)	(17,769)
<b>Other intangible assets, net</b>	<b>1,055</b>	<b>1,013</b>	<b>38,206</b>	<b>40,274</b>
<i>Changes in book value in 2015</i>				
Capitalized development expenses	-	-	5,627	5,627
Capitalized expenditures	978	-	-	978
Amortization	(539)	(507)	(8,548)	(9,594)
Impairment	(330)	-	-	(330)
Foreign currency differences	30	-	3,389	3,419
<b>Total changes</b>	<b>139</b>	<b>(507)</b>	<b>468</b>	<b>100</b>
<i>Balance at December 31, 2015</i>				
Cost	10,491	6,083	51,997	68,571
Accumulated impairment	(330)	-	-	(330)
Accumulated amortization	(8,967)	(5,577)	(13,323)	(27,867)
<b>Other intangible assets, net</b>	<b>1,194</b>	<b>506</b>	<b>38,674</b>	<b>40,374</b>

### Amortization

The amortization charge is recognized in the following line items in the Consolidated Statement of Comprehensive Income:

(euro in thousands)	Year ended December 31,	
	2016	2015
Cost of sales	4	5
Selling, general and administrative expenses	1,130	1,002
Research and development expenses	8,740	8,587
<b>Total amortization</b>	<b>9,874</b>	<b>9,594</b>

### 11. Income taxes

The items giving rise to the deferred tax assets (liabilities), net were as follows:

(euro in thousands)	December 31, 2016	December 31, 2015
<i>Deferred tax assets (liabilities)</i>		
Operating losses carry forward	15,437	16,626
Intangible assets	(8,144)	(6,986)
Inventories	502	622
Provision for pensions	1,945	1,536
Convertible Notes	(2,853)	-
Other items	662	546
<b>Total deferred tax assets (liabilities), net</b>	<b>7,549</b>	<b>12,344</b>

(euro in thousands)	December 31, 2015	Profit & loss 2016	OCI	Equity	Foreign currency	December 31, 2016
<i>Deferred tax assets (liabilities)</i>						
Operating losses carry forward	16,626	(1,331)	-	-	142	15,437
Intangible assets	(6,986)	(1,118)	-	-	(40)	(8,144)
Inventories	622	(117)	-	-	(3)	502
Provision for pensions	1,536	121	269	-	19	1,945
Convertible Notes	-	28	-	(2,881)	-	(2,853)
Other items	546	158	-	-	(42)	662
<b>Total</b>	<b>12,344</b>	<b>(2,259)</b>	<b>269</b>	<b>(2,881)</b>	<b>76</b>	<b>7,549</b>

The deferred tax assets for operating losses carry forward are related to the US and Dutch operations of the Company. Under applicable US tax law, the carry forwards related to the US operating losses of € 23.7 million expire during the period of 2022 and thereafter. The carry forwards related to the Dutch operating losses amount to approximately € 38.2 million and expire during the periods of 2017 through 2022. The Company has tax credits amounting to € 0.4 million of which € 0.2 million is not recognized.

In assessing the recoverability of deferred tax assets, the Company considers whether it is probable that sufficient taxable profits will be available to realize some portion or all of the deferred tax assets. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The Company considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment.

The distinction in recognized and unrecognized tax losses carry forward is as follows:

(euro in millions)	2016		2015	
	Recognized	Unrecognized	Recognized	Unrecognized
Netherlands	9.5	-	9.5	5.4
Switzerland	-	-	1.6	0.9
USA	5.9	2.2	5.5	2.5
<b>Total</b>	<b>15.4</b>	<b>2.2</b>	<b>16.6</b>	<b>8.8</b>

The aggregate deferred tax related to items recognized outside of profit and loss amounts to € 2.6 million. The Dutch domestic statutory tax rate is 25.0% for the years ended December 31, 2016 and 2015. The reconciliation between the actual income tax shown in the Consolidated Statement of Comprehensive Income and the expense (benefit) that would be expected based on the application of the domestic tax rate to income before income tax and related goodwill adjustment, is as follows:

(euro in thousands)	Year ended December 31, 2016		Year ended December 31, 2015	
		in % of income before taxes		in % of income before taxes
"Expected" income tax expense based on domestic rate	18,388	25.0%	14,275	25.0%
Non-deductible expenses	2,186	3.0%	1,761	3.1%
Foreign tax rate differential <sup>1</sup>	(8,605)	(11.7%)	(6,184)	(10.8%)
Tax exempt income	(232)	(0.3%)	(154)	(0.3%)
Recognition of previous unrecognized tax losses in the Netherlands and USA	(2,675)	(3.7%)	(2,812)	(4.9%)
Deferred tax expense (income) arising from write-down of/ reversal of previous recognized tax losses Switzerland	(969)	(1.3%)	769	1.3%
Withholding taxes	43	0.1%	140	0.3%
Other	123	0.1%	352	0.6%
<b>Income tax expense shown in Consolidated Statement of Comprehensive Income</b>	<b>8,259</b>	<b>11.2%</b>	<b>8,147</b>	<b>14.3%</b>

<sup>1</sup> This mainly relates to the difference in the nominal Dutch and Swiss tax rates.

The provision for income tax expense shown in the Consolidated Statement of Comprehensive Income consisted of the following:

(euro in thousands)	Year ended December 31,	
	2016	2015
Current	6,000	3,291
Deferred	2,259	4,856
<b>Total</b>	<b>8,259</b>	<b>8,147</b>

There are no income tax consequences attached to the proposed payment of dividends by the Company to its shareholders.

### Tax risk

Given the international business structure of the Company and the increasing number and amounts of intercompany transactions and the internationally growing attention for tax Base Erosion and Profit Shifting ("BEPS"), certain tax risks hereto may exist. The Company does not pay taxes or make use of tax structures in countries where the Company has no economic activities.

Currently in Malaysia and Austria a tax audit is ongoing of which the outcome is not known yet.

## 12. Other non-current assets

Other non-current assets consist of the following:

(euro in thousands)	December 31, 2016	December 31, 2015
Funds with insurance companies for pension liability	1,585	1,513
Guarantee deposits	693	963
Other	243	235
<b>Total other non-current assets</b>	<b>2,521</b>	<b>2,711</b>

With respect to more details the Company refers to Note 20.

## 13. Borrowing facilities

At December 31, 2016, Besi and its subsidiaries had available lines of credit aggregating € 33 million, under which € 18.6 million of borrowings were utilized of which € 11.9 million relate to notes payable to banks and the remaining balance of € 6.7 million relate amongst others to bank guarantees and forex transactions. In general, interest is charged at the banks' base lending rates or Euribor/Libor plus an increment. Most credit facility agreements include covenants requiring Besi and/or its subsidiaries to maintain certain financial positions or financial ratios and have no stated contractual maturity. Besi and all of its applicable subsidiaries were in compliance with all loan covenants at December 31, 2016.

A summary of Besi's principal credit lines is as follows:

- € 18 million of Besi's credit lines relate to Besi and its Dutch subsidiaries. The principal restrictive governance contains a solvency ratio, net total interest bearing debt to EBITDA ratio and a current ratio, all of which are calculated on a consolidated Besi level. All borrowing facilities have no contractual maturity date.
- € 8 million of Besi's credit lines relate to Besi Austria GmbH which is aimed for financing export, partly guaranteed by the State of Austria via the Österreichische Kontrollbank AG and with subsidized interest. This credit line is secured by a pledge of accounts receivable and a letter of comfort of the parent company. The principal restrictive covenant is a minimum equity ratio. The borrowing facility has no contractual maturity date.
- A credit line of € 0.5 million related to Besi APac Sdn. Bhd. for bank guarantees is granted without securities but with the requirement that BE Semiconductor Industries N.V. holds, directly or indirectly, an interest of at least 51%. All borrowing facilities have no contractual maturity date.
- € 6.5 million of Besi's credit lines relate to Besi Switzerland AG and its subsidiary Besi Spares & Tooling AG, both utilizing this credit facility for contingent liabilities (amongst others guarantees and documentary credits) and for conducting foreign exchange contracts. The credit facility is secured by a parent company guarantee. The principal restrictive covenant contains a minimum cash position to be held on the bank accounts of Besi Switzerland and Besi Spares & Tooling. The facility has no contractual maturity date.

## 14. Provisions

(euro in thousands)	December 31, 2016	December 31, 2015
Warranty provision	5,068	2,940
Restructuring provision	164	871
Onerous contracts	-	145
<b>Total provisions</b>	<b>5,232</b>	<b>3,956</b>

### Warranty provision

A summary of activity in the warranty provision is as follows:

(euro in thousands)	2016	2015
Balance at January 1	4,784	5,504
Additions	5,861	3,492
Usage	(5,128)	(4,675)
Foreign currency translation	63	463
<b>Subtotal</b>	<b>5,580</b>	<b>4,784</b>
Less non-current portion	(512)	(1,844)
<b>Balance at December 31</b>	<b>5,068</b>	<b>2,940</b>

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

### Restructuring provision

Restructuring charges recorded by the Company in 2016 amount to € 1 million, which mainly relates to severance payments, legal consultancy and outplacement expenses. Changes in the restructuring provision were as follows:

(euro in thousands)	2016	2015
Balance at January 1	871	1,024
Additions	993	1,201
Usage	(1,699)	(1,409)
Foreign currency translation	(1)	55
<b>Balance at December 31</b>	<b>164</b>	<b>871</b>

The provision of € 0.2 million at December 31, 2016 is expected to be fully utilized during 2017.

The restructuring charges are recognized in the following line items in the Consolidated Statement of Comprehensive Income:

(euro in thousands)	Year ended December 31,	
	2016	2015
Cost of sales	317	156
Selling, general and administrative expenses	641	571
Research and development expenses	35	474
<b>Total</b>	<b>993</b>	<b>1,201</b>

### Onerous contracts

The Company has a rental contract for a factory building in the Netherlands. Due to the changes in the activities of the Company, the Company ceased to use part of the premises. The rental contract expired in June 2016 and was renewed. The premises had partly been sublet for the remaining rental period until June 2016. The obligation for the future payments, net of expected rental income, was provided for. Changes in the provision for onerous contracts were as follows:

(euro in thousands)	2016	2015
Balance at January 1	145	403
Usage	(145)	(258)
<b>Balance at December 31</b>	<b>-</b>	<b>145</b>

### 15. Trade payables

Trade payables are non-interest bearing and are normally settled on 30-60 day terms.

### 16. Other payables

(euro in thousands)	December 31, 2016	December 31, 2015
Payroll accruals	11,869	10,968
Accrued audit and consultancy fees	910	941
Forward exchange contracts	1,971	1,228
Goods received/invoices received	1,069	462
Accrued utility costs	227	194
Accrued project costs	2,415	1,642
Clearing and settlement accounts	987	12
Payable Treasury Shares	966	531
Accrued maintenance	263	260
Other payables	2,226	3,098
<b>Total other payables</b>	<b>22,903</b>	<b>19,336</b>

Other payables are non-interest bearing and have an average term of three months. Interest payable is normally settled quarterly throughout the year with the exception of the Convertible Notes on which interest is settled semi-annually. Reference is made to Note 28 (Financial instruments) for additional information with respect to forward foreign currency exchange contracts.

## 17. Other current liabilities

(euro in thousands)	December 31, 2016	December 31, 2015
Advances from customers	803	2,447
Deferred revenue	7,891	2,516
Payroll liabilities	2,712	2,290
Other	837	613
<b>Total other liabilities</b>	<b>12,243</b>	<b>7,866</b>

Other current liabilities are non-interest bearing and are not expected to be settled in cash. For deferred revenue an amount of € 681 is expected to be recognized after more than one year.

## 18. Long-term debt and financial leases

(euro in thousands)	December 31, 2016	December 31, 2015
<i>Long-term debt</i>		
Convertible Notes	111,491	-
Loan Raiffeissen Landesbank ( <i>Interest rate 0.95%</i> )	10,000	10,000
Research and development loan from Österreichische Forschungsförderungsgesellschaft, Wien, Austria ( <i>Interest rates between 0.75% and 2% at December 31, 2016</i> )	3,352	3,352
<b>Subtotal</b>	<b>124,843</b>	<b>13,352</b>
Less: current portion	(2,240)	-
<b>Total long-term debt and financial leases</b>	<b>122,603</b>	<b>13,352</b>

Aggregate required principal payments due on long-term debt for the next five years and thereafter are as follows:

(euro in thousands)	Long-term debt
2017	2,240
2018	11,112
2019	-
2020	-
2021 and thereafter (Convertible Notes assuming no conversion)	125,000
<b>Total</b>	<b>138,352</b>
Less: current portion of long-term debt and financial leases	(2,240)
<b>Non-current portion of long-term debt</b>	<b>136,112</b>

Besi Austria has a four-year term loan of € 10 million carrying a 0.95% interest and to be fully repaid at November 30, 2018. The loan is secured by a parent company guarantee. There is a requirement that BE Semiconductor Industries N.V. holds directly/indirectly a controlled interest of at least 50%.

The research and development loan represents nine loans aggregating € 3,352 for the financing of the research and development projects at Besi Austria. The fixed interest rates at December 31, 2016 vary from 0.75% to 2% for all loans. Loan repayments are due between June 2017 and June 2018.

The Company and its subsidiaries had no defaults for its long-term debt at December 31, 2016.

### Convertible Notes

In December 2016, the Company issued € 125 million principal amount of Convertible Notes with a maturity date of December 2, 2023 (the "Notes"). The Notes carry a nominal interest rate of 2.5% per year, payable semi-annually, with the first payment to be made on June 2, 2017. Bondholders can convert the bonds into Ordinary Shares at an initial conversion price of € 43.51. The Notes will be repaid at maturity at a price of 100% of their principal amount plus accrued and unpaid interest.

If not converted, at any time from December 23, 2020, the Company may redeem the outstanding Notes at their principal amount, subject to giving a minimum of 30 days' and maximum of 60 days' prior notice to Bondholders, if the value of the shares underlying the Notes equals or exceeds 130% of the then effective conversion price for at least 20 out of 30 consecutive dealing days.

The amount of the Notes classified as equity of € 11,310 is net of attributable debt issuance cost of € 215.

## 19. Provisions

Provisions consist of the following:

(euro in thousands)	December 31, 2016	December 31, 2015
Pension liabilities Austria	730	725
Pension liabilities Switzerland	9,053	6,446
Severance obligations	4,774	4,157
Warranty provision	512	1,844
Other provisions	606	402
<b>Provisions</b>	<b>15,675</b>	<b>13,574</b>

## 20. Employee benefits

### Pension plan Dutch subsidiaries

Type:	Defined contribution plan. Industry-wide pension plan managed by Bedrijfstakpensioenfonds Metalektro.
Company obligations:	No continuing obligations other than the annual payments.
Contributions:	€ 1.1 million in 2016 and € 1.2 million 2015.
Other:	Excedent plan for certain employees which is a defined contribution plan.

### Pension plan parent company

Type:	Defined benefit plan for guaranteed pension payments. Insured with an independent insurance company.
Company obligations:	The contributions required are based on the agreement with the insurer. The Company does not hold any transferable financial instruments as plan assets.
Duration:	The weighted average duration of the plan is 28 years.
Valuation:	The pension assets related to this defined benefit plan are netted with the pension liability. As no market price is available, the fair value of plan assets is estimated by discounting expected future cash flows. There were no gains or losses from changes in demographic assumptions or experience adjustments. The total loss from changes in financial assumptions was € 360.
Discount rate:	Reflects both the risk associated with the plan assets and the maturity or expected disposal date of those assets.

Net benefit liability:

(euro in thousands)	December 31, 2016	December 31, 2015
Defined benefit obligations	2,133	1,569
Fair value of plan assets	(1,968)	(1,507)
<b>Net liability</b>	<b>165</b>	<b>62</b>

### Pension plan Switzerland

Type:	Defined benefit plan for guaranteed pension payments. Insured with an independent insurance company.
Company obligations:	The contributions required are based on the agreement with the insurer. The Company does not hold any transferable financial instruments as plan assets.
Duration:	The weighted average duration of the plan is 19 years.
Valuation:	The pension assets related to this defined benefit plan are netted with the pension liability. The cost of providing benefits under the defined benefit plan is calculated using the project unit cost method. Remeasurements are reported in accumulated other comprehensive income (loss).
Discount rate:	The discount rate is based on the available information at November 30, 2016 and determined as follows: Swiss franc bonds with rating AA as included in the Swiss Bond Index. These bonds are used to determine a yield curve for durations up to 10 years. This yield curve is extended based on the government bond rates for longer duration.

Principal actuarial assumptions at the reporting date:

(in percentage)	2016	2015
Discount rate	0.65%	0.85%
Future salary increases	1.50%	1.50%
Future pension increases	0.10%	0.10%

Movement in the present value of the defined benefit obligations:

(euro in thousands)	2016	2015
Liability for defined benefit obligations at January 1	41,346	44,773
Current service cost	1,381	1,925
Interest expense	344	538
Actuarial loss (gain) arising from changes in economic assumptions	881	1,304
Actuarial loss (gain) arising from experience	1,542	438
Plan participants' contribution	462	572
Gains on curtailments	-	(5,626)
Plan amendments/other	216	(733)
Benefits paid through pension assets and net transfers	(1,622)	(6,868)
Foreign currency differences	568	5,023
<b>Liability for defined benefit obligations at December 31</b>	<b>45,118</b>	<b>41,346</b>

During fiscal year 2015 a restructuring occurred that resulted in a curtailment. This reduced the defined benefit obligation, but was partly offset by the impact of the appreciation of the Swiss franc in 2015. From the total number of employees that was laid off during fiscal year 2015, 45 employees were covered under the pension plan.

Total defined benefit cost (income) recognized in the Consolidated Statement of Comprehensive Income:

(euro in thousands)	Year ended December 31,	
	2016	2015
Current service costs	1,381	1,925
Interest expense on benefit obligation	344	538
Interest income on plan assets	(295)	(420)
Past service cost including effects of curtailment in 2015	-	(6,381)
Administration expenses	60	70
<b>Defined benefit cost (income) recognized</b>	<b>1,490</b>	<b>(4,268)</b>

Movement in the fair value of plan assets:

(euro in thousands)	2016	2015
Fair value of plan assets at January 1	34,900	34,853
Interest income	295	420
Return on plan assets excluding amounts included in net income	307	929
Plan participants' contribution	462	572
Company contributions	1,092	1,327
Benefits paid through pension assets	(1,622)	(6,868)
Administration expenses	(60)	-
Other	216	(70)
Foreign currency differences	475	3,737
<b>Fair value of plan assets at December 31</b>	<b>36,065</b>	<b>34,900</b>

The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

(in percentage)	December 31, 2016	December 31, 2015
Qualified insurance policies	98%	98%
Others/cash	2%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The insurance policies cover in principle the minimum funding requirements. Future contributions can be increased due to changes in the annuity factors, but this is subject to decision of the Company.

Net benefit liability:

(euro in thousands)	December 31, 2016	December 31, 2015
Defined benefit obligations	45,118	41,346
Fair value of plan assets	(36,065)	(34,900)
<b>Net liability</b>	<b>9,053</b>	<b>6,446</b>

#### Historical information

(euro in thousands)	2016	2015	2014	2013	2012
Present value of the defined benefit obligations	45,118	41,346	44,773	36,815	42,128
Fair value of plan assets	(36,065)	(34,900)	(34,853)	(32,176)	(36,640)
<b>Deficit in the plan</b>	<b>9,053</b>	<b>6,446</b>	<b>9,920</b>	<b>4,639</b>	<b>5,488</b>
Experience adjustments arising on plan liabilities economic assumptions	881	1,304	7,235	(1,347)	1,905
Experience adjustments arising on plan liabilities from experience	1,542	438	(43)	-	-
Experience adjustments arising on plan assets ((gains)/losses)	307	929	1,427	(575)	(623)

Expected contribution related to employer contribution in 2017 is expected to be in line with 2016.

#### Sensitivity analysis

The calculation of the defined benefit obligations is sensitive to the assumptions as set out above. The following table summarizes how the defined benefit obligation at the end of the reporting period would have increased (decreased) as a result of a change in the respective assumptions by 0.25%.

(euro in thousands)	Defined benefit obligations	
	0.25% increase	0.25% decrease
Discount rate	(1,944)	2,098
Salary increase	228	(224)
Pension indexation	n/a	n/a
Interest credit rate	411	(401)

The above sensitivities are based on the average duration of the defined benefit obligations determined at the date of the last full actuarial valuation at December 31, 2016 and are applied to adjust the defined benefit obligation at the end of the reporting period of the assumptions concerned.

#### Pension plan Austria

Type:	Voluntary defined benefit plan for guaranteed pension payments covering certain persons, as well as a defined benefit plan for severance payments in accordance with Austrian Labor Law. Both plans are insured with an independent insurance company.
Company obligations:	The contributions required based on the agreement with the insurer. The Company does not hold any transferable financial instruments as plan assets.
Duration:	The weighted average duration of the pension plan is 17 years and the plan for severance payments is 18 years.
Valuation:	The pension assets related to this defined benefit plan do not qualify as plan assets and are therefore presented separately, not netted with the pension liability. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the project unit cost method. Remeasurements are recognized in accumulated other comprehensive income (loss). There were no gains or losses from changes in demographic assumptions for either pension or severance payment plan. The pension plan recorded a loss from changes in financial assumptions of € 57 and an experience gain of € 58 as members left with less payments than reserved. The severance payment plan recorded a loss from changes in financial assumptions of € 291 and an experience gain of € 61 due to staff leaving the Company without receiving termination indemnities.
Discount rate:	The discount rate was derived by reference to appropriate benchmark yields on high quality corporate bonds.

Principal actuarial assumptions at the reporting date:

(in percentage)	2016	2015
Discount rate	1.75%	2.25%
Future salary increases (severance payments)	3.00%	3.00%

Movements in the present value of the defined benefit and severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(euro in thousands)	Pension liabilities	Severance obligations	2016 Total
Liability for defined benefit and severance obligations at January 1	725	3,029	3,754
Service cost	31	184	215
Interest expense	16	68	84
Remeasurement losses (gains) recognized	(2)	231	229
Other	(32)	-	(32)
Benefits paid	(8)	(67)	(75)
<b>Liability for defined benefit and severance obligations at December 31</b>	<b>730</b>	<b>3,445</b>	<b>4,175</b>

(euro in thousands)	Pension liabilities	Severance obligations	2015 Total
Liability for defined benefit and severance obligations at January 1	666	2,869	3,535
Service cost	31	186	217
Interest expense	16	69	85
Remeasurement losses recognized	20	(19)	1
Benefits paid	(8)	(76)	(84)
<b>Liability for defined benefit and severance obligations at December 31</b>	<b>725</b>	<b>3,029</b>	<b>3,754</b>

The accumulated defined benefit obligation amounts to € 4.2 million at December 31, 2016. Future expected benefit payments to (former) employees regarding pensions and leave over the next ten years are considered immaterial.

A summary of the components of the defined benefit cost recognized in the Consolidated Statement of Comprehensive Income for the years ended December 31, 2016 and 2015 is presented as follows:

(euro in thousands)	Year ended December 31,	
	2016	2015
Service cost	215	217
Interest expense	84	84
<b>Defined benefit cost recognized</b>	<b>299</b>	<b>301</b>

Changes in assets related to the liability for defined benefit and severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(euro in thousands)	2016	2015
Fair value of plan assets at January 1	1,513	1,465
Interest income	12	11
Employer contribution/additions to assets	84	84
Benefits paid	(23)	(47)
<b>Fair value of plan assets at December 31</b>	<b>1,586</b>	<b>1,513</b>

At December 31, 2016 and at December 31, 2015, the assets consist of bonds (5%), investment funds (30%) and insurance policies (65%).

## Historical information

(euro in thousands)	2016	2015	2014	2013	2012
Present value of the defined benefit and severance obligations	4,175	3,754	3,535	2,918	2,704
Fair value of plan assets	(1,586)	(1,513)	(1,465)	(1,367)	(1,167)
<b>Deficit in the plan</b>	<b>2,589</b>	<b>2,241</b>	<b>2,070</b>	<b>1,551</b>	<b>1,537</b>
Experience adjustments and changes in financial assumptions on plan liabilities ((gains)/losses)	229	1	498	(6)	556

Expected contribution related to employer contribution in 2017 is expected to be in line with prior years.

### Sensitivity analysis

The calculation of the defined benefit and severance obligations is sensitive to the assumptions as set out earlier. The following table summarizes how the defined benefit and severance obligation at the end of the reporting period would have increased (decreased) as a result of a change in the respective assumptions by 0.25%.

(euro in thousands)	Defined benefit and severance obligations	
	0.25% increase	0.25% decrease
Discount rate	(178)	189
Salary increase	154	(146)

The above sensitivities are based on the average duration of the defined benefit and severance obligations determined at the date of the last full actuarial valuation at December 31, 2016 and are applied to adjust the defined benefit and severance obligations at the end of the reporting period of the assumptions concerned.

### Pension plan – other countries

The Company's US, Malaysian, Korean and Chinese subsidiaries have defined contribution plans that supplement the governmental benefits provided under local legislation.

### Share-based payment

#### *Description of share-based compensation plans*

In the year 2000, the Company granted equity-settled stock options to all of its employees under the Share Option Plan 2000 and equity-settled options to the Board of Management under the Share Option Plan December 2000.

In 2011, the Board of Management approved to prolong 62,986 out-of-the-money equity-settled options outstanding (outstanding as per January 1, 2011) until April 18, 2016 at the original exercise price of € 17.90 for employees other than the Board of Management.

The Share Option Plan 2000 contained an anti-dilution clause which can lead to an adjustment of the exercise price. In 2016, 2,340 options have been exercised. The exercise price was revised to € 13.14 effectively at the applicable exercise dates in 2016. The amendment of the exercise price is treated as a modification.

#### *Incentive Plan 2011-2016*

In 2011, the Company established the BE Semiconductor Industries Incentive Plan 2011-2016 (the "Incentive Plan 2011-2016"). The total number of Ordinary Shares that will be awarded under the Incentive Plan 2011-2016 may not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year in which the award is made.

The Incentive Plan 2011-2016 contains specific conditions for the Board of Management. Reference is also made to the Remuneration Policy 2011-2016 as adopted by the Annual General Meeting of Shareholders on April 28, 2011.

For share awards made under this plan prior to 2014, at the beginning of the three-year performance period, a number of Performance Shares are conditionally awarded. After the three-year performance period the actual vesting will be determined based on:

- Net Income relative to Revenue ("NIR") over a three-year performance period (50% of the at target award).
- The average annual Total Shareholder Return ("TSR") growth of the shares of the Company over the three-year performance period (50% of the at target award).

The final share awards made under this plan in 2013 vested in 2016.

Under the Incentive Plan 2011-2016, the Supervisory Board may, at its own discretion and upon recommendation of the Remuneration and Nomination Committee, award additional shares to a member of the Board of Management as a reward for extraordinary achievements of excellent performance, up to a maximum of 60,000 shares. For the performance year 2015, the Supervisory Board at its own discretion and upon recommendation by the Remuneration and Nomination Committee, awarded the member of the Board of Management 60,000 shares, which vested in two equal instalments: 30,000 shares vested on April 29, 2016 and the remaining 30,000 shares vested on November 30, 2016.

### LTI Plan 2012-2016 for Employees (Non-Board Members)

In 2012, the Company established the BE Semiconductor Industries N.V. Long-Term Incentive plan for Employees (Non-Board Members) 2012-2016 (the "LTI Plan 2012-2016"). At its discretion, the Board of Management may award Performance Shares to eligible key employees in line with the terms and conditions provided in the LTI Plan, the Award Agreement and the Allocation Agreement.

The aggregate number of total shares underlying the Performance Shares shall not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year the award is made.

The final awards made under this plan in 2013 vested in 2016.

### 2014 Framework Incentive Plan

The Performance Shares awarded as from 2014 to the member of the Board of Management and other employees under the 2014 Framework Incentive Plan will vest at the end of the three-year performance period, depending on the actual performance of the Company. If at target performance is achieved, 100% of the Performance Shares awarded will vest. The maximum number of shares that can vest amounts to 150% of the target number of Performance Shares conditionally awarded.

After the three-year performance period the actual number of Performance Shares that vests, subject to continued employment, will be determined based on:

- Net Income relative to Revenue (NIR) over a three-year performance period (50%).
- The Company's Total Shareholder Return ("TSR") relative to that of the TSR peer group consisting of 19 peer companies operating in the semiconductor industry (50%).

### Summary of outstanding stock options

Following is a summary of changes in Besi options:

	2016	Weighted	2015	Weighted
	Number of	average	Number of	average
	options	exercise price	options	exercise price
		(in euro)		(in euro)
<i>Equity-settled option plans</i>				
Outstanding, beginning of year	23,961	17.90	54,461	17.90
Options expired	(21,621)	-	-	-
Options exercised <sup>1</sup>	(2,340)	13.14	(30,500)	13.14
<b>Outstanding and exercisable, end of year</b>	<b>-</b>	<b>-</b>	<b>23,961</b>	<b>13.14</b>

<sup>1</sup>The weighted average share price at the date of exercise was € 13.14 in 2016 and € 13.14 in 2015.

### Summary of outstanding PSAs and Performance Shares

Following is a summary of changes in Performance Stock Awards and Performance Shares:

	2016	2015
Outstanding at January 1	583,305	648,204
Performance Shares granted (at target level)	142,852	171,324
Shares discretionary granted to the Board of Management	60,000	60,000
Shares discretionary granted to Non-Board members	124,793	49,737
Performance adjustments	32,394	4,051
PSAs/Performance Shares settled in equity instruments (re-issued from Treasury Shares)	(176,336)	(235,208)
PSAs/Performance Shares forfeited	(29,142)	(5,066)
Shares re-issued from Treasury Shares by the Company upon vesting	(184,793)	(109,737)
<b>Outstanding at December 31</b>	<b>553,073</b>	<b>583,305</b>

The market price of the Company's Ordinary Shares at the date of grant of Performance Shares in 2016 and 2015 was € 26.31 and € 25.50, respectively. At the date of grant of additional shares to the current member of the Board of Management and the non-Board members, the market price of the Company's Ordinary Shares was € 18.67 (2015: € 17.95).

The following table shows the aggregate at target number of Performance Shares conditionally awarded to the current member of the Board of Management, in accordance with the Besi 2014 Framework Incentive Plan:

Performance Shares	Year of grant	Three-year performance period	Number of PSs
R.W. Blickman	2014	2014-2016	54,526
	2015	2015-2017	33,070
	2016	2016-2018	28,224
<b>Total</b>			<b>115,820</b>

The following table shows the at target number of Performance Shares conditionally awarded to selected key employees, in accordance with the Besi 2014 Framework Incentive Plan:

Performance Shares	Year of grant	Three-year performance period	Number of PSs
Key employees	2014	2014-2016	200,194
Key employees	2015	2015-2017	127,222
Key employees	2016	2016-2018	109,837
<b>Total</b>			<b>437,253</b>

#### Fair value measurement Performance Shares

##### *2014 Framework Incentive Plan (Board of Management)*

The target number of Performance Shares conditionally awarded to the current member of the Board of Management in 2016 amounts to 28,224 (2015: 33,070). The maximum number of shares that can vest amounts to 150% of the target number of Performance Shares conditionally awarded.

After the three-year performance period the actual number of Performance Shares that vests, subject to continued employment, will be determined based on:

- Net Income relative to Revenue (NIR) over a three-year performance period (50%).
- The Company's Total Shareholder Return ("TSR") relative to that of the TSR peer group consisting of 19 peer companies operating in the semiconductor industry (50%).

The TSR comparator group consists of the following companies:

TSR comparator group (including Besi)	
Nova Measuring Instruments Ltd.	Cohu, Inc.
Kulicke & Soffa Industries, Inc.	Applied Materials, Inc.
Axcelis Technologies, Inc.	Entegris, Inc.
Veeco Instruments, Inc.	Lam Research Corporation
Aixtron SE	Tokyo Electron Ltd.
ASM International N.V.	Disco Corporation
SÜSS MicroTec AG	Tokyo Seimitsu Co., Ltd.
ASM Pacific Technology Ltd.	ASML Holding N.V.
Brooks Automation, Inc.	Shinkawa Ltd.
	Ultratech, Inc.

The vesting is determined based on the following schedule:

Ranking of Besi in comparator group based on relative TSR during performance period	Vesting percentage Performance Shares
Rank 13 – Rank 20	0%
Rank 7 – Rank 12	25%
Rank 4 – Rank 6	50% (at target)
Top 3	75%

For the awards made in 2016, the grant date fair value of the 50% portion with a TSR performance condition is € 26.09 (2015: € 25.23) and has been derived using a Monte Carlo Simulation model. The significant inputs into the model were:

	2016	2015
Market price of the Company's Ordinary Shares (in euro)	26.31	25.50
Expected volatility	44%	29%
Expected dividend yield	4.56%	5.88%
Vesting period (in years)	3	3
Risk-free interest rate	(0.48%)	(0.17%)

For the 2016 awards, the grant date fair value of the 50% portion with a NIR performance condition is € 23.42 (2015: € 21.96). This fair value has been derived from the market price of the Company's Ordinary Shares at the grant date, adjusted based on the present value for expected dividends over the three-year vesting period.

#### 2014 Framework Incentive Plan (Non-Board Members)

The grant fair value per award is equal to the grant date fair value of the awards made to the current member of the Board of Management. The estimated expense is based on the number of Performance Shares expected to vest taking into account:

- Non-market performance conditions: The expected NIR performance.
- Service condition: Total forfeitures of 4%.

The total estimated costs recognized in 2016 for these Performance Shares amount to € 2,939 (2015: € 2,143) and are recognized in the Statement of Comprehensive Income.

The expenses related to share-based payment plans are as follows:

(euro in thousands)	Year ended December 31,	
	2016	2015
Performance Shares granted and delivered to the Board of Management	1,083	1,050
Performance Shares granted and delivered to Non-Board members	2,330	870
Conditional Performance Shares Board of Management	895	985
Incremental fair value options	-	145
Performance Shares relating to the 2014 Framework Incentive Plan/LTI plan 2012-2016	2,939	2,143
<b>Total expense recognized as employee costs</b>	<b>7,247</b>	<b>5,193</b>

## 21. Equity

At December 31, 2016 and December 31, 2015, the parent company's authorized capital consisted of 80,000,000 Ordinary Shares, nominal value € 0.01 per share, and 80,000,000 Preference Shares, nominal value € 0.01 per share.

At December 31, 2016 and December 31, 2015, 37,326,309, and 37,863,456 Ordinary Shares were outstanding, excluding Treasury Shares of 2,707,612 and 2,170,465, respectively. No Preference Shares were outstanding at each of December 31, 2016 and December 31, 2015. All issued shares have been paid in full.

Changes in other reserves during 2016 and 2015 were as follows:

(euro in thousands)	Accumulated other comprehensive income	Currency translation adjustment	Legal reserves	Total other reserves
Balance at January 1, 2016	(10,020)	31,163	38,674	59,817
Total comprehensive income (loss) for the period	(2,277)	1,942	-	(335)
Legal reserve	-	-	(1,675)	(1,675)
<b>Balance at December 31, 2016</b>	<b>(12,297)</b>	<b>33,105</b>	<b>36,999</b>	<b>57,807</b>
Balance at January 1, 2015	(9,615)	21,103	38,206	49,694
Total comprehensive income (loss) for the period	(405)	10,060	-	9,655
Legal reserve	-	-	468	468
<b>Balance at December 31, 2015</b>	<b>(10,020)</b>	<b>31,163</b>	<b>38,674</b>	<b>59,817</b>

Accumulated other comprehensive income (loss) consists of:

(euro in thousands)	December 31, 2016	December 31, 2015
Actuarial gains (losses)	(14,436)	(11,860)
Deferred tax on actuarial gains and losses	1,667	1,380
Cash flow hedging reserve (net of taxes)	(291)	(303)
Others	763	763
<b>Accumulated other comprehensive income (loss)</b>	<b>(12,297)</b>	<b>(10,020)</b>

### Dividends

Proposed for approval at the Annual General Meeting of Shareholders to be held on May 1, 2017 (not recognized as a liability as at December 31, 2016 and December 31, 2015):

(euro in thousands)	Year ended December 31, 2016	2015
<b>174 cents per Ordinary Share (2015: 120 cents)</b>	<b>64,948</b>	<b>45,420</b>

The Board of Management proposes to allocate the part of the net income for the year 2016 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

For further notes to the Company's equity, reference is made to the Notes to the Parent Company Financial Statements.

## 22. Commitments and contingencies

The Company leases certain facilities and equipment under operating leases. The required minimum lease commitments were as follows:

(euro in thousands)	December 31, 2016	December 31, 2015
Within one year	3,498	3,983
After one year but not more than five years	9,679	9,259
After five years	2,241	1,412
<b>Total</b>	<b>15,418</b>	<b>14,654</b>

The amount above consists of committed rental expense amounting to € 14.8 million and € 12.5 million as of December 31, 2016 and 2015, respectively. In addition, the Company has an unconditional obligation related to the purchase of materials and equipment totalling € 76.5 million and € 45.6 million as of December 31, 2016 and 2015, respectively. Lease and rental expenses amounted to € 3.6 million and € 4.5 million for the years ended December 31, 2016 and 2015, respectively.

Research and development subsidies and credits available to offset research and development expenses were € 2.8 million in 2016 and € 2.1 million in 2015. R&D grants have been received from the EU, from the Österreichische Forschungsförderungsgesellschaft and from local governments.

### 23. Segment, geographic and customer information

The following table summarizes revenue, non-financial assets and total assets of the Company's operations in the Netherlands, Other Europe, the US and Asia Pacific, the significant geographic areas in which the Company operates. Intra-area revenues are based on the sales prices at arm's length:

<b>(euro in thousands)</b>	<b>The Netherlands</b>	<b>Switzerland</b>	<b>Austria</b>	<b>United States</b>	<b>Asia Pacific</b>	<b>Total</b>
<i>Year ended December 31, 2016</i>						
Total revenue	80,236	296,825	38,329	24,559	154,238	594,187
Intercompany revenue	(4,551)	(48,909)	(14,282)	-	(151,070)	(218,812)
External revenue	75,685	247,916	24,047	24,559	3,168	375,375
Non-financial assets	12,186	31,592	42,273	10,011	14,643	110,705
Capital expenditures	886	122	329	-	3,151	4,488
<i>Year ended December 31, 2015</i>						
Total revenue	83,621	270,625	56,177	51,104	127,914	589,441
Intercompany revenue	(6,542)	(84,026)	(25,402)	-	(124,265)	(240,235)
External revenue	77,079	186,599	30,775	51,104	3,649	349,206
Non-financial assets	12,219	32,614	44,184	9,733	13,884	112,634
Capital expenditures	718	780	-	-	2,670	4,168

The following table represents the geographical distribution of the Company's revenue to customers:

<b>(euro in thousands)</b>	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
China	114,046	80,214
Taiwan	46,012	35,065
Korea	14,901	15,656
United States	35,305	63,500
Malaysia	48,159	41,943
Germany	18,990	18,829
Singapore	22,108	24,823
Other Asia Pacific	47,437	37,851
Other Europe	19,598	24,403
Rest of the World	8,819	6,922
<b>Total revenue</b>	<b>375,375</b>	<b>349,206</b>

The Company's revenue is generated by shipments to leading US, European and Asian leading multinational chip manufacturers, assembly subcontractors and electronics and industrial companies.

For the years ended December 31, 2016 and 2015, not one customer represents more than 10% of the Company's revenue.

The following table represents the revenue for each significant category of revenue:

<b>(euro in thousands)</b>	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Sale of goods	371,942	345,936
Rendering of services	3,433	3,270
<b>Total revenue</b>	<b>375,375</b>	<b>349,206</b>

### 24. Related-party transactions

BE Semiconductor Industries N.V. and all its subsidiaries are consolidated and all transactions between these entities have been eliminated in these financial statements. There are no non-consolidated companies considered as related parties.

The Board of Management and the Supervisory Board are considered "Key Management Personnel" in accordance with IAS 24. The remuneration of the Board of Management and the Supervisory Board is as follows.

## Remuneration of the Board of Management

The remuneration of the member of the Board of Management is determined by the Supervisory Board, all with due observance of the Remuneration Policy adopted by the General Meeting of Shareholders. Reference is made to the Remuneration Report on pages 62 to 69 of this Annual Report. The Supervisory Board is required to present any scheme providing for the remuneration of the member of the Board of Management in the form of shares or options to the General Meeting of Shareholders for adoption.

The total cash remuneration and related costs of the member of the Board of Management for the years ended December 31, 2016 and 2015, were as follows:

(in euros)	Year ended December 31,	
	2016	2015
<b>R.W. Blickman</b>		
Salaries and other short-term employee benefits <sup>1,2</sup>	1,244,304	1,243,669
Post-employment benefits <sup>3</sup>	38,913	26,023
Equity compensation benefits: Discretionary grant	1,083,300	1,050,000
Equity compensation benefits: Modification options	-	-
Equity compensation benefits: Incentive Plan	903,840	985,171
<b>Total</b>	<b>3,270,357</b>	<b>3,304,863</b>

<sup>1</sup> Other benefits include expense compensation, medical insurance and social security premiums.

<sup>2</sup> Other benefits also includes a bonus earned over the applicable year, which will be payable in the second quarter of the year thereafter.

<sup>3</sup> The pension arrangements for the member of the Board of Management are defined contribution plans. The Company does not have further pension obligations beyond an annual contribution.

## Remuneration of the Supervisory Board

The aggregate remuneration paid to current members of the Supervisory Board was € 306 in 2016 (2015: € 306). The remuneration of the Supervisory Board is determined by the General Meeting of Shareholders.

The total cash remuneration of the members of the Supervisory Board for the years ended December 31, 2016 and 2015 was as follows:

(in euros)	2016	2015
T. de Waard	72,000	72,000
D.J. Dunn	60,000	60,000
D. Lindenbergh	-	19,000
K.W. Loh	57,000	38,000
M. ElNaggar	57,000	57,000
J.E. Vaandrager	60,000	60,000
<b>Total</b>	<b>306,000</b>	<b>306,000</b>

The yearly remuneration for the Supervisory Board members is determined as follows:

- (i) Member of the Supervisory Board: € 57,000
- (ii) Member of the Supervisory Board, Chair of committee: € 60,000
- (iii) Chairman of the Supervisory Board: € 72,000
- (iv) Meeting attendance and conference call fees: None

## Ordinary Shares, options and PSs held by the member of the Board of Management

The aggregate number of Ordinary Shares owned by the current member of the Board of Management as of December 31, 2016, are as follows:

Ordinary Shares	Number of shares
R.W. Blickman	738,084
<b>Total</b>	<b>738,084</b>

Performance Shares	Year of grant	Three-year performance period	Number of PSs
R.W. Blickman	2014	2014-2016	54,526
	2015	2015-2017	33,070
	2016	2016-2018	28,224
<b>Total</b>			<b>115,820</b>

The Performance Shares awarded will vest at the end of the three-year performance period, depending on the actual performance of the Company.

### Ordinary Shares held by members of the Supervisory Board

The aggregate number of Ordinary Shares held by the current members of the Supervisory Board as of December 31, 2016, was as follows:

Ordinary Shares	Number of shares
T. de Waard	24,610
<b>Total</b>	<b>24,610</b>

### 25. Selected operating expenses and additional information

Personnel expenses for all employees were as follows:

(euro in thousands)	Year ended December 31,	
	2016	2015
Wages and salaries	78,065	80,582
Social security expenses	9,609	10,378
Pension and retirement expenses	3,137	3,294
Curtailment gain	-	(5,626)
Share-based compensation plans	7,247	5,193
<b>Total personnel expenses</b>	<b>98,058</b>	<b>93,821</b>

The average number of employees during 2016 and 2015 was 1,525 and 1,530, respectively. For pension and retirement expenses, reference is made to Note 20.

The total number of personnel employed per department was:

	December 31, 2016	December 31, 2015
Sales and Marketing	378	377
Manufacturing and Assembly	730	672
Research and Development	335	311
General and Administrative	143	139
<b>Total number of personnel</b>	<b>1,586</b>	<b>1,499</b>

As of December 31, 2016 and 2015, a total of 191 and 200 persons respectively, were employed in the Netherlands.

### 26. Financial income and expense

The components of financial income and expense were as follows:

(euro in thousands)	Year ended December 31,	
	2016	2015
Interest income	463	490
<b>Subtotal financial income</b>	<b>463</b>	<b>490</b>
Interest expense	(632)	(466)
Net foreign exchange loss	(1,445)	(817)
<b>Subtotal financial expense</b>	<b>(2,077)</b>	<b>(1,283)</b>
<b>Financial income (expense), net</b>	<b>(1,614)</b>	<b>(793)</b>

## 27. Earnings per share

The following table reconciles Ordinary Shares outstanding at the beginning of the year to average shares outstanding used to compute income per share:

	2016	2015
Shares outstanding at beginning of the year	37,863,456	37,712,540
Weighted average shares re-issued from Treasury Shares for the vesting of Performance Stock Awards (LTI)	118,520	151,535
Weighted average shares re-issued from Treasury Shares for the vesting of shares discretionary granted	105,599	72,317
Weighted average shares re-issued from Treasury Shares for the execution of options	1,762	24,112
Weighted average shares bought under the share repurchase program	(488,483)	(29,303)
<b>Average shares outstanding - basic</b>	<b>37,600,854</b>	<b>37,931,201</b>

The total number of weighted average Ordinary Shares used in calculating diluted earnings per share amounts to 38,508,080 (2015: 38,503,786). Net income in 2016 used in calculating dilutive earnings per share amounts to € 65.3 million.

## 28. Financial instruments, financial risk management objectives and policies

### Fair value of financial instruments

The Company assumes that the book value of the Company's financial instruments, which consist of cash and cash equivalents, trade receivables, accounts payable and long-term debt, does not significantly differ from their fair value due to the short maturity of those instruments and to the fact that interest rates are floating or approximate the rates currently available to the Company.

The Company uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities.

Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.

Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

The fair values of financial assets and financial liabilities, together with the carrying amounts in the condensed Consolidated Statements of Financial Position, are as follows:

(euro in thousands)	Note	Carrying amount	December 31, 2016	
			Level	Fair value
<i>Financial assets</i>				
Cash and cash equivalents	3	224,790	1	224,790
Deposits	3	80,000	1	80,000
Trade receivables	4	89,845	3	89,845
Forward exchange contracts	6	258	2	258
Other receivables	6	7,067	3	7,067
<b>Total</b>		<b>401,960</b>		<b>401,960</b>
<i>Financial liabilities</i>				
Notes payable to banks	13	11,855	1	11,855
Trade payables	15	38,949	3	38,949
Forward exchange contracts	16	1,971	2	1,971
Other payables	16	20,932	1	20,932
Long-term debt and financial leases	18	122,603	1	122,603
<b>Total</b>		<b>196,310</b>		<b>196,310</b>

(euro in thousands)	Note	Carrying amount	December 31, 2015	
			Level	Fair value
<i>Financial assets</i>				
Cash and cash equivalents	3	157,818	1	157,818
Trade receivables	4	80,640	3	80,640
Forward exchange contracts	6	466	2	466
Other receivables	6	3,280	3	3,280
<b>Total</b>		<b>242,204</b>		<b>242,204</b>
<i>Financial liabilities</i>				
Notes payable to banks	13	8,000	1	8,000
Trade payables	15	27,529	3	27,529
Forward exchange contracts	16	1,228	2	1,228
Other payables	16	18,108	1	18,108
Long-term debt and financial leases	18	13,352	1	13,352
<b>Total</b>		<b>68,217</b>		<b>68,217</b>

There were no transfers between levels during the years ended December 31, 2016 and December 31, 2015.

The only recurring fair value measurement is the valuation of forward exchange contracts for hedging purposes. According to IFRS 13 this measurement is categorized as Level 2. Money market funds (deposits) are part of our cash and cash equivalents and therefore categorized as level 1. Non-recurring fair value measurements were not applicable in the reporting period.

### Financial risk management objectives and policies

#### Risk management framework

The Company is exposed to a variety of financial risks, such as foreign currency risk, interest rate risk, credit risk, market risk, liquidity risk and capital risk. These risks are inherent to the way the Company operates as a multinational with a number of local operating companies.

The Company's overall risk management policy is established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to risk limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

All material findings that result from the use of the Company's risk management policy are discussed with our Audit Committee and Supervisory Board.

The operating companies are primarily responsible for identifying and managing financial risks, especially in relation to transactions in foreign currencies and credit risks. The Company, through its training, management standards and procedures, such as guidelines and instructions governing hedging of financial risks, developed a disciplined and constructive control environment in which all employees understand their roles and obligations. In addition, the Company performs several reviews at all significant operating companies, such as reviews of the foreign currency positions. The Company's policies, specifically regarding to foreign currency hedging, interest rate, credit, market and liquidity risks, are further described in the remainder of this Note.

#### Foreign exchange

Due to the international scope of the Company's operations, the Company is exposed to the risk of adverse movements in foreign currency exchange rates. The Company is primarily exposed to fluctuations in the value of the euro, Swiss franc and Malaysian ringgit against the US dollar and US dollar-linked currencies, since approximately 74% of its sales in 2016 are denominated in US dollar and US dollar-linked currencies.

The Company seeks to protect itself from adverse movements in foreign currency exchange rates by hedging firmly committed sales contracts, which are denominated in US dollars through the use of forward foreign currency exchange contracts. In addition, the Company also uses forward foreign currency exchange contracts to hedge trade receivables that are denominated in a foreign currency. During 2016 and 2015, the Company did not have any derivative financial instruments that were held for trading or speculative purposes. Furthermore, the Company does not use financial instruments to hedge the translation risk related to equity, intercompany loans of a permanent nature and earnings of foreign subsidiaries. The Company has adopted the cash flow hedge model. In this hedging model, the effective part of a hedge transaction is reported as a component of other comprehensive income, which is reclassified to earnings in the same period(s) in which the hedged forecasted transaction affects earnings.

Due to cash flow hedge transactions, € 291 was reported as other comprehensive income at December 31, 2016. The amount in 2016 released from equity in revenue in the Consolidated Statement of Comprehensive Income was € 0. The cash flow hedging reserve included in equity comprises the effective portion of the cumulative net change in the fair value of cash flow hedges related to hedged transactions that have not yet occurred. The ineffective part of the hedges recognized, directly in the Consolidated Statement of Comprehensive Income was a loss of € 12 in 2016 (2015: a loss of € 18).

Movement cash flow hedging reserve:

(euro in thousands)	2016
Balance at January 1	(303)
Amount recognized in equity, net	-
Amount reclassified to Consolidated Statement of Comprehensive Income due to ineffectiveness	12
<b>Balance at December 31</b>	<b>(291)</b>

The Company has exposure to credit risk to the extent that the counterparty to the transaction fails to perform according to the term of the contract. The amount of such credit risk, measured as the fair value of all forward foreign currency exchange contracts that have a positive fair value position, was € 258 and € 466 at December 31, 2016 and 2015, respectively. The Company believes that the risk of significant loss from credit risk is remote, because it deals with credit-worthy financial institutions. The Company does not, in the normal course of business, demand collateral from the counterparties.

Following is a summary of the Company's forward foreign currency exchange contracts at foreign currency contract rate:

(euro in thousands)	December 31, 2016	December 31, 2015
To sell US dollars for euros	10,125	12,320
To sell euros for US dollars	-	100
To sell US dollars for Swiss francs	62,183	63,259
To sell Swiss francs for US dollars	2,493	5,050
To sell US dollars for Malaysian ringgits	24,567	17,908
To sell euros for Malaysian ringgits	4,446	3,665
To sell euros for Singapore dollars	3,038	1,909
To sell Singapore dollars for euros	-	636
To sell Swiss francs for euros	11,826	12,698
To sell euros for Swiss francs	22,312	5,303
To sell Malaysian ringgits for euros	289	-
<b>Total</b>	<b>141,279</b>	<b>122,848</b>

At December 31, 2016, the unrealized loss on forward foreign currency exchange contracts that were designated as a hedge of firmly committed transactions amounted to € 1,713. At December 31, 2015, the unrealized loss on forward foreign currency exchange contracts amounted to € 762.

The fair value of the Company's forward foreign currency exchange contracts, which are categorized as Level 2 is as follows:

(euro in thousands)	2016		2015	
	Positive	Negative	Positive	Negative
<i>Forward exchange contracts</i>				
<b>Fair value</b>	<b>258</b>	<b>1,971</b>	<b>466</b>	<b>1,228</b>

The fair value of the forward currency exchange contracts is included in the Company's other receivables and the other payables. For the years ended December 31, 2016 and 2015, foreign currency losses of € 12 and € 18, respectively, are included in the Company's results of operations relating to the Company's foreign currency contracts. The Company recorded no changes in the fair value of the financial instruments that were attributable to changes in the credit risk of the forward exchange contracts. Cash flows related to foreign currency contracts are expected to occur as follows:

(euro in thousands)	December 31, 2016	December 31, 2015
Within 0-3 months	122,398	104,926
From 3-6 months	17,413	17,367
From 6-9 months	1,468	233
After 9 months	-	322
<b>Total</b>	<b>141,279</b>	<b>122,848</b>

The Company's principal financial liabilities, other than derivatives, comprise of bank loans and overdrafts, Convertible Notes, financial leases, trade payables and hire purchase contracts. The main purpose of these financial liabilities is to finance the Company's operations. The Company has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations.

The Company also enters into derivative transactions, primarily forward currency contracts. The purpose of these transactions is to manage the currency risks arising from the Company's operations.

It is, and has been throughout 2016 and 2015, the Company's policy that no trading in derivatives shall be undertaken. The main risks arising from the Company's financial instruments are foreign currency risk, interest rate risk, credit risk and liquidity risk.

### Foreign currency risk

As a consequence of the global nature of Besi's businesses, its operations, reported financial results and cash flows are exposed to the risks associated with fluctuations in exchange rates between the euro and other major world currencies. Currency exchange rate movements typically also affect economic growth, inflation, interest rates, government actions and other factors. These changes can cause the Company to adjust its financing and operating strategies.

The discussion below of changes in currency exchange rates does not incorporate these other economic factors. For example, the sensitivity analysis presented in the foreign exchange rate risk discussion below does not take into account the possibility that rates can move in opposite directions and that gains from one category may or may not be offset by losses from another category. As currency exchange rates change, translation of the statements of operations of Besi's international business into euro affects year-over-year comparability.

Besi's currency risk exposure primarily occurs because the Company generates a portion of its revenue in currencies other than the euro while the major share of the corresponding cost of sales is incurred in euro, Swiss franc and Malaysian ringgit. The percentage of its consolidated net revenue which is presented by US dollar or US dollar-linked currencies amounted to approximately 74% of total revenue in the year ended December 31, 2016, whereas revenue denominated in euro amounted to approximately 25% and other currencies amounted to approximately 1%. Approximately 26% of its costs and expenses were denominated in euro, 21% in Swiss franc, 30% in Malaysian ringgit and the remaining 23% in various currencies. In order to mitigate the impact of currency exchange rate fluctuations, Besi continually assesses its remaining exposure to currency risks and hedges such risks through the use of derivative financial instruments. The principal derivative financial instruments currently used by the Company to cover foreign currency exposures are forward foreign currency exchange contracts that qualify for hedge accounting.

The following table presents a sensitivity analysis of the Company's profit before tax (due to changes in the fair value of monetary assets and liabilities) and the Company's equity (due to changes in the fair value of forward exchange contracts) related to reasonable potential changes in the US dollar exchange rate compared to the euro, Swiss franc and Malaysian ringgit, with all other variables held constant. This comparison is done as most transactions are in US dollar and are hedged against the local currencies of the main operations in the Netherlands, Austria, Switzerland and Malaysia. The analysis includes the effects of fair value changes of the financial instruments used to hedge the currency exposures and focuses only on balance sheet positions.

(euro in thousands)	Increase/decrease in US dollar rate compared to euro	Effect on profit before tax	Effect on equity
2016	+10%	(300)	500
	-10%	300	(500)
2015	+10%	(200)	(700)
	-10%	200	700

(euro in thousands)	Increase/decrease in US dollar rate compared to Swiss franc	Effect on profit before tax	Effect on equity
2016	+10%	(100)	-
	-10%	100	-
2015	+10%	100	-
	-10%	(100)	-

(euro in thousands)	Increase/decrease in US dollar rate compared to Malaysian ringgit	Effect on profit before tax	Effect on equity
2016	+10%	(100)	-
	-10%	100	-
2015	+10%	(100)	-
	-10%	100	-

The current outstanding forward exchange contracts have been included in this calculation.

### Interest rate risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's long-term debt obligations with floating interest rates. The Company's policy is to manage its interest exposure using a mix of fixed and variable rate debt financing. The Company's long-term capital lease obligations, long-term debt and lines of credit currently bear fixed and variable rates of interest. An immediate increase of 100 basis points, or 1%, in interest rates would positively affect the Company's results of operations over the next fiscal year by approximately € 2.2 million, net of tax (2015: € 1.1 million). An immediate decrease of 100 basis points, or 1%, in interest rates would negatively affect the Company's results of operations over the next fiscal year by approximately € 2.2 million, net of tax (2015: € 1.1 million). No derivative interest rate related swaps have been entered into.

### Credit risk

Credit risk is the risk that the counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily for trade receivables) and from its financing activities, including deposits with banks, foreign exchange transactions and other financial instruments. Management has a credit policy in place and monitors exposure to credit risk on an ongoing basis.

The Company's maximum exposure to credit risk for financial instruments are the carrying amounts of financial assets as illustrated in the table at the beginning of Note 28. The Company does not hold collateral as security.

### Cash and cash equivalents

The Company is managing the credit risk from balances with banks in accordance with the Company's policy, which is that the cash and cash equivalents are held with bank and financial institution counterparties that have high credit ratings. The Company manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

### Trade receivables and other receivables

The Company has established a credit policy under which credit evaluations are performed on all customers requiring credit over specified thresholds. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Company's customer base, including the default risk of the industry and country in which customers operate, as these factors may have an influence on credit risk. As the Company's revenue is generated by shipments to Asian manufacturing operations of leading US, European and Asian semiconductor manufacturers and subcontractors, an industry and geographical concentration of credit risk exists, however, this risk is reduced through the long-term relationships with our customers.

Ageing of trade receivables and other receivables:

(euro in thousands)	Total	Impaired	Neither past due nor impaired	Past due				
				< 30 days	30-60 days	60-90 days	90-120 days	> 120 days
2016	97,170	(713)	75,093	7,974	4,080	1,696	1,296	7,744
2015	84,386	(878)	58,844	8,983	5,436	3,036	1,732	7,233

Movement in impairment of trade receivables and other receivables:

(euro in thousands)	2016	2015
Balance at January 1	878	953
Additions (releases)	(197)	(59)
Utilized	(31)	(59)
Foreign currency translation	63	43
<b>Balance at December 31</b>	<b>713</b>	<b>878</b>

### Forward exchange contracts

The forward exchange contracts are with multiple counterparties that have high credit ratings. Currently, the Company does not expect any counterparty to fail to meet its obligations.

### Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return. The Company buys and sells derivatives, and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines set by the Company.

### Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The Company monitors its risk to a shortage of funds by reviewing cash flows of all entities throughout the year. The Company's objective is to maintain a balance between continuity of funding and flexibility through the use of bank overdrafts and financial leases.

The table below summarizes the maturity profile of the Company's financial liabilities at December 31, 2016 and 2015, based on contractual undiscounted payments:

Maturity profile (euro in thousands)	On demand	Less than 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
<i>Year ended December 31, 2016</i>						
Convertible Notes (assuming no conversion)	-	-	-	-	125,000	125,000
Other long-term debt and financial leases	-	-	2,240	11,112	-	13,352
Interest payable convertible	-	-	3,125	12,500	6,250	21,875
Other interest payable long- term debt and financial leases	1	11	35	36	-	83
Accounts payable	949	34,420	3,323	255	2	38,949
Other payables	1,410	13,143	7,660	613	77	22,903
<b>Total</b>	<b>2,360</b>	<b>47,574</b>	<b>16,383</b>	<b>24,516</b>	<b>131,329</b>	<b>222,162</b>

Maturity profile (euro in thousands)	On demand	Less than 3 months	3 to 12 months	1 to 5 years	> 5 years	Total
<i>Year ended December 31, 2015</i>						
Long-term debt and financial leases	-	-	-	13,352	-	13,352
Interest payable long-term debt and financial leases	-	35	106	217	-	358
Accounts payable	1,528	24,613	1,314	74	-	27,529
Other payables	1,083	8,452	8,818	983	-	19,336
<b>Total</b>	<b>2,611</b>	<b>33,100</b>	<b>10,238</b>	<b>14,626</b>	<b>-</b>	<b>60,575</b>

It is not expected that the cash flows included in the maturity profile could occur significantly earlier, or at significantly different amounts.

### Capital management

The primary objective of the Company's capital management is to ensure healthy capital ratios in order to support its business and maximize shareholder value.

The Company manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Company may make a dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes during the years ending December 31, 2016 and December 31, 2015. The Company only regards equity as capital. This capital is managed using solvency ratio (excluding intangible assets) and return on investment.

<b>(euro in thousands/in percentage)</b>	<b>2016</b>	<b>2015</b>
Equity	345,037	332,220
Solvency ratio	58.7%	76.8%
Solvency ratio (excluding intangible fixed assets)	51.9%	71.0%
Return on average investment	19.3%	15.0%

The return on average investment is calculated using the opening and closing balance of equity and the net income of 2016.

The total number of Ordinary Shares that will be awarded under the Incentive Plan 2011-2016 and the LTI Plan 2012-2016 may not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year in which the award is made.

### **29. Events after the balance sheet date**

Subsequent events were evaluated up to February 22, 2017, which is the date the Financial Statements included in this Annual Report were approved. There are no events to report.

# Parent Company Balance Sheet

(Before appropriation of the result)

(euro in thousands)	Note	December 31, 2016	December 31, 2015
<i>Assets</i>			
<b>Property, plant and equipment</b>	2	-	-
<b>Other intangible assets</b>	3	<b>405</b>	<b>402</b>
Investments in subsidiaries	4	196,430	205,641
Subordinated loans due from subsidiary	4	-	8,000
Loans due from subsidiaries	4	55,047	64,334
Deferred tax assets		7,120	10,000
<b>Financial fixed assets</b>		<b>258,597</b>	<b>287,975</b>
<b>Total fixed assets</b>		<b>259,002</b>	<b>288,377</b>
Amounts due from subsidiaries		4,210	10,817
Other receivables		1,264	786
<b>Receivables</b>		<b>5,474</b>	<b>11,603</b>
Deposit		80,000	-
<b>Cash and cash equivalents</b>		<b>224,035</b>	<b>137,823</b>
<b>Total current assets</b>		<b>309,509</b>	<b>149,426</b>
<b>Total assets</b>		<b>568,511</b>	<b>437,803</b>
<i>Shareholders' equity, provisions and liabilities</i>			
Share capital	5	400	36,031
Share premium	5	224,482	195,524
Retained earnings	5	(4,501)	(9,736)
Other reserves	5	57,807	59,817
Undistributed result	5	65,223	48,980
<b>Shareholders' equity</b>		<b>343,411</b>	<b>330,616</b>
Convertible Notes	7	111,491	-
Other non-current liabilities		165	62
<b>Non-current liabilities</b>		<b>111,656</b>	<b>62</b>
Notes payable to banks		3,855	-
Trade payables		2,782	299
Amounts due to subsidiaries		104,025	105,111
Other payables		2,782	1,715
<b>Current liabilities</b>		<b>113,444</b>	<b>107,125</b>
<b>Total shareholders' equity, provisions and liabilities</b>		<b>568,511</b>	<b>437,803</b>

# Parent Company Statement of Income and Expense

(euro in thousands)	Note	Year ended December 31, 2016	2015
General and administrative expenses		8,968	4,556
<b>Total operating expenses</b>		<b>8,968</b>	<b>4,556</b>
<b>Operating income (loss)</b>		<b>(8,968)</b>	<b>(4,556)</b>
Financial income	9	877	1,222
Financial expense	9	(1,486)	(837)
<b>Financial income (expense), net</b>		<b>(609)</b>	<b>385</b>
<b>Income from subsidiaries, after taxes</b>	4	<b>74,843</b>	<b>53,151</b>
<b>Income before income tax</b>		<b>65,266</b>	<b>48,980</b>
Income tax		(43)	-
<b>Net income</b>		<b>65,223</b>	<b>48,980</b>

# Notes to the Parent Company Financial Statements

## 1. Summary of significant accounting policies

The Financial Statements of the parent company have been prepared using the option of section 362 of Book 2 of the Netherlands Civil Code, meaning that the accounting principles used are the same as for the Consolidated Financial Statements.

Foreign currency amounts have been translated, assets and liabilities have been valued, and net income has been determined, in accordance with the principles of valuation and determination of income presented in the summary of significant accounting policies included in the Notes to the Consolidated Financial Statements. Subsidiaries of the parent company are accounted for using the net equity value. The net equity value is determined on the basis of IFRS accounting principles applied in the Consolidated Financial Statements. In case of a negative net equity value of a subsidiary, the negative value is deducted from the loan due from the respective subsidiary.

The remuneration paragraph is included in Note 24 of the Consolidated Financial Statements.

## 2. Property, plant and equipment

Property, plant and equipment, net consist of the following:

(euro in thousands)	Office furniture and equipment
<i>Balance at January 1, 2016</i>	
Cost	114
Depreciation	(114)
<b>Property, plant and equipment, net</b>	<b>-</b>
<i>Changes in book value in 2016</i>	
Depreciation	-
<b>Total changes</b>	<b>-</b>
<i>Balance at December 31, 2016</i>	
Cost	114
Depreciation	(114)
<b>Property, plant and equipment, net</b>	<b>-</b>

## 3. Other intangible assets

Other intangible assets, net consist of the following:

(euro in thousands)	Software
<i>Balance at January 1, 2016</i>	
Cost	1,437
Accumulated amortization	(1,035)
<b>Other intangible assets, net</b>	<b>402</b>
<i>Changes in book value in 2016</i>	
Capital expenditures	235
Amortization	(232)
<b>Total changes</b>	<b>3</b>
<i>Balance at December 31, 2016</i>	
Cost	1,672
Accumulated amortization	(1,267)
<b>Other intangible assets, net</b>	<b>405</b>

The other intangible fixed assets consist of capitalized licenses and are amortized in three years.

## 4. Financial fixed assets

### Investments in subsidiaries

The movement was as follows:

(euro in thousands)	Investment in subsidiaries	Subordinated loans due from subsidiaries	Loans due from subsidiaries	Total
Balance at January 1, 2016	205,641	8,000	64,334	277,975
Income for the period	74,843	-	-	74,843
Negative equity adjustments	(596)	-	596	-
Reclassification	-	(8,000)	8,000	-
Repayments	-	-	(19,082)	(19,082)
Dividend payments	(82,003)	-	-	(82,003)
Changes in accumulated other comprehensive income	(2,207)	-	-	(2,207)
Currency translation adjustment	752	-	1,199	1,951
<b>Balance at December 31, 2016</b>	<b>196,430</b>	<b>-</b>	<b>55,047</b>	<b>251,477</b>

(euro in thousands)	Investment in subsidiaries	Subordinated loans due from subsidiaries	Loans due from subsidiaries	Total
Balance at January 1, 2015	195,538	8,000	63,612	267,150
Income for the period	53,151	-	-	53,151
Negative equity adjustments	(950)	-	950	-
Repayments	-	-	(4,132)	(4,132)
Dividend payments	(47,756)	-	-	(47,756)
Changes in accumulated other comprehensive income	(498)	-	-	(498)
Currency translation adjustment	6,156	-	3,904	10,060
<b>Balance at December 31, 2015</b>	<b>205,641</b>	<b>8,000</b>	<b>64,334</b>	<b>277,975</b>

The negative equity adjustments in the movement schedule are adjustments of the income for the period related to the net income of the subsidiaries with a negative equity value.

### Subordinated loan due from subsidiary

The subordinated loan represented in 2015 a loan granted by BE Semiconductor Industries N.V. to its subsidiary Fico International B.V. and is subordinated to the loan and credit line between Fico International B.V. and its subsidiaries and ABN AMRO Bank N.V. In the renewed contract this subordination ceased to exist.

### Loans due from/to subsidiaries

Interest on loans from/to subsidiaries is calculated based on monthly base rates plus a market-conform mark-up. An amount of € 40 million relates to loans granted by BE Semiconductor Industries N.V. to its US subsidiaries. These loans are repaid upon lenders' demand for repayment. Therefore, no interest is calculated on these loans.

As of December 31, 2016, the following subsidiaries are included:

Name	Location and country of incorporation	Percentage
BE Semiconductor Industries USA, Inc.	Chandler, Arizona, USA	100%
BE Semiconductor Industries Holding GmbH	Radfeld, Austria	100%
Besi USA, Inc.	Chandler, Arizona, USA	100%
Besi Singapore Pte. Ltd.	Singapore, Singapore	100%
Besi Korea Ltd.	Seoul, South Korea	100%
Besi Asia Pacific Holding B.V.	Duiven, the Netherlands	100%
Besi Philippines, Inc.	Muntinlupa City, Philippines	100%
Besi Netherlands B.V.	Duiven, the Netherlands	100%
Fico International B.V.	Duiven, the Netherlands	100%
Besi Leshan Co., Ltd.	Leshan, China	87%
Besi APac Sdn. Bhd.	Shah Alam, Malaysia	100% <sup>1</sup>
ASM Fico (F.E.) Sdn. Bhd.	Shah Alam, Malaysia	99.9% <sup>2</sup>
Fico Hong Kong Ltd.	Hong Kong, China	100%
Meco International B.V.	Drunen, the Netherlands	100%
Meco Equipment Engineers B.V.	Drunen, the Netherlands	100%
Besi North America, Inc.	Chandler, Arizona, USA	100%
Datacon Eurotec GmbH i.L.	Berlin, Germany	100%
Datacon Beteiligungs GmbH	Radfeld, Austria	100%
Besi Austria GmbH	Radfeld, Austria	100%
Esec International B.V.	Duiven, the Netherlands	100%
Besi Switzerland AG	Cham, Switzerland	100%
Esec China Financial Ltd.	Hong Kong, China	100%
Besi (Shanghai) Trading Co., Ltd.	Shanghai, China	100%
Esec (Singapore) Pte. Ltd.	Singapore, Singapore	100%
Besi Spares and Tooling AG	Cham, Switzerland	100%

<sup>1</sup> In order to comply with local corporate law, a non-controlling shareholding (less than 0.1%) is held by Company Management.

<sup>2</sup> In order to comply with local corporate law, a non-controlling shareholding is held by Company Management.

## 5. Shareholder's equity

(euro in thousands, except for share data)	Number of Ordinary Shares outstanding <sup>1</sup>	Share capital	Share premium	Retained earnings	Other reserves	Undistri- buted result	Total share- holders' equity <sup>2</sup>
Balance at January 1, 2016	40,033,921	36,031	195,524	(9,736)	59,817	48,980	330,616
Total comprehensive income for the period	-	-	-	-	(335)	65,223	64,888
Decline of par value	-	(35,631)	35,631	-	-	-	-
Dividend paid to owners of the Company	-	-	-	-	-	(45,420)	(45,420)
Legal reserve	-	-	-	1,675	(1,675)	-	-
Appropriation of the result	-	-	-	3,560	-	(3,560)	-
Equity-settled share-based payments expense	-	-	7,247	-	-	-	7,247
Purchase of Treasury Shares	-	-	(22,389)	-	-	-	(22,389)
Re-issued Treasury Shares	-	-	40	-	-	-	40
Equity component convertible	-	-	8,429	-	-	-	8,429
<b>Balance at December 31, 2016</b>	<b>40,033,921</b>	<b>400</b>	<b>224,482</b>	<b>(4,501)</b>	<b>57,807</b>	<b>65,223</b>	<b>343,411</b>
Balance at January 1, 2015	40,033,921	36,431	193,562	(23,275)	49,694	70,884	327,296
Total comprehensive income for the period	-	-	-	-	9,655	48,980	58,635
Decline of par value	-	(400)	400	-	-	-	-
Dividend paid to owners of the Company	-	-	-	-	-	(56,877)	(56,877)
Legal reserve	-	-	-	(468)	468	-	-
Appropriation of the result	-	-	-	14,007	-	(14,007)	-
Equity-settled share-based payments expense	-	-	5,193	-	-	-	5,193
Purchase of Treasury Shares	-	-	(4,031)	-	-	-	(4,031)
Re-issued Treasury Shares	-	-	400	-	-	-	400
<b>Balance at December 31, 2015</b>	<b>40,033,921</b>	<b>36,031</b>	<b>195,524</b>	<b>(9,736)</b>	<b>59,817</b>	<b>48,980</b>	<b>330,616</b>

<sup>1</sup> The outstanding number of Ordinary Shares includes 2,707,612 and 2,170,465 Treasury Shares at December 31, 2016 and December 31, 2015, respectively.

<sup>2</sup> In total an amount of € 14.5 million is classified as a restricted reserve for subsidiaries (2015: € 82.7 million).

## Preference Shares

At December 31, 2016 and December 31, 2015, the parent company's authorized capital consisted of 80,000,000 Ordinary Shares, nominal value € 0.01 per share, and 80,000,000 Preference Shares, nominal value € 0.01 per share.

No Preference Shares were outstanding at December 31, 2016 and December 31, 2015.

In April 2000, the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") was established. The Foundation is an independent legal entity and is not owned or controlled by any other legal person. The purpose of the Foundation is to safeguard the interests of the Company, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the continuity, independence and identity of the Company contrary to such interests. The aim of the Preference Shares is, among other things, to provide a protective measure against unfriendly take-over bids and other possible unsolicited influences which could threaten the Company's continuity, independence and identity. The issue of Preference Shares would enable the Company to consider its position in the then-existing circumstances.

By agreement of May 19, 2008, between the Company and the Foundation, which replaces a similar agreement dated April 19, 2002, the Foundation has been granted a call option pursuant to which it may purchase a number of Preference Shares up to a maximum of the number of Ordinary Shares issued and outstanding at the time of exercise of this option, minus one.

The Company has also granted to the Foundation the right to file an application for an inquiry into the policy and conduct of business of the Company with the Enterprise Chamber of the Amsterdam Court of Appeal (*Ondernemingskamer*). The Company believes that this may be a useful option in the period before the issuance of Preference Shares, without causing a dilution of the rights of other shareholders at that stage.

## Foreign currency translation adjustment

The foreign currency translation adjustment comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

## Accumulated other comprehensive income (loss)

Accumulated other comprehensive income (loss) consists of:

(euro in thousands)	December 31, 2016	December 31, 2015
Actuarial gains (losses)	(14,436)	(11,860)
Deferred taxes on actuarial gains (losses)	1,667	1,380
Cash flow hedging reserve	(291)	(303)
Others	763	763
<b>Accumulated other comprehensive income (loss)</b>	<b>(12,297)</b>	<b>(10,020)</b>

### *Actuarial gains (losses)*

The reserve for actuarial gains and losses arises from the actuarial calculations for the defined benefit pension plans.

### *Cash flow hedging reserve*

The cash flow hedging reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedges related to hedged transactions that have not yet occurred.

### *Deferred taxes*

The deferred taxes in accumulated other comprehensive income primarily relate to the deferred tax on the recognized actuarial gains and losses on the Austrian and Swiss pension plans.

## Dividends

Proposed for approval at the Annual General Meeting of Shareholders to be held on May 1, 2017 (not recognized as a liability as at December 31, 2016 and December 31, 2015):

(euro in thousands)	Year ended December 31, 2016	2015
<b>174 cents per Ordinary Share (2015: 120 cents)</b>	<b>64,948</b>	<b>45,420</b>

The Board of Management proposes to allocate the part of the net income for the year 2016 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

## 6. Borrowing facilities

At December 31, 2016, the parent company had available lines of credit aggregating € 18 million, under which € 4.1 million of borrowings were utilized of which € 3.8 million relate to notes payable to banks and the remaining balance of € 0.3 million relate amongst others to bank guarantees and forex transactions. The principal restrictive governance contains a solvency ratio, net total interest bearing debt to EBITDA ratio and a current ratio, all of which are calculated on a consolidated Besi level. All borrowing facilities have no contractual maturity date. Besi was in compliance with all loan covenants at December 31, 2016. Besi has provided a parent company guarantee amounting to CHF 7.7 million related to the credit line of the Swiss subsidiaries and a letter of comfort related to the credit line of the Austrian subsidiary.

## 7. Convertible Notes

In December 2016, the Company issued € 125 million principal amount of Convertible Notes with a maturity date of December 2, 2023 (the "Notes"). The Notes carry a nominal interest rate of 2.5% per year, payable semi-annually, with the first payment to be made on June 2, 2017. Bondholders can convert the bonds into Ordinary Shares at an initial conversion price of € 43.51. The Notes will be repaid at maturity at a price of 100% of their principal amount plus accrued and unpaid interest.

If not converted, at any time from December 23, 2020, the Company may redeem the outstanding Notes at their principal amount, subject to giving a minimum of 30 days' and maximum of 60 days' prior notice to Bondholders, if the value of the Shares underlying the Notes equals or exceeds 130% of the then effective conversion price for at least 20 out of 30 consecutive dealing days.

The amount of the Notes classified as equity of € 11,310 is net of attributable debt issuance cost of € 215.

## 8. Commitments and contingencies

The parent company leases certain facilities and equipment under operating leases. The required minimum lease commitments were as follows:

(euro in thousands)	December 31, 2016	December 31, 2015
Within one year	68	30
After one year but not more than five years	119	54
<b>Total</b>	<b>187</b>	<b>84</b>

BE Semiconductor Industries N.V. is parent of the fiscal unit BE Semiconductor Industries N.V. and is therefore liable for the liabilities of the fiscal unit as a whole.

## 9. Financial income and expense

The components of financial income and expense were as follows:

(euro in thousands)	Year ended December 31, 2016	2015
Interest income	794	1,148
Net foreign exchange gain	83	74
<b>Subtotal financial income</b>	<b>877</b>	<b>1,222</b>
Interest expense	(1,486)	(837)
<b>Subtotal financial expense</b>	<b>(1,486)</b>	<b>(837)</b>
<b>Financial income (expense), net</b>	<b>(609)</b>	<b>385</b>

## 10. Selected operating expenses and additional information

Personnel expenses for all employees were as follows:

(euro in thousands)	Year ended December 31, 2016	2015
Wages and salaries	1,577	1,562
Social security expenses	111	112
Pension and retirement expenses	194	325
Share-based compensation plans	7,247	5,193
Other personnel costs	486	161
<b>Total personnel expenses</b>	<b>9,615</b>	<b>7,353</b>

The average number of employees during 2016 and 2015 was 8 and 8, respectively.

## 11. Additional information

### Cost of services provided by external auditor

Deloitte Accountants B.V. has served as our independent registered public accounting firm for the year 2016 and 2015. The following table sets out the aggregate fees for professional audit services and other services rendered by Deloitte Accountants B.V. and its member firms and/or affiliates in 2016 and 2015:

(euro in thousands)	Year ended December 31,	
	2016	2015
Audit costs	359	285
Other services	1	36
Tax services	-	-
<b>Total costs</b>	<b>360</b>	<b>321</b>

### Total number of personnel

The Company employed 9 employees at December 31, 2016 and 8 employees at December 31, 2015.

### Appropriation of the result

The Articles of Association provide that the Company can only distribute profits from its free distributable reserves. The Board of Management, with the approval of the Supervisory Board, will propose to the Annual General Meeting of Shareholders to determine the total dividend over 2016 at € 1.74 per Ordinary Share, amounting to a total of € 64,948. The Board of Management proposes to allocate the part of the net income for the year 2016 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

The General Meeting of Shareholders approved the 2015 statutory financial statements on April 29, 2016.

### Events after the balance sheet date

Subsequent events were evaluated up to February 22, 2017, which is the date the Financial Statements included in this Annual Report were approved. There are no events to report.

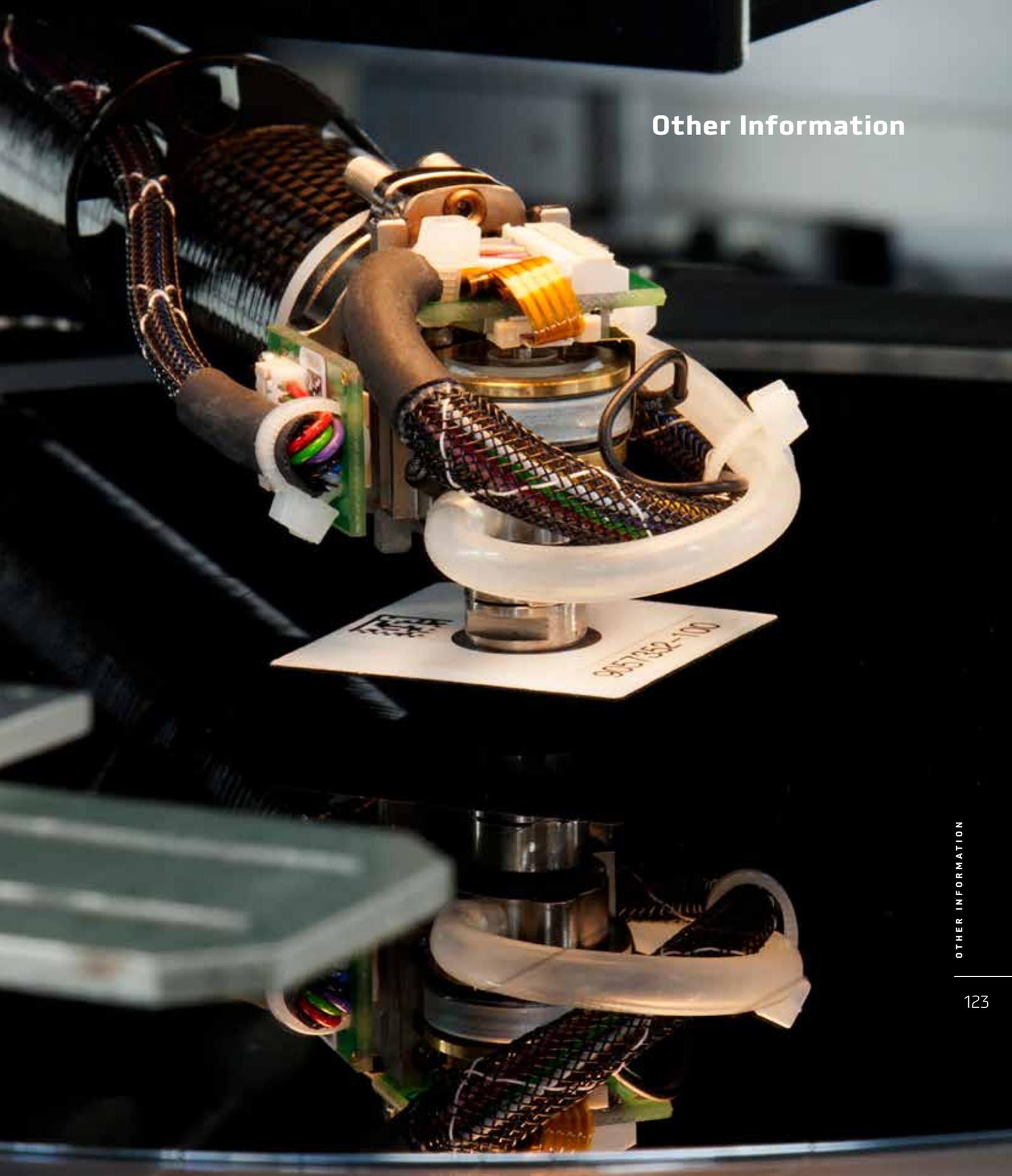
Duiven, February 22, 2017

#### Board of Management

Richard W. Blickman

#### Supervisory Board

Tom de Waard  
Douglas J. Dunn  
Mona ElNaggar  
Kin Wah Loh  
Jan E. Vaandrager



### **Corporate Office**

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The Netherlands  
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[www.besi.com](http://www.besi.com)  
e-mail: [info@besi.com](mailto:info@besi.com)  
[investor.relations@besi.com](mailto:investor.relations@besi.com)

For addresses of Besi's offices and manufacturing facilities worldwide, please visit Besi's website: [www.besi.com](http://www.besi.com)

### **Transfer Agent**

Ordinary Shares (euro)  
ABN AMRO Bank N.V.,  
Amsterdam, the Netherlands

### **Independent Auditors**

Deloitte Accountants B.V.,  
Amsterdam, the Netherlands

### **Legal Counsels**

Freshfields Bruckhaus Deringer,  
Amsterdam, the Netherlands

Rutgers Posch Visée Endedijk N.V.,  
Amsterdam, the Netherlands

### **Trade Register**

Chamber of Commerce,  
Arnhem, the Netherlands  
Number 09092395

### **Statutory Financial Statements**

The statutory financial statements of BE Semiconductor Industries N.V. will be filed with the Chamber of Commerce, Arnhem, the Netherlands.

### **Annual General Meeting**

The Annual General Meeting of Shareholders will be held on May 1, 2017, 10.30 a.m. at Besi in Duiven, the Netherlands.

### **Board of Management**

#### **Richard W. Blickman (1954)**

Chief Executive Officer,  
Chairman of the Executive Board

### **Executive Committee Members**

#### **Ruurd Boomsma (1956)**

SVP Die Attach, CTO

#### **Jeroen Kleijburg (1974)**

SVP Packaging

#### **Ruben Tibben (1978)**

VP Plating

#### **Henk Jan Jonge Poerink (1970)**

SVP Global Operations

#### **J.K. Park (1965)**

SVP Sales & Customer Service APac

#### **René Hendriks (1961)**

SVP Sales Europe/North America

#### **Cor te Hennepe (1958)**

SVP Finance

### **Other Members of Management**

#### **Christoph Scheiring (1970)**

VP Die Attach

#### **René Betschart (1973)**

VP Die Attach

#### **Danilo Gerletti (1967)**

VP Spares & Tooling

#### **Michael Leu (1962)**

Director Strategic Supply  
Management

#### **Hanspeter Abegg (1976)**

VP Finance Die Attach/Head  
of Global IT

#### **Leon Verweijen (1976)**

SVP Finance Asia

#### **Hans Wunderl (1951)**

SVP Strategic Development

# Independent Auditor's Report

To the shareholders and the Supervisory Board of BE Semiconductor Industries N.V.

## Report on the financial statements 2016 included in the annual accounts

### Our Opinion

We have audited the financial statements 2016 of BE Semiconductor Industries N.V., based in Amsterdam. The financial statements include the Consolidated Financial Statements and the Parent Company Financial Statements.

In our opinion:

- The Consolidated Financial Statements included in these annual accounts give a true and fair view of the financial position of BE Semiconductor Industries N.V. as at December 31, 2016, and of its result and its cash flows for 2016 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code.
- The Parent Company Financial Statements included in these annual accounts give a true and fair view of the financial position of BE Semiconductor Industries N.V. as at December 31, 2016, and of its result for 2016 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The Consolidated Financial Statements comprise:

1. The Consolidated Statement of Financial Position as at December 31, 2016.
2. The following statements for 2016: the Consolidated Statements of Comprehensive Income, Changes in Equity and Cash Flows.
3. The Notes comprising a summary of the significant accounting policies and other explanatory information.

The Parent Company Financial Statements comprise:

1. The Parent Company Balance Sheet as at December 31, 2016.
2. The Parent Company Statement of Income and Expense for 2016.
3. The Notes comprising a summary of the accounting policies and other explanatory information.

### Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the financial statements" section of our report.

We are independent of BE Semiconductor Industries N.V. in accordance with the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at € 5.1 million. The materiality is based on 7% of profit before tax. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Supervisory Board that misstatements in excess of € 255,000, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Audits of the group entities (components) were performed using materiality levels determined by the judgement of the group audit team, taking into account the materiality of the Consolidated Financial Statements as a whole and the reporting structure within the group. Component materiality did not exceed € 3.5 million.

### Materiality overview

Materiality for the financial statements as a whole	€ 5.1 million
Basis for materiality	7% of profit before tax
Threshold for reporting misstatements	€ 225,000

## Scope of the group audit

BE Semiconductor Industries N.V. is at the head of a group of entities. The financial information of this group is included in the Consolidated Financial Statements of BE Semiconductor Industries N.V.

Our group audit mainly focused on significant group entities in the Netherlands, Austria, Switzerland, China and Malaysia.

The group engagement team:

- Audited the group consolidation, the component in the Netherlands, financial statement disclosures and a number of key audit matters. These include revenues, impairment testing on goodwill, valuation of capitalized R&D and the valuation of operating losses carried forward.
- Used the work of Deloitte component auditors when auditing the significant components in Europe (2) and Asia (2).
- Performed analytical procedures or specific audit procedures at the other group entities.

As part of our audit procedures we have considered our assessment of significant group entities in order to ensure we have obtained appropriate coverage of the risks of a material misstatement for significant account balances and disclosures that we have identified.

For the entities which do not classify as significant entities we performed a combination of specific audit procedures and analytical procedures at group level relating to the risks of material misstatement for significant account balances and disclosures that we have identified.

### Audit coverage

Audit coverage of consolidated revenues	99%
Audit coverage of profit before tax	99%
Audit coverage of consolidated total assets	98%

By performing the procedures mentioned above at group entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the Consolidated Financial Statements.

## Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

### Key audit matter

### How the key audit matter was addressed in the audit

#### Revenue recognition

In the Company's industry a variety of customer contracts and revenue arrangements may be entered into that require careful consideration and judgement to determine the revenue recognition. Reference is made to note 2 to the Consolidated Financial Statements for the significant accounting policies on revenue recognition. There is a risk that revenue could be recorded in the incorrect year (cut-off) or misstated due to the judgmental nature of revenue recognition for contracts containing multiple products and services (multiple element arrangements).

Our audit procedures included, amongst others, testing the operating effectiveness of the Company's internal controls. Next to this we have assessed the appropriateness of the Company's revenue recognition accounting policies, including multiple element arrangements and assess compliance with EU-IFRS accounting policies. We have tested individual sales orders and transactions to assess proper identification of the elements in the contracts and correct allocation of the revenue to these elements. We also selected sales transactions before and after yearend to assess whether revenue was recognized in the correct period by, amongst others, inspection of: sales contracts, internal quality control approvals, client acceptance documents, shipping documents and the attendance of inventory counts.

**Key audit matter****How the key audit matter was addressed in the audit****Valuation of Die Attach goodwill**

Die Attach goodwill amounts to € 43.9 million and represents 7.5% of total assets at December 31, 2016. The Company's goodwill is allocated to two cash-generating units, being Die Attach and Plating. The annual goodwill impairment test for the Die Attach cash-generating unit was significant to our audit because the amount is material and the assessment process is complex, judgmental and is based on assumptions that are affected by expected future market and economic conditions.

We obtained an understanding of the internal process in place and identified controls around the financial forecasting process and impairment testing of the goodwill.

We assessed and challenged management's assumptions used in the impairment model with certain key assumptions as outlined in Note 9 to the Consolidated Financial Statements. For the financial forecast after 2017, the Company used assumptions in respect of market growth estimates from semiconductor equipment industry reports and future market developments. Specifically, we assessed the cash flow projections that are mainly driven by forecasted revenues, the Weighted Average Cost of Capital and the perpetuity growth rates. Furthermore, we assessed management's process in evaluating different market scenarios underlying the valuation model. These scenarios were, amongst others, used to analyze the sensitivity of the key assumptions used in the valuation models.

In our audit we were assisted by our valuation experts.

We also evaluated the adequacy of the disclosures provided by the Company in Note 9 in relation to its impairment assessment.

**Valuation of capitalized development expenses**

Capitalized development expenses included in intangible fixed assets amount to € 37.0 million and represent 6.3% of total assets at December 31, 2016. At December 31, 2016, 31.4% relates to capitalized development expenses not available for use, which have to be tested annually for impairment. The annual impairment test was significant to our audit because the assessment process is complex, judgmental and is based on assumptions that are affected by expected future market or economic conditions.

We obtained an understanding of the process in place around the expected financial forecasts for the development projects not yet in use and the impairment testing of capitalized development expenses not yet in use.

Our audit procedures partly comprised of our work on the Company's cash flow projections and forecasts as described above in our audit response to the key audit matter on the valuation of goodwill with the nuance that the forecast of the capitalized development expenses are prepared on individual technology level which is lower than the forecast of the cash generation unit used in the goodwill. In addition we reconciled the sales forecast per technology to the budget and performed sensitivity analyses on critical assumptions.

**Valuation of inventory**

The total net inventory and related obsolescence provision as of December 31, 2016 amounts to € 55.1 million and € 13.6 million, respectively. The obsolescence provision mainly relates to raw materials and spare parts because finished products (and related work in process) are manufactured when a commitment from a customer is received. We focused on this area because the gross inventory and related provision are material to the financial statements, involve a high level of judgement and are subject to uncertainty due to rapid technological changes.

We obtained an understanding of the process in place and identified controls in the assessment of the obsolescence provision.

We evaluated, amongst others, the analyses and assessments made by management with respect to slow moving and obsolete stock, the expected demand and market value related to spare parts and raw materials.

**Valuation of deferred tax assets**

The Company has recognized deferred tax assets of € 15.2 million related to tax losses. The deferred tax asset position was significant to our audit, since the amount is material to the financial statements, the assessment process is complex, requires careful consideration and judgement in relation to forecasting future taxable profits.

We considered controls in place relevant to the assessments made by management in determining the valuation of the deferred tax asset position. Our audit procedures included assessing management's assumptions to determine the probability that the recognized deferred tax assets are expected to be recovered through future taxable income. During these procedures we used for example, management's budgets, forecasts and relevant tax laws. In addition we also assessed the historical accuracy of management's assumptions. The audit procedures are performed in close cooperation with Deloitte's tax experts.

We also assessed the adequacy of the Company's disclosure Note 11 to the Consolidated Financial Statements.

## Report on the other information included in the annual accounts

In addition to the financial statements and our auditor's report, the annual accounts contain other information that consists of the following chapters (hereinafter referred to as "other information"):

- Report of the Board of Management
- Report of the Supervisory Board
- Corporate Governance
- Other information (pursuant to Part 9 of Book 2 of the Dutch Civil Code)

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements.
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of other information, including the Management Board's Report in accordance with Part 9 of Book 2 of the Dutch Civil Code, and the other information as required by Part 9 of Book 2 of the Dutch Civil Code.

## Report on other legal and regulatory requirements

### Engagement

We were engaged by the Supervisory Board as auditor of BE Semiconductor Industries N.V. on April 30, 2015, for the 2015 audit and have operated as statutory auditor since that date.

### Description of responsibilities for the financial statements

#### Responsibilities of management and the Supervisory Board for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting framework mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Management should disclose events and circumstances that may cast significant doubt on the Company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

#### Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit assignment in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgement and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included e.g.:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or specific items.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Amsterdam, February 22, 2017

Deloitte Accountants B.V.

B.C.J. Dielissen

## Preference Shares

At December 31, 2016, the Company's authorized capital consisted of 80,000,000 Ordinary Shares, nominal value € 0.01 per share, and 80,000,000 Preference Shares, nominal value € 0.01 per share.

No Preference Shares were outstanding at December 31, 2016.

In April 2000, the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") was established. The Foundation is an independent legal entity and is not owned or controlled by any other legal person. The purpose of the Foundation is to safeguard the interests of the Company, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the continuity, independence and identity of the Company. The aim of the Preference Shares is, among other things, to provide a protective measure against unfriendly take-over bids and other possible unsolicited influences which could threaten the Company's continuity, independence and identity, including, but not limited to, a proposed resolution to dismiss the Supervisory Board or the Board of Management. The issue of Preference Shares would enable the Company to consider its position in the then-existing circumstances.

By agreement of May 19, 2008 between the Company and the Foundation, which replaces a similar agreement dated April 19, 2002, the Foundation has been granted a call option pursuant to which it may purchase a number of Preference Shares up to a maximum of the number of Ordinary Shares issued and outstanding at the time of exercise of this option, minus one.

The Company has also granted to the Foundation the right to file an application for an inquiry into the policy and conduct of business of the Company with the Enterprise Chamber of the Amsterdam Court of Appeal (*Ondernemingskamer*). The Company believes that this may be a useful option in the period before the issuance of Preference Shares, without causing a dilution of the rights of other shareholders at that stage.

The members of the Board of the Foundation are W.L.J. Bröcker (Chairman), J.N. de Blécourt, N.W. Hoek and T. de Waard. As of June 1, 2016 Mr Bröcker succeeded Mr Ekelmans, who retired according to schedule as of that date, as Chairman of the Foundation. Except for Mr De Waard, none of the members of the Board of the Foundation are connected to the Company. The Foundation therefore qualifies as an independent legal entity within the meaning of section 5:71 paragraph 1 sub c of the Dutch Financial Supervision Act (Wet op het financieel toezicht).







