

# ANNUAL REPORT 2016

**THE STRENGTH  
TO CHANGE**



# KEY FIGURES

		2016	2015
Sales	€ million	35,166	29,154
Research & development expenses	€ million	1,948	1,390
Operating profit or loss	€ million	1,614	1,081
in % of sales		4.6	3.7
Adjusted EBIT	€ million	2,239	1,570
adjusted EBIT margin	%	6.4	5.4
Adjusted EBITDA	€ million	3,814	2,934
adjusted EBITDA margin	%	10.8	10.1
Net profit or loss before tax	€ million	1,281	1,088
in % of sales		3.6	3.7
Net profit or loss after tax	€ million	924	1,019
Adjusted free cash flow <sup>1)</sup>	€ million	2,000	1,361
Investments in property, plant and equipment	€ million	1,185	1,290
Equity ratio (end of the year)	%	21	19
Dividends	€ million	50	50
Employees (end of the year) <sup>2)</sup>		136,820	138,269

1) Cash flow from operating activities less cash flow from investing activities, adjusted for company acquisitions and disposals.  
2) Direct and indirect employees without temporary workers, apprentices and vacation workers.

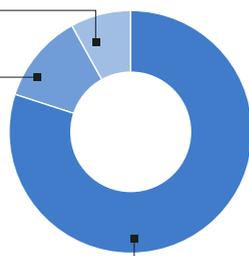
## €35.2 BILLION SALES

### SALES DISTRIBUTION BY SECTORS

Construction and agricultural machinery, marine craft, aircraft, special and rail vehicles, wind power **8%**

Commercial vehicles > 6 t **12%**

Cars and light commercial vehicles < 6 t **80%**



### SALES DEVELOPMENT BY REGIONS

Africa **1%**

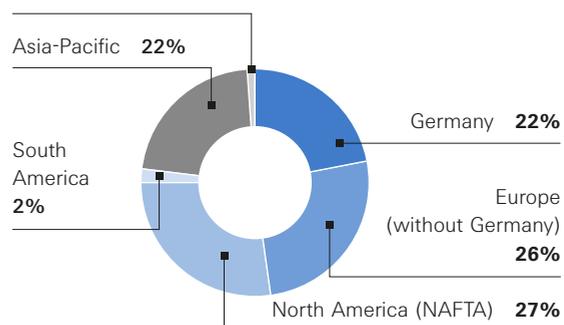
Asia-Pacific **22%**

South America **2%**

Germany **22%**

Europe (without Germany) **26%**

North America (NAFTA) **27%**



# EDITORIAL



## **“ZF IS NOT ONLY SUPPORTING THE TRANSFORMATION IN THE AUTOMOTIVE INDUSTRY, IT IS SHAPING IT.”**

*Nowhere is the word “disruption” so frequently heard as in the automotive industry, which is currently undergoing a radical transformation brought on by digitalization. This digitalization is revolutionizing not only our society, but the entire industry. Technology companies such as ZF are therefore being called upon to be prepared for this transformation.*

*Two years ago and in line with our ZF 2025 Strategy, we took one big step toward the future by purchasing TRW. The gain in expertise resulting from this acquisition and the increased sales amounting to €35 billion in 2016 give ZF the necessary technological and financial power. Last year, we invested roughly €2 billion or approximately 6% of our sales in research and development in order to secure our place as a company of tomorrow.*

*Mobility is becoming increasingly automated, which requires highly complex technology. We are therefore establishing joint ventures and cooperations with other companies to work in certain areas. We founded the venture capital company Zukunft Ventures GmbH in order to better benefit from the power of technological innovation and to leverage the rapid pace of specialized start-up companies.*

*All of the above plus ZF’s broad product portfolio form the basis for success. Neither chips nor processors alone can steer a vehicle, accelerate it or slam on its brakes. These actions still require intelligently networked mechanical systems which are our core competence. ZF is therefore in the unique position of enabling vehicles to see, think and act. We will continue to build on this strength in 2017.*

*Yours sincerely,*

A handwritten signature in black ink, appearing to read 'Stefan Sommer'. The signature is fluid and cursive, written over a white background.

*Dr. Stefan Sommer  
Chief Executive Officer*

ZF is shaping the future of the mobility industry

# LEVERAGING STRENGTHS

ZF is growing. Over the past decade, the company has gained considerably in size and market importance. Yet ZF continues to look beyond the horizon. The company is leveraging its current strengths to be perfectly positioned for the future.

The ZF Group's key performance indicators, such as sales or the number of employees and locations, have more than tripled since 2006. Contributing factors include not only the company's strong organic growth. Its acquisition of TRW Automotive in 2015 is equally important. By integrating TRW as its "Active & Passive Safety Technology" division, the ZF Group has

become stronger. Ultimately, this division has expanded ZF's product portfolio by adding safety and sensor technology products and expertise – decisive factors for automated and autonomous driving. The Group provides intelligent solutions to successfully meet the mobility challenges of tomorrow. That is how ZF is shaping the future of the mobility industry.

€ **35.2** BILLION  
SALES

Solid sales and revenue growth is important for ZF. Only in this way can the Group rapidly reduce its liabilities while simultaneously investing in research and development.

[www.zf.com](http://www.zf.com)

## OUTSIDER'S VIEW

*"Already coming from a very high level, ZF impressed the jury with its outstanding power of innovation, smart expansion strategy and high growth rates. And this is true in all regions of the world where the company does business."*

Frank Riemensperger, executive board chairman of the international technology consulting company Accenture during the award ceremony of the "Top 500 Award" handed out by the media group Welt/N24 and Accenture

€ **1.2** BILLION INVESTED IN  
PROPERTY, PLANT AND  
EQUIPMENT



**STRONG FOUNDATION:  
OUR BROAD PRODUCT PORTFOLIO**

**Car Powertrain Technology:** Automatic Transmissions, Manual Transmissions/Dual Clutch Transmissions, Axle Drives, Powertrain Modules

**Car Chassis Technology:** Chassis Systems, Chassis Components, Suspension Technology

**Commercial Vehicle Technology:** Truck & Van Driveline Technology, Axle & Transmission Systems for Buses & Coaches, CV Chassis Technology, CV Powertrain Modules, CV Steering Systems

**Industrial Technology:** Off-Highway Systems, Industrial Drives, Marine & Special Driveline Technology, Test Systems, Aviation Technology, Wind Power Technology

**E-Mobility:** Electronic Systems, Electric Traction Drive (pure electric drives and hybrid application technology), System House

**ZF Aftermarket:** Products and solutions for the global automotive spare parts market

**Active & Passive Safety Technology:** Braking Systems, Steering Systems, Occupant Safety Systems, Electronics, Body Control Systems

[www.zf.com](http://www.zf.com)

Leading technology  
supplier, repre-  
sented in all types of  
vehicles as well as  
agricultural and con-  
struction machinery

€ **2** BILLION  
RESEARCH AND  
DEVELOPMENT  
SPENDING

The Group strategy is the framework

# A GLANCE AT 2025

ZF is staying its course. The company has set important milestones that follow a detailed plan, namely the ZF 2025 Strategy. Since 2013, the company has consistently realized this strategy and is thus ensuring its future.

Already the decision made in 2014 to acquire the U.S. company TRW Automotive was part of ZF's future strategy. Its targets include, among others, balanced market penetration, innovation and cost leadership as well as a diversified product portfolio. Since adopting the ZF 2025 Strategy, it has been the guiding light for all decisions the Group has made and actions it has taken. One important milestone achieved as we implement the ZF 2025 Strategy is the new joint aftermarket organization of ZF and TRW, the world's second largest of its kind. This joint organization has also created important synergies for the future success of ZF. New and dynamic

elements have also resulted from the Group strategy. Different innovation labs throughout the Group are busy developing new technologies, exploring new product ideas and experimenting with new working methods. ZF is also leveraging the technological and innovative power of start-up companies through its new venture capital company Zukunft Ventures GmbH, founded in 2016. The Group is gaining additional necessary expertise by entering into joint ventures and cooperative agreements with other companies. By creating the new position of Chief Digital Officer, ZF will be able to better fulfill its role as the driver in an increasingly connected world of mobility. [www.zf.com](http://www.zf.com)

## ROADS TO SUCCESS THE GOALS OF ZF 2025



## TWICE AS POWERFUL TODAY



Acquisition of TRW  
and successful  
integration in the  
ZF Group



New joint  
aftermarket  
organization



Joint purchasing  
organization

## EVEN STRONGER TOMORROW



Different ZF  
innovation labs  
ensure even more  
innovative power



Zukunft Ventures  
GmbH coordinates joint  
ventures and coopera-  
tive agreements

Business success requires more than just innovative products. ZF's strategic direction is making the company more competitive, more successful on the market and more viable for the future.

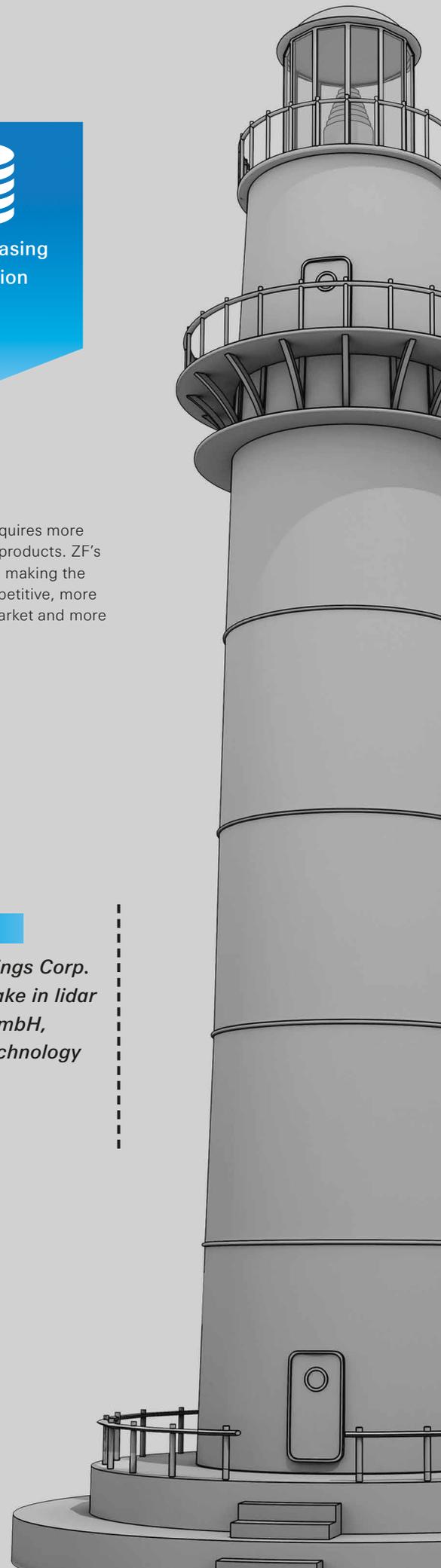
### OUTSIDER'S VIEW

*"Since ZF acquired TRW Automotive Holdings Corp. in 2015 for \$12.4 billion and took a 40% stake in lidar producer Ibeo Automotive Systems GmbH, the supplier has become a self-driving technology powerhouse."*

Katie Burke, "Automotive News"

€ **1.6** BILLION  
REDUCTION IN  
GROSS DEBT

ZF pays off its debts faster than expected. Corporate bonds from the Group are appealing to international investors.



Challenges and opportunities of the future

# SHAPING CHANGE

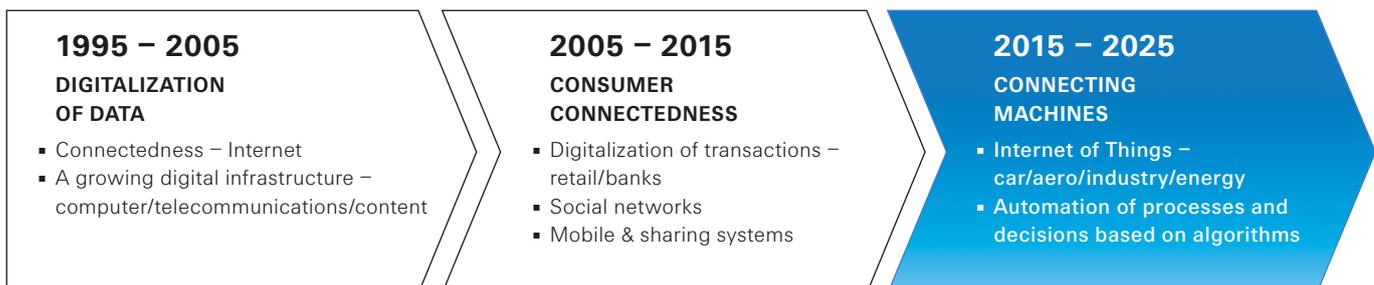
Digitalization is bringing about rapid change in our society and business world. Seldom has that change been as radical or dynamic as now. This is especially true in the automotive industry. In 2013, computers around the world generated a data volume of roughly 230 million terabytes. According to estimates, this unbelievable volume will reach more than one billion terabytes by 2020, almost five times as much as now.

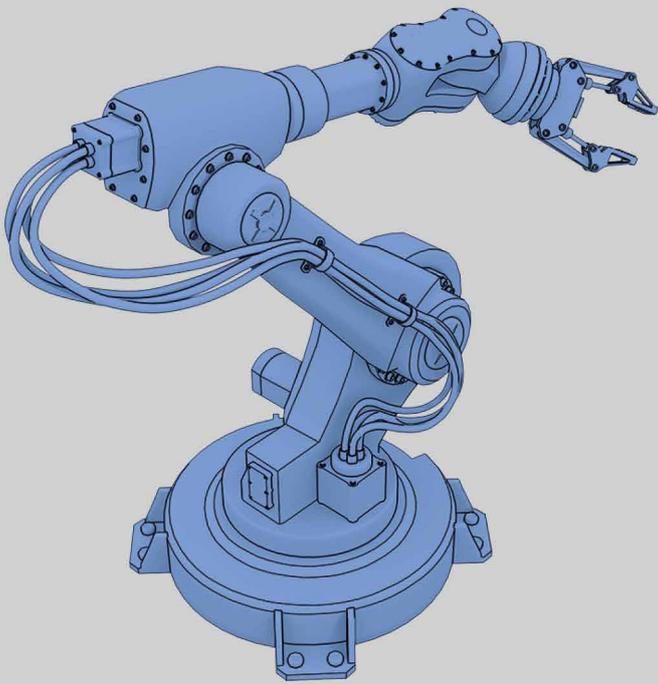
Bits and bytes are also redefining business and commerce. The Internet of Things will impact the production of future industrial products and consumer goods from many sectors even more so than now. This development is shaping how people live and interact with one another. Currently, more than half of the world’s population lives in big cities; by 2050, it will be more than two-thirds. This will have a far-reaching impact on people’s quality of life. Today’s air pollution levels in big cities are already revealing the limits of a mobile society that depends on combustion engines. Moreover, CO<sub>2</sub> emissions are accelerating climate change. These developments

have alarmed legislators, resulting in global climate change agreements that influence both national and local regulations to limit emissions. In general, society expects to receive answers to urgent questions like these more quickly – and gets them. When it comes to mobility, such answers are coming not only from established but also from new players in an automotive industry adapting to these megatrends. One visible sign of this is electromobility or, more specifically, zero local emissions mobility. Other trends range from increasing connectedness and automated driving to self-driving vehicles, which can significantly increase safety.

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## DIGITALIZATION RISING CONNECTEDNESS BETWEEN HUMAN AND MACHINE





# IoT

## INTERNET OF THINGS

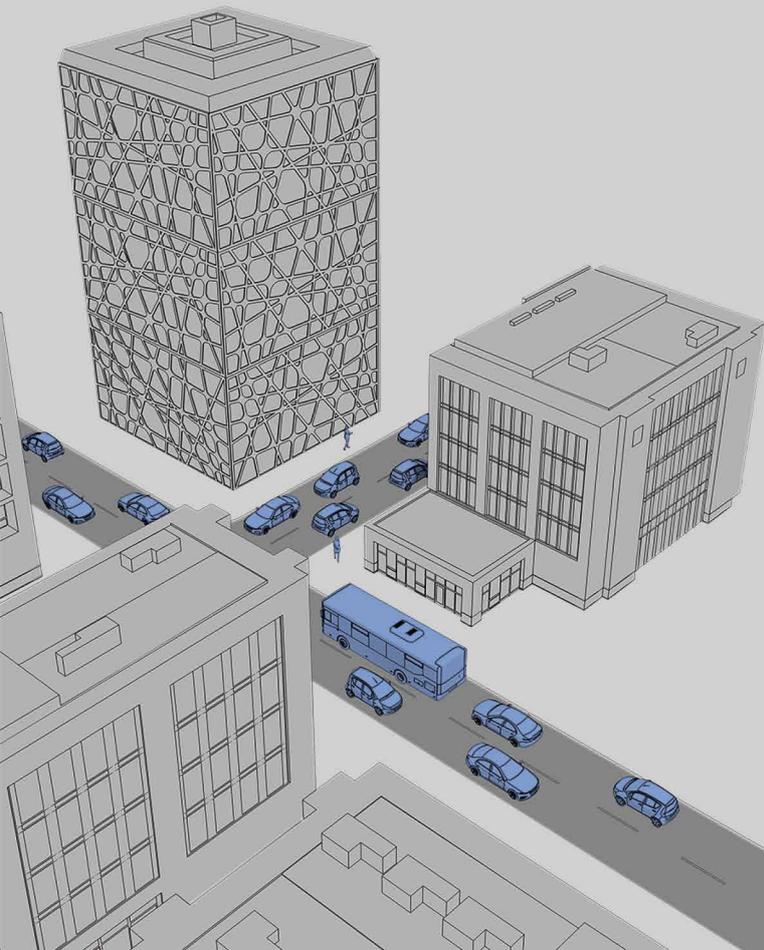
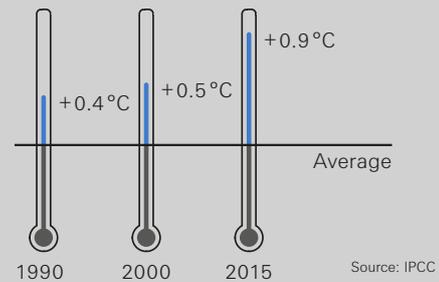
A refrigerator that orders replenishments itself is just one of many visions of the future in an increasingly connected world. And it is coming! A long-established component of industry and materials management, the Internet of Things, is now about to make a leap into the daily lives of people.

# CO<sub>2</sub>

## REDUCTION

Reducing emissions is still an important social responsibility. It mitigates climate change and increases the air quality in cities. As such, legislators are writing stricter and stricter guidelines. That's why the use of emission-reducing technology is attractive. If you take the average temperature between 1951 and 1980 as a baseline, you will notice that there has since been a clear rise in temperatures.

### WORLD CLIMATE: CONTINUOUS CLIMATE WARMING



### OUTSIDER'S VIEW

*"Beyond the evolutionary autonomous steps that ZF put on display, one overarching message is clear: The development and deployment of increasingly autonomous technology is here to stay."*

Jason Morgan, "Fleet Equipment"

Intelligent mechanical systems for all vehicles

# STAYING NEW

Mobility goes digital – but that is not the whole truth. Processors and computer chips process information, but they do not make a vehicle accelerate by itself. They also cannot brake, steer or protect passengers independently. Such actions continue to require a mechanical connection. This is where ZF can play to all its strengths. The Group interconnects supercomputers with its sensors and mechatronic systems to create intelligent mechanics.

ZF products enable vehicles to see, think and act. All of this is equally important when it comes to assisted driving today and self-driving vehicles tomorrow. The requirements are both varied and ambitious. Regardless of light and weather conditions, high-resolution sensor systems are needed to identify the driving lane, the vehicle's and other road users' positions as well as the situation inside the vehicle. For such a 720-degree analysis, a smart control unit is required. Endowed with artificial intelligence, the control unit "understands" what is happening in and around the vehicle. Just as critical are the powerful, reliable actuators in the drive, braking and steering systems as well as the occupant safety systems because they are what makes a vehicle move – and, in extreme cases, save passenger lives thanks to the seatbelt and airbag systems.

ZF's unique technological position is expressed in a nutshell with the motto "See – Think – Act". Made possible by sensors, controls and actuating elements perfectly attuned to one another, this trifecta of actions has already become a reality in the Innovation Truck and Innovation Tractor 2016. This enables the 40-ton Innovation Truck to avoid an accident by automatically activating the emergency brakes and performing an evasive maneuver. At the same time, when driving on the freeway, it can remain in its lane and maintain a proper distance from the vehicle in front of it without the driver having to intervene. The Innovation Tractor additionally uses electric drive power in the trailer's axle to move over difficult terrain. Both ZF's innovation vehicles maneuver independently thanks to systems that interconnect vehicle and infrastructure. The truck reverses fully automatically up to the loading ramp while the tractor reverses to hitch itself to the trailer.

# 24 TRILLION

The scalable supercomputing platform NVIDIA DRIVE PX 2 manages 24 trillion deep-learning operations per second. With this platform, ZF and Nvidia bring artificial intelligence into the vehicle – an essential prerequisite for autonomous driving.

## OUTSIDER'S VIEW

*"The era of vehicles on autopilot inches closer to reality as automotive supplier ZF pairs with technology specialist NVIDIA to unveil what they say is the world's first artificial-intelligence self-driving car computer."*

Tom Murphy, "WardsAuto"

## EXAMPLE INNOVATION TRUCK

If a collision cannot be avoided by emergency braking, the **Evasive Maneuver Assist** automatically performs an evasive maneuver.

With the **Highway Driving Assist**, the truck can automatically remain in the lane and maintain the proper distance from the vehicle in front of it.

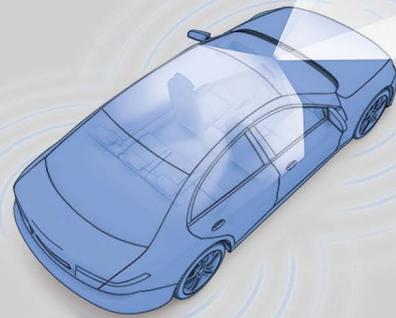


Thanks to **Safe Range**, the truck automatically maneuvers in reverse to the ramp safely and efficiently on pure electric power.

[WWW.ZF.COM](http://www.zf.com)

## EXAMPLE 720-DEGREE SENSING

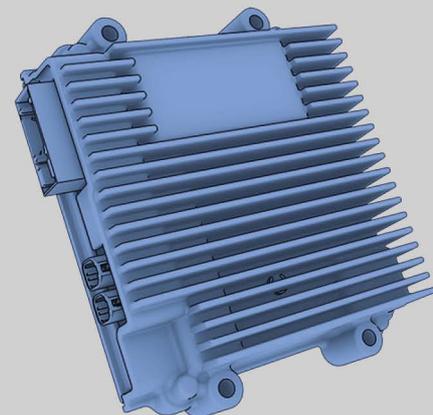
ZF's high-resolution sensors provide a double 360-degree panoramic view, first sweeping the vehicle's exterior surrounding and then scanning the position of the driver and passengers on the inside.



### ZF ProAI: ARTIFICIAL INTELLIGENCE FOR ALL APPLICATIONS

With an increasingly large volume of sensor data, including a multitude of possible reaction options, what kind of control unit can process this immense data volume? For self-driving vehicles in which the computer system is in full control of the vehicle, artificial intelligence (AI) will be extremely important. Thanks to the "deep learning" capacity of AI, systems can network with one another just like the human brain. Together with Nvidia, ZF is working on an AI-capable control unit. ZF will not only equip cars and trucks with it, but also agricultural and construction machinery as well as industrial applications.

[WWW.ZF.COM](http://www.zf.com)



Mobility solutions for a connected world

# THINKING ONE STEP AHEAD

Old boundaries are becoming blurred. Innovations that are shaping the mobility of the future are no longer just about the vehicle. Whether connectedness, cloud-based information or support services, ZF is pursuing its own ideas for new business models in these fields.

Public acceptance of electromobility will come about in many ways. That's why ZF is expanding its long-term core expertise in electric motors by bringing in new product ideas and establishing cooperative partnerships. Together with partners, ZF is developing the blockchain technology-based "Car eWallet" which will enable the vehicle to automatically pay for parking fees, highway tolls or for power at the charging station. Another potential new business model is to develop apps and algorithms to increase safety in road traffic, especially for more vulnerable road users like pedestrians and cyclists. For example, the intelligent algorithm "X2Safe" warns its user of a potential collision with another road user. The concept of the Intelligent Rolling Chassis (IRC), a ready-to-go platform for all-electric city vehicles, has been designed for all players on the mobility

market. The completely flat floor between the front and rear axles accommodates almost any vehicle body design and new interior concepts. The Intelligent Rolling Chassis is the perfect platform for compact cars, sedans, fun convertibles, delivery vehicles and even for driverless delivery containers. The intelligently connected mechatronic systems from ZF are included. For car-sharing service providers, taxi companies and rental car companies, the "Dashboard" app from Openmatics is an interesting innovation. This application helps fleet operators manage their fleets efficiently. ZF founded Openmatics in 2011 as the first manufacturer-independent telematics platform. Today, Openmatics is an important part of many of the Group's future ideas – for passenger cars, trucks and industrial applications.

# ZERO

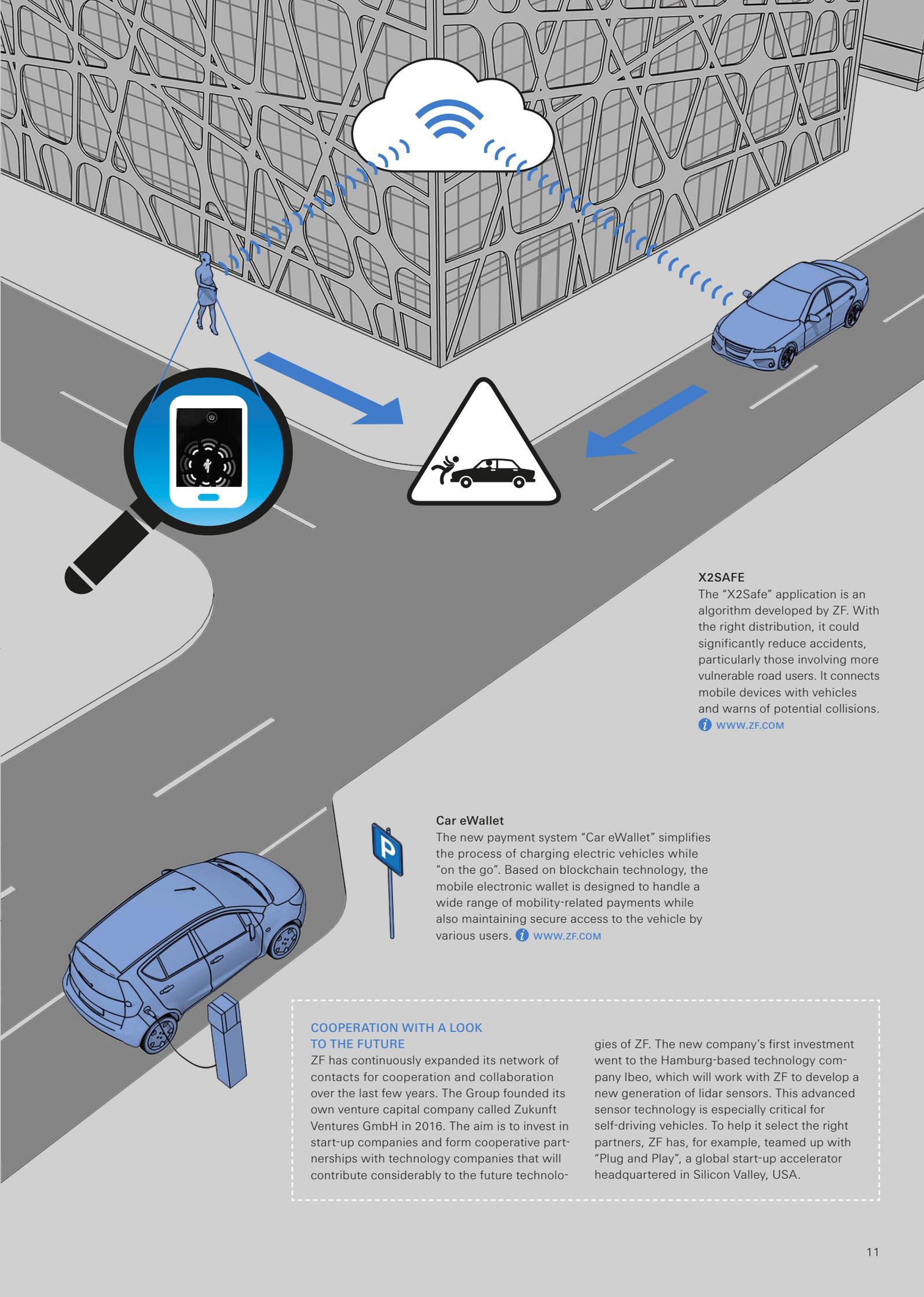
EMISSIONS / ACCIDENTS

"Vision Zero" means zero accidents, zero emissions. Achieving these ambitious goals requires intelligently connected and automated systems.

## OUTSIDER'S VIEW

*"German manufacturer ZF has a solution that uses artificial intelligence to predict the likelihood of a collision, then alerts drivers and bystanders, intervening if necessary to keep everyone out of harm's way. Even better, it's ready to be used today."*

*"thedrive.com"*



#### X2SAFE

The "X2Safe" application is an algorithm developed by ZF. With the right distribution, it could significantly reduce accidents, particularly those involving more vulnerable road users. It connects mobile devices with vehicles and warns of potential collisions.

[www.zf.com](http://www.zf.com)

#### Car eWallet

The new payment system "Car eWallet" simplifies the process of charging electric vehicles while "on the go". Based on blockchain technology, the mobile electronic wallet is designed to handle a wide range of mobility-related payments while also maintaining secure access to the vehicle by various users. [www.zf.com](http://www.zf.com)

#### COOPERATION WITH A LOOK TO THE FUTURE

ZF has continuously expanded its network of contacts for cooperation and collaboration over the last few years. The Group founded its own venture capital company called Zukunft Ventures GmbH in 2016. The aim is to invest in start-up companies and form cooperative partnerships with technology companies that will contribute considerably to the future technolo-

gies of ZF. The new company's first investment went to the Hamburg-based technology company Ibeo, which will work with ZF to develop a new generation of lidar sensors. This advanced sensor technology is especially critical for self-driving vehicles. To help it select the right partners, ZF has, for example, teamed up with "Plug and Play", a global start-up accelerator headquartered in Silicon Valley, USA.

# FINANCIAL REPORT

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€ **35.2** BILLION  
SALES

€ **1.2** BILLION INVESTED  
IN PROPERTY,  
PLANT AND  
EQUIPMENT

**136,820**  
EMPLOYEES

# PREFACE TO THE FINANCIAL REPORT

*Dear Customers and Business Partners,  
Dear Employees and Readers,*

*Fiscal year 2016 turned out to be a good year for ZF. With its new size, the company was able to reach important milestones. This was the first year that ZF TRW, acquired in May 2015, was included in the ZF Group's business figures for a full year. We were again able to increase our sales and operating results in fiscal year 2016, with sales rising by 20.6% to €35,166 million. The adjusted EBIT also improved from €1,570 million to €2,239 million. The successful integration of ZF TRW is also reflected in the increase of free cash flow to €2,000 million, adjusted for M&A transactions.*

*The acquisition of TRW – the largest in ZF's company history – was an important building block in realizing our corporate strategy ZF 2025. With the resulting gain in expertise as well as our stronger financial position, we are ensuring the long-term future of ZF as a technology company and leader in the automotive industry. The integration of TRW is already showing initial signs of success and continues to be rapidly driven forward. ZF TRW has become the “Active & Passive Safety Technology” division in the ZF Group. From our newly created, improved position, we can actively shape the transformation currently underway in the automotive industry as a result of increasing digitalization and urbanization. Now, with our core expertise and intelligently connected mechanical systems, we can offer key products for the mobility of tomorrow.*

*2016 also saw the establishment of a joint aftermarket organization between ZF and TRW, which is now the second largest in the world. Sharing a purchasing organization allows us to leverage important synergies. Also, the innovation labs that we have initiated as part of our strategy are forward-looking and will ensure even greater innovation. We are expanding our know-how by entering into targeted joint ventures and cooperative agreements. Last year, we founded Zukunft Ventures GmbH and have already established initial and very promising joint ventures with Ibeo and doubleSlash.*

*These successes would not have been possible without our employees and partners. We would therefore like to take this opportunity to give you – our customers, suppliers and other business partners – a special thank-you for your continued trust and for the respectful cooperation we have all enjoyed. Also, we owe a special thanks to our employees worldwide who have successfully driven the further development of ZF through their in-depth expertise and commitment, even during times of change. Moreover, we would like to thank the shareholder representatives and members of the Supervisory Board who are intensely involved and who support us in making far-reaching decisions to ensure the future of the company.*

*Like last year, global economic growth this year remained moderate. That's why it is all the more gratifying to report that ZF was able to leverage numerous market opportunities in this environment. However, trends in the individual sectors and regions were highly mixed, as in previous years. The crisis markets in South America and Russia had to absorb further declines while Asia-Pacific, especially China, as well as Europe and North America, were able to enjoy further gains. In terms of vehicle sectors, global production of passenger cars and light commercial vehicles as well as global commercial vehicle production grew; in contrast, the off-road machinery markets continued to contract. One major growth driver for ZF was the particularly high sales volume of automatic transmissions for luxury and mid-size vehicles, especially in the USA, Europe and Asia. The Industrial Technology Division experienced the strongest growth in 2016. Compared to the previous year, regional sales distribution remained mainly unchanged with 48% of sales in Europe, 27% of sales in North America (NAFTA) and 22% of sales in Asia-Pacific.*

*Also in 2016, we spent €1,185 million on property, plant and equipment, thereby concretely investing in the future success of the ZF Group. The largest percentage of the investments went to starting up new products and expanding the capacities of existing products. In terms of regions, focal points include Germany, the USA, China and Mexico. We invested €1,948 million or 5.5% of sales in research and development.*

*For the coming year, we expect development trends to remain mixed but quite stable in the sectors relevant for ZF. In light of this and based on our ZF 2025 Strategy, ZF should enjoy stable, above-average organic growth, which, over the medium term should reach around 6% annually. For the 2017 fiscal year, we are expecting Group sales of approximately €36 billion and an adjusted EBIT margin of approximately 6%. We expect a slight increase in the investment ratio over the previous year.*

*We hope to continue to enjoy your company as we travel down our road to the future!*

*Friedrichshafen, March 2017*



*Dr. Stefan Sommer  
Chief Executive Officer*



## BOARD OF MANAGEMENT

**Wilhelm Rehm**  
Corporate Materials  
Management,  
Commercial Vehicle  
Technology, Industrial  
Technology

**Dr. Franz Kleiner**  
Corporate Quality,  
Active & Passive  
Safety Technology,  
North America

**Michael Hankel**  
Corporate Production,  
Car Powertrain  
Technology, Car  
Chassis Technology,  
E-Mobility

**Jürgen Holeksa**  
Corporate Human  
Resources, Corporate  
Governance, Service  
Companies



**Dr. Stefan Sommer**  
Chief Executive Officer,  
Corporate Research and  
Development, ZF Aftermarket

**Dr. Konstantin Sauer**  
Corporate Finance,  
IT, M&A

**Peter Lake**  
Corporate Market,  
Asia-Pacific,  
South America

# REPORT OF THE SUPERVISORY BOARD



*The course of business and the result again developed positively at ZF in 2016. Thanks to this strong base, ZF was able to focus systematically on further developing the ZF 2025 Strategy and integrating ZF TRW as the Active & Passive Safety Technology Division. ZF has further extended its activities relating to electromobility by setting up the E-Mobility Division and took important strategic decisions for digitalizing the company.*

*The Supervisory Board performed the duties incumbent upon it under the law and the by-laws with great diligence. We continually monitored the Board of Management's work and assisted it in the execution of its managerial tasks, the strategic further development of the company and other important individual matters. Outside of the board meetings, the Chairman of the Supervisory Board also received regular reports from the Chief Executive Officer about current and important developments in the company. An open, responsible and constructive reciprocity characterizes our cooperation with the Board of Management in the Executive and Audit Committees as well as in the collective Supervisory Board.*

*In 2016, the Supervisory Board met for several meetings during which the Board of Management reported on the company's situation and all essential, current and strategically important issues.*

*At the respective meetings, the Supervisory Board discussed the progress made with implementing the ZF 2025 Strategy drawn up by the Board of Management. Core elements include, among other things, the further balanced global market penetration, product innovations and the focus on strategically and financially appealing new business. A common objective of the Supervisory Board and the Board of Management is the sustainable further development of the ZF Group based on the requirements for new technologies in an increasingly dynamic market. The successful integration of ZF TRW plays a major role, especially for leveraging the business potential inherent in the megatrends of efficiency, safety and automated driving. The development of these activities, the process of integrating ZF TRW as well as the realignment of the ZF management concept were regularly deliberated by the Supervisory Board and its committees. Moreover, the M&A projects initiated as part of the strategy were discussed in detail. In 2016, these projects*

*included the disposal of the Engineered Fasteners & Components business to ITW and the sale of the Cherry Group to GENUI, along with setting up Zukunft Ventures GmbH in particular, whose aim is to utilize the technological innovativeness of start-up companies. The participations in Ibeo and doubleSlash underline this approach.*

*The Supervisory Board pays special attention to the Board of Management's presentation of key activities in the framework of strategic and operational planning, which are to further improve operational performance and profitability as well as help to achieve the planned net debt reduction. The Supervisory Board will make sure it is kept up-to-date about how implementation of the actions is progressing. Positive aspects are the improved operating margins and the faster repayment of interest-bearing debt capital. The Board of Management also presented the Compliance Report and reported about the significant individual risks within the context of risk management. No risks were identified which were a threat to continued existence.*

*At its meetings, the Executive Committee of the Supervisory Board addressed, in particular, the strategic focus of the ZF Group, personnel issues of the Board of Management and Division Management, promoting young talents, succession planning and the overall HR strategy.*

*During the meeting on March 17, 2016, the appointed auditor reported to the Audit Committee in detail on the results of the annual financial statements and the consolidated financial statements, and discussed these as well as ZF's challenges in Finance with the Board of Management. At the other two meetings, the Board dealt with the compliance organization, the risk management system, the internal audit system and operational planning. The chairpersons of both committees, Prof. Dr. Giorgio Behr and Dr. Margarete Haase, reported on the essential issues and activities in their committees at the subsequent Supervisory Board meetings.*

*As per the decision taken by the Supervisory Board on June 28, 2016, the appointment of Dr. Stefan Sommer as Chief Executive Officer was extended by five years. The retirement of Rolf Lutz on September 30, 2016, reduced the number of Board members from eight to the current seven and saw his corporate functions distributed among the other members. Rolf Lutz worked at ZF Friedrichshafen AG for 36 years and spent five thereof as a Board member. Following Hans-Georg Härter's departure from the Supervisory Board, Robert Friedmann was appointed as his successor as of January 1, 2017.*

*The annual financial statements of ZF Friedrichshafen AG compiled by the Board of Management in accordance with the provisions of the German Commercial Code (HGB) and the consolidated financial statements compiled in accordance with § 315a HGB on the basis of the International Financial Reporting Standards (IFRS), dated December 31, 2016, as well as the corresponding management reports, were each audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft. The company issued its unqualified audit opinion in each case. The Supervisory Board extensively studied the documentation. All*

members of the Supervisory Board had access to the audit reports to do this. In addition, the appointed auditor explained the main audit results first to the Audit Committee and then to the Supervisory Board during the board meeting on March 29, 2017. In both cases, the results were discussed in detail in the presence of the auditor. The Supervisory Board raised no objections, accepted the financial statement audit results and adopted the annual financial statements of ZF Friedrichshafen AG as well as the consolidated financial statements. The Supervisory Board advised the shareholders to approve the annual financial statements, adopt the consolidated financial statements and accept the recommendation of the Board of Management for the appropriation of the net profit.

For the fiscal year 2016, the Board of Management drew up a report on the relations to affiliated companies (dependence report) according to § 312 German Stock Corporation Law (AktG). The Supervisory Board audited this report; no objections were raised. Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft audited the report and issued the following audit opinion:

*“Based on our dutiful audit and assessment, we confirm that firstly, the actual statements of the report are correct; secondly, the contribution by the company with regard to the legal transactions presented in the report was not unreasonably high.”*

The Supervisory Board agrees to the audit result of the appointed auditor. According to the concluding audit result by the Supervisory Board, no objections are to be raised with regard to the Board of Management’s closing statement contained in the report.

Despite facing difficult obstacles at times, the Board of Management, the employee representatives and the entire workforce of the ZF Group did an outstanding job in 2016. The Supervisory Board would like to take this opportunity to express its appreciation and thank everyone for the work they have done, the high level of commitment to the company as well as the objective and constructive teamwork.

Friedrichshafen, March 2017



On behalf of the Supervisory Board  
Prof. Dr. Giorgio Behr  
Chairman

# MANAGEMENT BODIES

## Board of Management

**Dr. Stefan Sommer**, Meersburg,  
**Chief Executive Officer**,  
Corporate Research and Development,  
ZF Aftermarket

**Michael Hankel**, Eschborn,  
Corporate Production, Car Powertrain  
Technology, Car Chassis Technology,  
E-Mobility

**Jürgen Holeksa**, Friedrichshafen,  
Corporate Human Resources, Corporate  
Governance, Service Companies

**Dr. Franz Kleiner**, Neuburg am Inn,  
Corporate Quality, Active & Passive Safety  
Technology, North America

**Peter Lake**, Franklin, USA,  
Corporate Market, Asia-Pacific,  
South America

**Rolf Lutz** (until September 30, 2016),  
Friedrichshafen,  
Corporate Quality, Commercial Vehicle  
Technology, South America

**Wilhelm Rehm**, Höchstädt,  
Corporate Materials Management,  
Commercial Vehicle Technology, Industrial  
Technology

**Dr. Konstantin Sauer**, Überlingen,  
Corporate Finance, IT, M&A

## Supervisory Board

The Supervisory Board of the company has been set up in accordance with the provisions of the Act on the Co-determination of Employees. It is composed as follows:

**Prof. Dr. Giorgio Behr**, Buchberg,  
Switzerland,  
**Chairman of the Supervisory Board**,  
CEO and President of the BBC Group,  
Villmergen, Switzerland

**Frank Iwer**<sup>1)</sup>, Stuttgart,  
**Deputy Chairman of the Supervisory Board**,  
Head of Staff Position Political and Strategic  
Planning of the Board of Management of  
IG Metall, Frankfurt

**Jörg Ammon**<sup>1)</sup>, Salem,  
Head of ZF Friedrichshafen AG Projects,  
Friedrichshafen

**Ernst Baumann**, Münsing,  
former Member of the Management Board  
of BMW AG, Munich

**Matthias Beuerlein**<sup>1)</sup>, Volkach,  
Team Leader of Non-Production Materials  
Purchasing, Schweinfurt location of ZF  
Friedrichshafen AG, Friedrichshafen

**Andreas Brand**, Friedrichshafen,  
First Mayor of the City of Friedrichshafen

**Jürgen Bunge**<sup>1)</sup>, Lemförde,  
Chairman of the Lemförde Location  
Works Council of ZF Friedrichshafen AG,  
Friedrichshafen

**Achim Dietrich**<sup>1)</sup>, Kressbronn,  
Chairman of the Group Works Council of ZF  
Friedrichshafen AG, Friedrichshafen

**Prof. Dr. Dr. Claudia Eckert**, Munich,  
Chair for IT Security, Technische Universität  
München, Munich

**Robert Friedmann** (since January 1, 2017),  
Beilstein,  
Chairman of the Central Managing Board  
of the Würth Group, Künzelsau

**Dr. Margarete Haase**, Cologne,  
Member of the Management Board of  
DEUTZ AG, Cologne

**Hans-Georg Härter** (until August 10, 2016),  
Salzweg,  
former CEO of ZF Friedrichshafen AG,  
Friedrichshafen

**Peter Kippes**<sup>1)</sup>, Schweinfurt,  
First Representative of IG Metall  
Administration Center Schweinfurt

**Dr. Joachim Meinecke**, Freiburg,  
Lawyer

**Oliver Moll**<sup>1)</sup>, Schonungen,  
Chairman of the Schweinfurt Location  
Works Council of ZF Friedrichshafen AG,  
Friedrichshafen

**Jürgen Otto**, Coburg,  
CEO of Brose Group, Coburg

**Dr.-Ing. Franz-Josef Paefgen**, Ingolstadt,  
former Chairman and Chief Executive of  
Bentley Motors Ltd., Crewe, Great Britain

**Vincenzo Savarino**<sup>1)</sup>, Friedrichshafen,  
First Representative of IG Metall Administration  
Center Friedrichshafen-Upper Swabia

**Wolfgang Schuler**<sup>1)</sup>, Riegelsberg,  
Chairman of the Saarbrücken Location  
Works Council of ZF Friedrichshafen AG,  
Friedrichshafen

**Hermann Sicklinger**<sup>1)</sup>, Thyrnau,  
Chairman of the Passau Location  
Works Council of ZF Friedrichshafen AG,  
Friedrichshafen

**Weidong Xu**, Castrop-Rauxel,  
Chief Representative of LIMO Lissotschenko  
Mikrooptik GmbH, Dortmund

## Chief Representative

**Andreas Hartmann**, Cologne

<sup>1)</sup> Employee Representative



# GROUP MANAGEMENT REPORT

ZF Group sales increased to €35,166 million in 2016. The number of employees totaled 136,820 at the end of the year under review. An amount of €1,185 million was invested in property, plant and equipment, the amount spent on R&D rose to €1,948 million. The adjusted EBIT was €2,239 million, the adjusted EBITDA was €3,814 million. The profit after tax amounted to €924 million.

## BASIC PRINCIPLES OF THE ZF GROUP

### Operating Activities and Corporate Structure

ZF Friedrichshafen AG is a corporation, of which 93.8% is owned by the Zeppelin Foundation and 6.2% by the Dr. Jürgen and Irmgard Ulderup Foundation. The company is headquartered in Friedrichshafen. As of December 31, 2016, the Group's workforce worldwide comprised 136,820 employees in around 40 countries.

As a global leader in driveline and chassis technology as well as active and passive safety technology, ZF operates in particular in the passenger car and commercial vehicle industry. In addition, our activities cover other market segments such as construction and agricultural machinery, wind power, marine propulsion, aviation technology, rail drives, special drives and test systems for industry with a focus on the automotive

sector. Alongside transmission systems, units and components, the company also produces chassis systems and components as well as safety technology, electronics and sensors. ZF offers a wide range of services that are mainly marketed by the ZF Aftermarket organization. These services primarily involve the spare parts business for driveline and chassis technology as well as maintenance and repair services. The main sales markets of the Group are Europe, North America and the Region of Asia-Pacific, with China as the core market.

ZF is set up along the lines of a matrix organization which links the Group-wide competencies of the corporate functions with the global business responsibility of the divisions and business units. The central departments of the ZF Group are headed by the members of the Board of Management. The members of the Board of Management are assigned directly to the seven divisions. The same applies to the responsibilities with regard to the Regions of North America, South America and Asia-Pacific.

## ZF Friedrichshafen AG

Shareholders: 93.8% Zeppelin Foundation and 6.2% Dr. Jürgen and Irmgard Ulderup Foundation

Car Powertrain Technology	Car Chassis Technology	Commercial Vehicle Technology	Industrial Technology	E-Mobility	ZF Aftermarket	Active & Passive Safety Technology
Automatic Transmissions	Chassis Systems	Truck & Van Driveline Technology	Off-Highway Systems	Electronic Systems	Independent Aftermarket	Braking Systems
Manual Transmissions/ Dual Clutch Transmissions	Chassis Components	Axle & Transmission Systems for Buses & Coaches	Industrial Drives	Electric Traction Drive	Original Equipment Service/Specific Original Equipment	Steering Systems
Axle Drives	Suspension Technology	CV Chassis Technology	Marine & Special Driveline Technology	System House	Manufacturing	Occupant Safety Systems
Powertrain Modules		CV Powertrain Modules	Test Systems		Services	Electronics
		CV Steering Systems	Aviation Technology		Friction Materials Group	Body Control Systems
			Wind Power Technology			
Central Functions/Regions						
Corporate Functions						

The Group structure with seven divisions is aligned with the market and customers.

- The *Car Powertrain Technology* Division is responsible for the following business units: Automatic Transmissions, Manual Transmissions/Dual Clutch Transmissions, Axle Drives and Powertrain Modules.
- The *Car Chassis Technology* Division includes the following business units: Chassis Systems, Chassis Components and Suspension Technology.
- The *Commercial Vehicle Technology* Division is responsible for the following business units: Truck & Van Driveline Technology, Axle & Transmission Systems for Buses & Coaches, CV Chassis Technology and CV Powertrain Modules. In the fiscal year 2017, the CV Steering Systems Business Unit which had previously been assigned to the Active & Passive Safety Technology Division became part of the Commercial Vehicle Technology Division.
- The *Industrial Technology* Division combines the following business units: Off-Highway Systems, Industrial Drives, Marine & Special Driveline Technology, Test Systems, Aviation Technology and Wind Power Technology.
- The *E-Mobility* Division – with the Electronic Systems and Electric Traction Drive Business Units as well as the System House – brings together the expertise in electromobility under a single roof.
- ZF Services and TRW Aftermarket have been managed as the *ZF Aftermarket* Division since January 2017. The TRW name will be retained as a product brand and enhance the existing brand portfolio – alongside ZF, SACHS, LEMFÖRDER, BOGE and Openmatics.

- The *Active & Passive Safety Technology* Division, established by the ZF Group to manage the business activities of ZF TRW after its acquisition, includes the following business units: Braking Systems, Steering Systems, Occupant Safety Systems, Electronics and Body Control Systems. The Engineered Fasteners & Components Business Unit was sold in the fiscal year 2016.

## Corporate Management

The shareholders, the Zeppelin Foundation and the Dr. Jürgen and Irmgard Ulderup Foundation exercise their voting rights at the annual shareholders' meeting.

ZF Friedrichshafen AG and the ZF Group are led by the Board of Management, which manages the company, and by the Supervisory Board, which monitors the Board of Management. For the most part, the activities of the Board of Management are strategic in nature and comprise responsibility for the corporate functions, the divisions and the regions. In this context, particular importance is placed on close networking and cooperation within the Group. The operational topics are mainly addressed in the divisions and business units.

On October 1, 2016, the Board member for Corporate Quality, Commercial Vehicle Technology and South America retired. His corporate functions were distributed among the other Board members. Accordingly, the ZF Group Board of Management comprised seven members as of the end of 2016.

The supervision of the Board of Management by the Supervisory Board, whose 20 members are appointed with equal representation, is supported by an Executive Committee and an Audit Committee which are both composed of members of the Supervisory Board.

## EQUAL REPRESENTATION OF WOMEN DEFINED

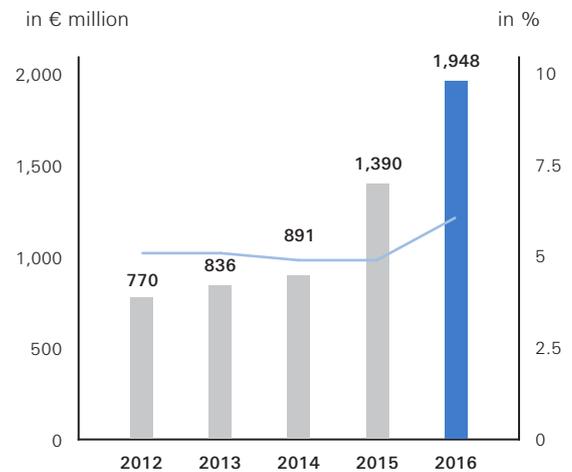
In light of German legislation governing equal representation of women and men in managerial positions in the private and public sectors, ZF has discussed and set targets for the relevant managerial levels to be achieved throughout the entire Group by June 30, 2017. At the first managerial level below the Board of Management, the percentage of women is planned to increase to 8.4%; at the second managerial level, the target of 8.1% has already been achieved and actually exceeded by 0.3%, reaching 8.4%. The percentage of women on the Board of Management will probably remain at 0% in June 2017 as no personnel-related changes are envisaged for this period. At the moment, 15% of the members of the Supervisory Board are women. This percentage may change when seats on the Supervisory Board become vacant.

## Research and Development

14,550 employees work for ZF Research and Development worldwide. Of these, about 1,600 engineers and technicians work for the ZF Group's Corporate Research and Development Departments at the locations in Friedrichshafen (Germany), Pilsen (Czech Republic), Shanghai (China), Tokyo (Japan) and Northville, Michigan (USA). In 2016, ZF invested €1,948 million in R&D, which is 5.5% of sales (2015: 4.8%). This increase compared to the previous year mainly results from more intensified development in the Active & Passive Safety Technology and E-Mobility Divisions.

**See, Think, Act:** With this guiding principle, ZF addresses the mobility megatrends.

## R&D costs



## PRODUCT AND TECHNOLOGY PLANNING IN THE SPOTLIGHT

As a technology and cost leader, ZF aims to meet the demands of the mobility megatrends of tomorrow, such as efficiency, integrated safety and automated driving. With its "See, Think, Act" guiding principle, the Group has set a clear technology focus. The company's product and technology planning is based on market and product roadmaps which are continuously updated. One focal point for activities in 2016 was efficient, intelligent systems for conventional, hybrid and electric drives. Development also focused on sensors for environment recognition, electronic control units, occupant safety systems and automated driving functions.

The international development locations were further strengthened in 2016 – including a major extension to the Engineering Center at the Pilsen (Czech Republic) location. Furthermore, ZF's India Technology Center (ITC) for software and application development in Hyderabad (India) was set up and is due to start operating in March 2017. The new Tech Center aims to support the global R&D network as well as local product development.

To meet the challenges of disruptive market changes, to facilitate rapid access to strategic key technologies and to acquire key experts for the Group, ZF also founded Zukunft Ventures GmbH in September 2016. Interests in companies, which operate in technology areas that are interesting for the ZF Group, give rise to close partnerships while full corporate responsibility and agility remain within the technology companies. Zukunft Ventures GmbH complements the implementation of the ZF Group strategy in relation to products and technology planning. The acquisition of a 40% stake in the Hamburg-based Ibeo Automotive Systems GmbH was an important step in the field of sensor technologies relating to automated driving.

#### **DEVELOP SOLUTIONS FOR FUTURE MOBILITY**

Once again in 2016, many of the topics in advanced product engineering were related to CO<sub>2</sub> target fleet values and the required efficiency improvements. With this in mind, ZF is continuously further developing lightweight design solutions for conventional and electrified drives, for example. Projects promoted based on the recommendations of the German Federal Government's National Platform for Electric Mobility (NPE) are now in their final phase. Hardware specially built for these projects caters for newly developed concepts such as, for example, the large-scale integration of e-vehicle drives and range extender concepts. For ZF, the integration of power electronics into drive units is an important step toward more streamlined vehicle design and competitive overall concepts.

In 2016, the Innovation Tractor made its debut as the first innovation vehicle in the off-highway segment. Essential elements include the automated hitching of implements, pedestrian protection and traction optimization by using an electric trailer axle. The lessons learned are being further developed in innovation projects in the Industrial Technology Division. Moreover, developments in the field of commercial vehicles relating to driver assistance and automated driving are being systematically followed up and presented to the public in the Innovation Truck. The Evasive Maneuver Assist demonstrated an automated assistance system. This could prevent, for instance, serious rear-end collisions at the end of a queue – a key accident scenario in the commercial vehicle segment. The automated hitching of commercial vehicles in the depot was also demonstrated in a further developed stage last year and the level of automation increased further.

#### **COMBINED PRODUCT EVOLUTION METHODS AND PROCESSES**

2016 essentially focused on analyzing the two PLM (Product Lifecycle Management) programs of ZF and ZF TRW and on transforming these into a joint platform. At the start of 2017, work began on implementing a joint data platform. This, in turn, will be the basis for jointly coordinated and harmonized PLM processes. Corresponding projects are being prepared.

The new ZF product evolution process (GDPEP – Global Development & Product Evolution Process), which is based on the tried-and-trusted ZF and ZF TRW procedures, was drawn up in 2016. GDPEP will be rolled out throughout the Group in 2017.

**ZF founded Zukunft Ventures GmbH in 2016 in order to promote strategic investments.**

**Strong power of innovation:**  
More than 1,200 patent applications were filed in 2016.

#### **FUNDAMENTAL PRINCIPLES AND TECHNOLOGY DEVELOPMENT DRIVEN FORWARD**

To reinforce its automated driving expertise in the field of “See”, ZF is working intensively on developing, among other things, 3D lidar sensors, imaging radar sensors and highly dynamic interior cameras. In addition, work is being done in particular on technologies that pave the way for new interior concepts in conjunction with automated driving. To this end, ZF is combining innovative sensors with redesigned occupant safety systems, thus underlining the aspirations of “The Power of 2”. To reinforce “Think”, ZF is intensively promoting the development of intelligent electronic control units and vehicle systems.

To develop safety and automated driving functions efficiently, a virtual development and test environment is being set up in close cooperation with the divisions and external experts involved. It enables sensor systems, functions and actuators to be specified and tested in combination with the vehicle and environment. ZF is therefore making major efforts with its own activities to suitably factor in the megatrend of automated driving.

The synergies of the merger between ZF and ZF TRW are manifold with regard to “Act”. Here, the long-standing experience is being integrated into various development disciplines and technologies from all divisions. Examples include driveline and chassis systems as well as the development of intelligent control systems, such as electric power steering, electric parking brake, electric brake booster and electric pretensioner.

#### **PATENT APPLICATIONS EXCEED HIGH PRIOR-YEAR VALUE**

The protection of industrial property is high on ZF’s list of priorities. As in previous years, ZF was able to maintain its position among the top patent applicants in Germany in 2016. The company once again managed to exceed the high level set in the previous year with over 1,720 internal invention disclosures and 1,200 new patents. These figures also include ZF TRW activities. Inventions focused on the aforementioned key areas of development activities in 2016.

With regard to brand and domain rights, ZF has reinforced the protection of its valuable assets worldwide. The company’s brand and domain inventory consists of more than 6,444 individual brands and more than 1,626 domains.

#### **Employees**

As of December 31, 2016, ZF employees worldwide numbered 136,820 (2015: 138,269).

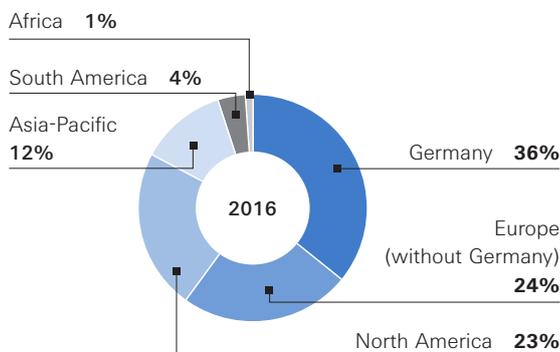
The slight decline in the number of employees compared to the previous year can be primarily traced back to the sale of the Engineered Fasteners & Components Business Unit concluded in July 2016. This business unit had roughly 2,800 employees worldwide. In addition, Cherry GmbH (including its subsidiaries) with a workforce of approximately 400 was sold in October 2016 to the German private investment company GENUI. ZF created approximately 1,800 new jobs last year, which equals growth of 1.3%. In 2016, ZF Friedrichshafen AG once again ranked among Germany’s major providers of training and apprenticeship opportunities. At the end of 2016, ZF’s workforce counted more than 2,800 apprentices and students in the work-study degree program, respectively (2015: 2,300).

### THE DAWNING OF THE WORKING WORLD OF TOMORROW IN THE NEW ZF FORUM

The increasing digitalization of the working world also had an impact on how employees worked at the corporate headquarters last year. In September 2016, approximately 650 employees of the Central Departments moved into the ZF Forum, the new headquarters in Friedrichshafen. They are the first to work under the new Office Concept 3.0. It offers a variety of work environments that support both team and solo work, meetings, telephone calls, work requiring total concentration and collaborative work. Mobile IT technology makes it easy to switch quickly between these different working needs. Together with the Fraunhofer Institute for Industrial Engineering IAO in Stuttgart and in close consultation with the works council, ZF developed and shaped this office concept based on the newest workplace and ergonomic findings. Currently, a possible rollout of this concept at other ZF locations is being checked and decided.

Digitalization and associated changes in the global production landscape place new demands on workers and their skills, which are also impacting training and education. ZF has therefore initiated the “Training 4.0” project. The goal is to work out and present possible training and qualification solutions for junior employees in light of the demands being placed on skilled workers in the global Industry 4.0 environment. High-ranking representatives from the German Federal Employment Agency as well as professional trade associations, unions and educational institutions, among others, met at an education and training summit in April 2016 in Friedrichshafen where they expressed their thoughts on the challenges and opportunities of these changing job profiles and training programs. A Group-wide project team is currently developing models on how ZF can adapt its training content and the associated qualification programs for employees to these changing conditions.

Employees by regions



### Globally established attractive employer brand

Due to changing mobility habits, employees and graduates in the software and IT fields are becoming increasingly relevant for the automotive industry. In order to develop and produce intelligent mechanical products, ZF still requires employees from traditional occupations. However, the HR Department is also increasing its global activities in attracting graduates with IT and electrical engineering degrees or those who have completed vocational training in these fields. A further employer branding action in 2016 aimed at increasing the brand recognition of ZF as an employer in the China and U.S. growth markets. ZF has continued to improve its placement in the employer rankings in Germany over the last few years. Among prospective engineers, ZF placed 16<sup>th</sup> in the “Trendence Graduate Barometer 2016” survey while, in engineering, it rose from 26<sup>th</sup> in 2015 to 24<sup>th</sup> place in the “Universum Student Survey”.

The new corporate headquarters is already working according to the Office Concept 3.0.

## Sustainability

### SUSTAINABILITY MANAGEMENT

In fiscal year 2016, sustainability management at ZF was characterized by the implementation and further development of the sustainability program first published in 2015. As part of this program, the company committed to meeting non-financial targets such as reducing specific greenhouse gas emissions in production, mitigating the environmental impact in logistics and continuously improving occupational health and safety, diversity and ZF's appeal as an employer. Similar actions are being taken at ZF TRW where sustainability management involves assessing possible impacts of processes in production and at the end of the product life cycle on the environment and employees.

During the process of integrating ZF TRW into the ZF Group's sustainability management program, it was determined that the sustainability program required further development, which is to be completed by the end of 2017. Further development involved harmonizing targets and definitions of non-financial key figures as well as consolidating data and integrating the corresponding internal reporting processes. For 2017, we are again planning to publish a report for ZF based entirely on the Global Reporting Initiative (GRI) guidelines which will include the new Active & Passive Safety Technology Division created as a result of acquiring TRW Automotive.

As the process of merging ZF's and ZF TRW's sustainability management systems had not yet been completed, the GRI report was not published for 2016. Nevertheless, a progress report was published according to the standards of the UN Global Compact Network. The ZF Group has been a member of this organization since 2012. In the recent sustainability report, ZF answered questions on how it is handling the important global challenges on which the company is focusing its sustainability activities, including climate change, urbanization and demographic change.

With sustainable corporate governance and clearly defined strategic goals, ZF is actively shaping the changes brought about by the megatrends in the automotive industry. When deriving these strategic goals, consideration is given to long-term factors that are changing due to global shifts in the economy, the environment and society. As a result, ZF is decisively shaping the future of mobility, traffic safety and the working world while tackling issues of social justice.

### COMPLIANCE

In order to ensure the company's long-term success, corporate social responsibility has to be assumed and business activities have to be managed responsibly, sustainably and with integrity. With its effective Compliance Management System (CMS) that was further developed in 2016, ZF has taken this responsibility to heart. The still separate systems of ZF and ZF TRW will be merged by the end of 2017.

In 2016, ZF spent €15 million on new environmental protection facilities.

The compliance risk analysis on the business unit level as well as global classroom-based training programs and continuously expanding (online) training courses were in ZF's focus in the year under review to raise employee awareness regarding potential compliance risk areas. In addition to that, the set of rules for compliance was systematically improved and the risk-oriented review of business partners further expanded in 2016. These preventive actions will help reduce compliance risks in order to counteract serious economic threats early on.

#### **ENVIRONMENTAL PROTECTION, OCCUPATIONAL HEALTH AND SAFETY**

Within the ZF Group, environmental protection is a fundamental corporate principle that is integrated at all levels and throughout all processes. Through innovative products and state-of-the-art production technologies, the company has succeeded in sustainably reducing the environmental impacts resulting from its operating activities and the use of ZF products. All production plants are operated at the highest standards to meet environmental protection requirements.

Within the scope of company development activities, ZF carried out Group-wide environmental due diligence audits to assess the potential environmental protection and occupational health and safety risks for 13 major investment and divestiture projects. In addition, the ZF Group was involved in over 54 remediation projects worldwide with costs amounting to €14 million in 2016.

In total in 2016, €15 million was spent on new environmental protection facilities and €45 million on operation and maintenance at the German and international ZF locations. These figures do not include costs for ZF TRW.

As part of the ZF TRW integration process, the environmental protection and occupational health and safety experts from both companies are working on adapting and aligning their different strategies in these areas. They will be drawing on the best practices from both companies as well as the automotive industry. A uniform environmental protection and occupational health and safety program as well as a reporting concept should be ready by the end of 2017.

#### **Environmental management ensures regulatory compliance**

Systematic environmental management according to ISO 14001 is the Group standard for all production and main development locations. Since 2006, it has been centrally managed in line with a multisite procedure for 103 certificates according to ISO 14001. Further 109 ZF TRW locations have individual certificates. External expert audits confirm that the participating locations comply with current environmental legislation and certification standards.

Most OEMs have set their own climate protection targets and are reporting on their progress regarding greenhouse gas emissions using the widely recognized reporting format created by the Carbon Disclosure Project (CDP). As of the end of 2016, the ZF Group is on track to meet its climate protection targets, which include a 20% reduction in greenhouse gas emissions by 2020. Currently, this percentage has already been exceeded.

Up-to-date figures on emissions and resource consumption as well as on occupational health and safety can be found in the Sustainability Report which is created according to the internationally renowned GRI standard.

**In 2016, ZF has already significantly contributed to achieving its climate protection targets.**

### Comprehensive actions to improve energy efficiency

In 2016, actions to make the company more environmentally sustainable once again focused on saving energy and reducing greenhouse gas emissions. To this end, numerous locations had many ongoing projects, such as the construction of a combined heat and power plant in Passau (Germany) that will reduce CO<sub>2</sub> emissions by 2,800 tons annually. These projects normally go hand in hand with cost savings. At ZF TRW, Environmental Protection and Occupational Health and Safety initiated a project called “Cost Determination and Reduction” (CDR) at the individual locations which is intended to uncover potential savings in these areas. In 2016, the project brought in more than €4 million worldwide in areas such as energy and resource efficiency and waste reduction.

The German Federal Office for Economic Affairs and Export Control (BAFA) has audited all ZF Friedrichshafen AG locations for compliance with the requirements of the European Energy Efficiency Directive without any objection.

### Global legislative changes require adjustments

In China, there was one significant legislative change in 2016: An external auditor must now check the environmental protection concept as part of the approval process. U.S. legislation announced additional changes for 2017 regarding extended reporting requirements in case of accidents. An environmental protection and occupational health and safety team at ZF is currently preparing and implementing the relevant changes in order to meet the new requirements.

The trend toward occupational health and safety certifications, for instance according to OHSAS, is pushed by various OEMs. To continue to ensure that ZF meets the requirements

for awarding contracts, a certification project was initiated at the relevant locations. More projects will follow in the next few years. Today, a total of 53 locations already have a corresponding certificate.

### CORPORATE SOCIAL RESPONSIBILITY

At ZF, corporate social responsibility is an important and inherent component of the company’s mission statement. We therefore contribute a great deal to our local communities by supporting education, sports and recreation, culture, environmental and social projects, for example. Such activities range from funding endowment chairs at universities through the ZF Art Foundation, which supports artists and musicians, festivals and non-profit organizations, to an owl sanctuary project in northern Germany. In addition to top volleyball players from the VfB Friedrichshafen team, ZF also sponsors many recreational sports. The association “ZF hilft.” collects donations for sustainable aid projects around the world. Under the slogan “100 Years – 100 Schools”, ZF is working together with the YOU Foundation as part of one of the largest humanitarian education projects in the company’s history, namely the construction and expansion of 100 schools in poverty-stricken regions around the world. A total of 85 new schools are being built in Bangladesh, India and Sierra Leone – mainly near poverty-stricken areas. In addition, 70 different educational institutions in China, Mexico, Nepal and Peru as well as the Philippines were selected to receive support to improve the quality of education and teaching there. Together with the international “World Bicycle Relief” organization, “ZF hilft.” dedicated itself to mobility, the third pillar of its far-reaching aid campaign. As part of this commitment, it donated more than 4,000 bicycles to Zambia and South Africa to make school children from 100 African villages more mobile. In 2016, donations for the “100 Years – 100 Schools” project totaled €4 million.

The association “ZF hilft.” supports sustainable relief projects around the world.

## ECONOMIC REPORT

### The Business Environment

#### OVERALL ECONOMY REMAINS SLUGGISH

In the year under review, overall economic development continued to be characterized by low interest rates and favorable prices on the commodity exchanges. Nonetheless, private and public investments as well as global trade proved fairly sluggish, particularly in the first half of the year. Economic stimulus from private consumption, productivity increases and wage development proved limited in many countries. It was not until the second half of the year that the global economy bottomed out and regained some momentum. The global growth rate of gross domestic product (GDP) was just over 3%, on a par with growth seen over the past few years.

Economic growth in the advanced economies has accelerated moderately over the course of the year. As in the prior year, the eurozone reported a 1.6% increase in economic performance. The weak euro pushed up exports. Domestic demand and private consumption also performed well. The feared financial market turbulence following the Brexit vote failed to materialize. The U.S. economy gained momentum in the course of the year, achieving growth of around 1.7% in the overall year. The economy continued to perform poorly in Japan, with growth of below 1% as in the prior year.

The economic situation stabilized in the newly industrialized countries, even though problems remained unresolved in some countries. In China, the reflationary economic policy and government stimulus measures managed once again to give the economy a notable boost. The growth rate of 6.6% was in line with government planning. India reported a notable increase in production, while the cash reform, however, slowed down economic expansion towards the end of the year. By contrast, Brazil continued in a deep recession for another year, with economic performance contracting once again by more than 3%.

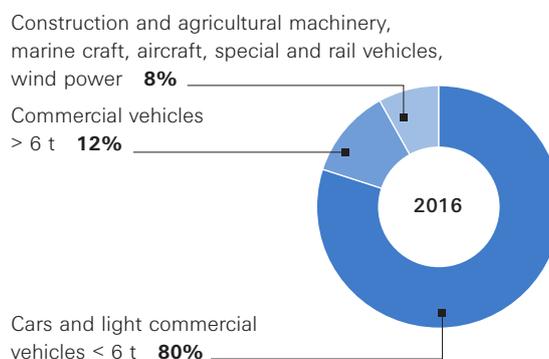
After a slow first half, the **global economy** improved in the second half of 2016.

#### DEVELOPMENT OF THE INDUSTRY

##### VERY INCONSISTENT

ZF's core industries in the automotive and non-automotive segments developed very heterogeneously, both in the industries and also in the regions, in the fiscal year 2016.

##### Sales distribution by sectors



*Worldwide production of passenger cars and light commercial vehicles* rose another 4%, on the back of the 2% increase in the previous year. China proved a key growth driver thanks to an increase of 12% and suitable purchase incentives from the government, turning the country into the world's largest individual market with production of over 26.5 million vehicles. With 21 million vehicles produced, Europe posted growth of 3%; North America once again managed to increase production by 2% to 18 million vehicles. The crisis markets in Russia, down another 8% (following -13% and -28% in 2014 and 2015), and South America, down 13% (following -15% and -18% in the two prior years respectively), continued to come under pressure. In Japan, production stagnated at the prior-year level, while South Korea saw production contract by 6%.

Following two years of falling volumes, worldwide *heavy commercial vehicle production* once again topped the 3 million vehicle mark with an increase of 4% in 2016. This growth came from China and India in particular. Following two poor years (2014: -5%, 2015: -22%), China rose by 26%; India maintained its growth phase; following increases of 12% and 26% in 2014 and 2015, production of heavy commercial vehicles expanded another 11%. By contrast, the North American market slid into recession: Production of commercial vehicles > 6 tons fell by 18%, the heavy segment of the class 8 vehicles (> 16 tons) even plummeted by approximately 30%. In Europe, production fell by 3% following the strong 8% growth in the prior year. By contrast, Russia bottomed out; the market has performed well since the summer with double-digit growth rates, albeit from a very low level.

The *off-road machinery markets* (agricultural and construction machinery) failed to move out of recession in 2016. Worldwide agricultural machinery production fell another 3%, in the wake of the 10% drop in 2015. Low agricultural producer prices and, in turn, low farming income as well as lower subsidies in some areas – such as in China – dampened the willingness to invest. In this environment, the production of tractors in Europe fell by 5%, in North America by 14%, in South America by 10% and in China by 8%. Only India as the world's largest tractor market with a focus on low-powered segments managed to post a 2% increase (following -16% in 2015). Global construction machinery production fell 26% in 2015 and dropped a further 3% in 2016. While Europe stabilized, the other major markets of North America and China fell sharply by 10% respectively; production in China had already fallen over 50% in 2015. India once again managed to reverse the downward spiral, with production of construction machinery up 12%. The other industries in the industrial technology segment performed very differently: The *marine markets* stabilized at a low level; *rail drives* reported moderate growth in demand, while the *wind power markets* proved relatively stable in light of the increasing competitiveness of renewable energies. The Region of North America posted growth, Europe experienced a slight cool-down and China had to accept a “normal” level after the record values in 2015.

## Overview of the Business Trend and Board of Management Overall Statement on Business Performance

TRW Automotive Holdings Corp. was acquired on May 15, 2015 as the largest acquisition in ZF's history. The company was included for the first time in the ZF Group for a full year in fiscal year 2016. In 2015, ZF TRW had only been included in the business figures since the acquisition date, namely for a period of 7.5 months. The acquisition was an important component in the implementation of the ZF 2025 Strategy which is to secure ZF's long-term future as a technology company. ZF TRW has been incorporated into the company as a new division called Active & Passive Safety Technology. The integration is proving successful and continues to be pushed forward rapidly. In addition to jointly developed new products, numerous departments, such as Sales, Purchasing and many others had already been fully integrated at the end of 2016.

The ZF Group made significant advances in the fiscal year 2016. The stronger financial position and results of operations as part of the successful integration of ZF TRW are reflected in the increase in sales of €6,012 million to €35,166 million, the increase in adjusted EBIT (sum of operating profit and net result from participations) from €1,570 million to €2,239 million and the improvement of the free cash flow adjusted for company acquisitions and disposals of €639 million to €2,000 million.

As regards sales, the figure of €35,166 million is within ZF's notified target corridor (between €35 and €36 billion). The same applies to EBITDA (EBIT corrected by depreciation/amortization and reversals of impairments) where the margin of 11.0% is in line with the stated target of above 10%. With the adjusted EBIT margin, the figure of 6.4% puts ZF at the top end of the stated bandwidth (between 5% and 6%). With free cash flow adjusted for company acquisitions and disposals, the target of greater than €1 billion was clearly exceeded with €2 billion. With regard to headcount developments, ZF's figure of 136,820 employees is below the forecast figure of over 140,000 employees, essentially due to the disposal of the Engineered Fasteners & Components Business Unit.

2016 focused on further improving the profitability and generating free cash flow in order to continue to reduce the debts incurred as a result of the acquisition of ZF TRW. The resulting reduction in the total assets again fed through into a higher equity ratio of 21%, compared with 19% in the prior year. This is to improve further in the following years as a result of the planned redemptions. The ZF Group rests on a solid financial foundation thanks to its long-term oriented and diversified financing, as well as cash and cash equivalents of €1.6 billion and an unused credit line of €3.0 billion at Group level. Rating agencies Moody's and Standard & Poor's singled out the ZF Group's positive development in the first half of 2016 with an improved rating. Further improvement of the rating to achieve the investment-grade segment is expected. Against this backdrop of a stable liquidity and financial basis as well as the good business performance, the economic situation of the consolidated ZF Group is considered to be positive on the whole.

**The fast integration of ZF TRW was successfully pushed in 2016.**

## Results of Operations, Net Assets and Financial Position

### PRELIMINARY REMARK

The acquisition of ZF TRW was completed on May 15, 2015. As a result, 2016 was the first fiscal year in which ZF TRW was included in the ZF consolidated financial statements for a full year. There is therefore only limited comparability between the figures for fiscal year 2016 with those of fiscal year 2015.

### RESULTS OF OPERATIONS

In the fiscal year 2016, the ZF Group succeeded in increasing sales by €6,012 million compared to the previous year. After including the pro-forma sales of ZF TRW in 2015, sales in 2016 rose by 2% to €35,166 million. The pro-forma sales take into account the projected annual sales generated by ZF TRW in 2015. The increase amounts to 4% after adjusting for effects from M&A activities and exchange rate effects.

Sales in the Car Powertrain Technology Division rose by 2.5% to €7,981 million in fiscal year 2016. The main driver for this increase was the business with automatic transmissions for upper mid-size and luxury vehicles, particularly in the markets of North America and Europe. The organic growth of the Car Chassis Technology Division was offset by adverse currency effects, in particular in the Chinese market, resulting in a slight sales decline by 1.6% to a total of €6,447 million. In addition, the fiscal year 2016 was characterized by project launches in the chassis systems business.

Sales of the Commercial Vehicle Technology Division amounted to €2,960 million, thus almost reaching the previous year's level. The continuing market weakness in Brazil as well as adverse exchange rate effects were largely offset by sales growth, especially in Europe.

### Consolidated statement of profit or loss

in € million

	2016	%	2015	%
Sales	35,166	100.0%	29,154	100.0%
Cost of sales	29,069	82.7%	24,533	84.1%
<b>Gross profit on sales</b>	<b>6,097</b>	<b>17.3%</b>	<b>4,621</b>	<b>15.9%</b>
Research and development costs	1,948	5.5%	1,390	4.8%
Selling expenses	1,263	3.6%	1,081	3.7%
General administrative expenses	1,317	3.7%	1,099	3.8%
Other income	530	1.5%	653	2.2%
Other expenses	485	1.4%	623	2.1%
<b>Operating profit or loss</b>	<b>1,614</b>	<b>4.6%</b>	<b>1,081</b>	<b>3.7%</b>
Result from associates	48		532	
Net result from participations	16		-17	
<b>EBIT</b>	<b>1,678</b>	<b>4.8%</b>	<b>1,596</b>	<b>5.5%</b>
Financial income	458		301	
Financial expenses	855		809	
<b>Net profit or loss before income tax</b>	<b>1,281</b>	<b>3.6%</b>	<b>1,088</b>	<b>3.7%</b>
Income taxes	357	27.9%	69	6.3%
<b>Net profit or loss after tax</b>	<b>924</b>	<b>2.6%</b>	<b>1,019</b>	<b>3.5%</b>

**Sales development by divisions and business units**

in € million

	2016	2015	Changes compared to 2015
Car Powertrain Technology	7,981	7,785	+2.5%
Car Chassis Technology	6,447	6,550	-1.6%
Commercial Vehicle Technology	2,960	2,983	-0.8%
Industrial Technology	2,552	2,187	+16.7%
E-Mobility	862	-	-
Electronic Systems	-	717	-
ZF Services	1,849	1,847	+0.1%
Active & Passive Safety Technology	14,446	8,941	+61.6%
Pro forma	-	14,278	+1.2%
Corporate R&D, Corporate Headquarters and Service Companies	483	284	+70.1%
- Internal Sales	-2,414	-2,140	-
Pro forma	-	-2,225	-
<b>ZF Group</b>	<b>35,166</b>	<b>29,154</b>	<b>+20.6%</b>
Pro forma	-	34,406	+2.2%

The Industrial Technology Division achieved the highest sales growth with an increase of 16.7% to a total of €2,552 million. This increase is attributable to the vital momentum in the Wind Power Technology Business Unit as well as the industrial drive and wind turbine gearbox business which was acquired from Bosch Rexroth AG in December 2015. The off-road machinery business moved sideways in 2016.

The growing strategic importance of electromobility is reflected by bringing these activities together in the new E-Mobility Division, which generated sales of €862 million in 2016.

The ZF Services Business Unit generated a slight sales growth to €1,849 million, after €1,847 million in 2015.

Due to the fact that the Active & Passive Safety Technology Division was taken into account only on a pro-rata basis in the previous year, sales grew by 61.6% over the prior year. Despite currency and structural effects, an increase by 1.2% to €14,446 million compared with the previous year was achieved on a pro-forma basis. The sales growth mainly resulted from the Occupant Safety Systems Business Unit as well as from the markets of Asia-Pacific and Europe.

**Regional sales distribution similar to prior year**

The distribution of sales by region only showed minor changes compared to the pro-forma sales in 2015. Top-selling region was again Europe, accounting for 48% (2015: 47%) of sales, followed by North America with 27% (2015: 28%) and Asia-Pacific with 22% (2015: 22%). The sales share of the Region of South America remained at the prior-year level of 2%. The same applies to the Region of Africa with a sales share of 1%. In 2016, there were differences in sales growth in the individual regions compared with fiscal year 2015 when considering the inclusion of ZF TRW for the whole year. In Europe, sales

**The Industrial Technology Division experienced the strongest growth in 2016.**

grew by €892 million to €16,779 million, in particular due to the first full inclusion of the industrial drives and wind turbine gearbox business acquired from Bosch Rexroth AG as well as the positive sales development of the Active & Passive Safety Technology Division. In North America, adverse exchange rate effects as well as structural effects from the sale of business units of the Active & Passive Safety Technology Division led to a decline in sales to €9,681 million which offset the organic growth due to the strong demand for automatic transmissions and occupant safety systems. The increase in sales in the Region of Asia-Pacific by 1.2% to €7,649 million was heavily impacted by the depreciation of the Chinese renminbi at an average rate of 4% in 2016. The ramp-up of a new project in the Chassis Systems Business Unit in the Region of South America resulted in sales growth by €79 million to €845 million against the backdrop of a continued market

weakness in Brazil and negative currency effects. In the Region of Africa, sales amounted to €212 million, which is slightly below the previous year's level.

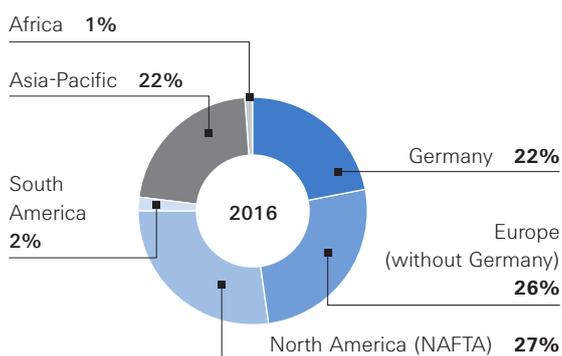
#### Operating profit up from previous year

In the fiscal year 2016, the gross profit on sales rose by almost €1.5 billion to €6,097 million. As a result of the rise in sales and in spite of the additional write-downs following the purchase price allocation, the overall gross margin improved to 17.3% (2015: 15.9%). The improved earnings quality is primarily attributable to the successful implementation of the measures to improve price quality, productivity and the development of personnel expenses. Selling and administrative expenses largely remained on prior-year level, proportionate to the increase in sales. However, research and development costs rose from 4.8% to 5.5% due to the focus on future technologies. The expenses include

#### Sales development by regions

in € million (consolidated)

	2016	2015	Changes compared to 2015
Europe	16,779	13,823	+21.4%
North America (NAFTA)	9,681	8,115	+19.3%
South America	845	633	+33.5%
Asia-Pacific	7,649	6,363	+20.2%
Africa	212	220	-3.6%
<b>Total</b>	<b>35,166</b>	<b>29,154</b>	<b>+20.6%</b>



an amount of €598 million (2015: €462 million) relating to the purchase price allocation. The balance of other income and expenses remained largely at the same level as in the prior year.

Overall, operating profit rose by €533 million to €1,614 million in the year under review. In this context, the major contribution came from the inclusion of the Active & Passive Safety Technology Division for full twelve months. The rise in the operating margin by 0.9 percentage points was largely due to the improved operating performance in 2016.

EBIT, as the sum of operating profit and the net result from participations, amounted to €1,678 million (2015: €1,596 million) in fiscal year 2016. The increase in the EBIT by €82 million compared to the prior year was smaller than the increase in the operating profit. This was due to the extraordinary income of €510 million from the sale of the shareholding in ZF Lenksysteme GmbH, which was included in the net result from participations in 2015. Adjusted by the €598 million of extraordinary items relating to the purchase price allocation plus M&A activities of €37 million, the adjusted EBIT margin was 6.4%, an increase of one percentage point over the prior year. In 2016, EBITDA increased by €497 million to €3,851 million. This corresponds to an EBITDA margin of 11%. Adjusted by the above-mentioned M&A effects, the adjusted EBITDA margin amounts to 10.8%. ZF therefore managed to achieve or outperform the targets it set last year.

Financial income amounted to €458 million in fiscal year 2016 (2015: €301 million). The increase is mainly attributable to a higher balance from exchange gains and income from derivative financial instruments as well as from higher income from the disposal of securities that were assigned to the contractual trust arrangement (CTA) to hedge pension obligations. The increased financial expenses in the amount of €855 million (2015: €809 million) reflect a higher balance from exchange gains and expenses from derivative financial instruments as well as increased interest expenses. This was offset in particular by lower transaction and ancillary financing costs.

Tax expenses amounted to €357 million in 2016, compared with €69 million in the previous year. The low tax expense in the prior year was largely driven by extraordinary items such as the first-time recognition of previously unrecognized deferred tax assets on loss carryforwards relating to the acquisition of ZF TRW and tax-free income. This results in net profit after tax of €924 million compared with €1,019 million in 2015.

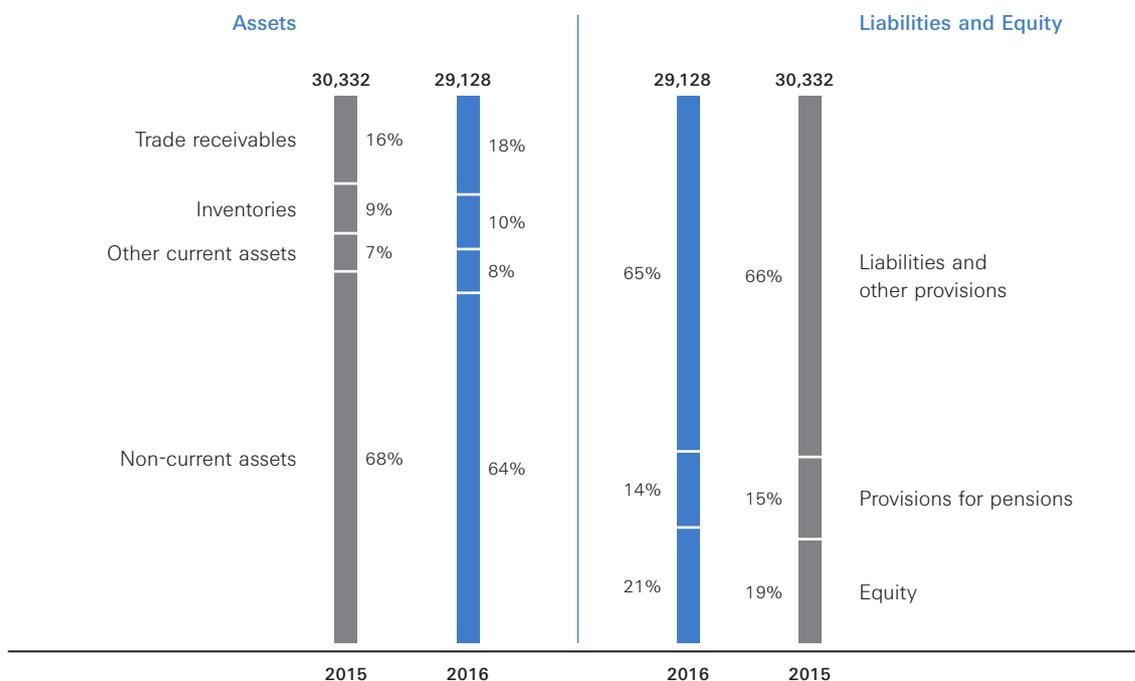
#### NET ASSETS POSITION

In 2016, ZF Group's total assets declined to €29,128 million (2015: €30,332 million). This was mainly influenced by the assignment of securities to a trustee into a contractual trust arrangement (CTA), write-downs of undisclosed reserves identified within the context of the purchase price allocation from the TRW acquisition as well as from the sale of the Engineered Fasteners & Components Business Unit.

**The operating profit increased by 49% to €1,614 million in 2016.**

## Consolidated statement of financial position

in € million



Current assets increased to €10,403 million (2015: €10,317 million). Trade receivables rose to €5,220 million (2015: €4,777 million). The increase in trade receivables is largely attributable to the growth of the operating business. It corresponds with the rise in trade payables. In addition, assets held for sale and disposal groups were reduced to €108 million (2015: €657 million). In 2015, this item included assets from the Engineered Fasteners & Components Business Unit, which was sold to Illinois Tool Works (ITW) on July 1, 2016. As a result of the intention to sell the remaining shares in Haldex Aktiebolag as part of the cash offer by Knorr-Bremse AG, €108 million of shares acquired in September 2016 are reported as assets held for sale as of the reporting date.

Non-current assets fell to €18,725 million (2015: €20,015 million). This is primarily a result of the fall in financial assets, intangible assets and property, plant and equipment. The decline of financial assets to €764 million (2015: €1,809 million) is primarily attributable to the assignment of financial assets in the amount of approximately €1 billion in connection with establishing a contractual trust arrangement (CTA) to hedge pension obligations. The reduction in intangible assets by €286 million to €9,893 million is largely attributable to the write-downs recognized in connection with the purchase price allocation from the acquisition of ZF TRW.

The deferred tax assets increased by €169 million to €842 million. This was mainly the result of the adjustment of the discount rates for the valuation of pension obligations.

As a result of the slight slowdown in the investment ratio, property, plant and equipment amounted to €6,626 million as of December 31, 2016, compared with €6,856 million in 2015.

#### Investments in property, plant and equipment

In fiscal year 2016, investments in property, plant and equipment amounted to €1,185 million (2015: €1,290 million). The investment ratio of 3.4% of sales was below the prior-year level.

A share of 81% of capital expenditure was spent on technical equipment and machines, including advance payments and construction in progress, while 16% was spent on other equipment, factory and office equipment, and 3% on land and buildings.

The largest portion of capital expenditure related to the expansion of capacities for existing products and the ramp-up of new products. This included capital expenditure for transmission applications (incl. hybridization), electric traction drives, electronics, chassis systems, damper modules, brakes and steering systems, occupant safety as well as body control systems. There were also investments in constructing development and office buildings in Shanghai (China), Northville, Michigan (USA) as well as Saarbrücken and Friedrichshafen (Germany).

Geographically, capital expenditure focused on Germany, the USA, China and Mexico. Depreciation on property, plant and equipment (excluding impairment losses) amounted to €1,292 million (2015: €1,115 million).

#### Capital structure and financing

Financial liabilities amounted to €8,430 million as of December 31, 2016 (2015: €9,907 million). Without considering the change of derivative financial instruments, there was a reduction in the amount of €1,576 million which reflects the consistent implementation of the de-leveraging strategy in the past fiscal year. The remaining financial liabilities derive primarily from the financing of the ZF TRW acquisition in May 2015 and are largely fixed interest-bearing. The financial instruments issued in this context are euro- and US dollar-denominated bonds with final maturities from 2019 to 2025 and a nominal amount as of the reporting date of €2,250 million and \$3,377 million respectively (2015: €2,250 million and \$3,500 million) and bonded loans with final maturities from 2017 to 2022 and a nominal €2,274 million (2015: €2,304 million). ZF terminated a €411 million tranche of its bonded loans with final maturity in 2020 as of January 20, 2017. The syndicated loan, which was also taken out to finance the acquisition, was refinanced on much improved terms in July 2016. The new loan consists of a three-year term loan of €500 million plus a revolving facility of €3,000 million with an original term of five years. At the end of the fiscal year, all drawings under the syndicated loan had been repaid. The revolving credit line was unused. As of the reporting date, ZF has company and bond ratings of Ba1 with a positive outlook from Moody's and BB+ with a stable outlook from Standard and Poor's. Both agencies had raised their ratings by one notch compared with the end of 2015.

**Additional €1,576 million was paid back in 2016 for the consistent implementation of the de-leveraging strategy.**

The increase in trade payables by a total of €358 million to €5,361 million is mainly attributable to the growth of the operating business. The increase in other provisions by €175 million is mainly the result of the increased provisions for warranty and litigation risks.

As a result of the disposal of the Engineered Fasteners & Components Business Unit in 2016, the liability items of the business unit recorded under “Liabilities of disposal groups” were derecognized in the amount of €244 million.

Provisions for pensions fell by €325 million to €4,140 million in the year under review. The main reason for the reduction was the impact of a contractual trust arrangement (CTA), under which part of the Group’s pension obligations were secured with financial assets. The assignment of approximately €1 billion of assets to ZF Asset Trust e.V. created plan assets according to IFRS. This reduced the pension obligations by an amount equal to the financial assets included. This was partly compensated by the increase in pension obligations resulting from the downward adjustment in the discount rates.

As of December 31, 2016, the Group equity, including non-controlling interests, amounted to €6,115 million compared to €5,850 million in the prior year. The equity ratio improved to 21% (2015: 19%). Equity mainly increased due to the net profit after tax in the amount of €924 million. This was offset primarily by the above-mentioned adjustment in the discount rates for the valuation of pension obligations. The resulting effect amounted to €-440 million after tax. Additionally, the amounts reclassified through profit or loss from the disposal of securities into the contractual trust arrangement had a negative impact. Dividends paid to the shareholders of ZF Friedrichshafen AG (€50 million) and to holders of non-controlling interests (€28 million) totaled €78 million in the year under review (2015: €115 million) and also reduced equity.

## FINANCIAL POSITION

### Cash and cash flow

The net change in cash in 2016 was €108 million. Taking into account effects of exchange rate changes in the amount of €24 million, cash and cash equivalents increased accordingly from €1,495 million to €1,627 million as of year-end 2016. The increase in cash flow from operating activities by €564 million to €3,334 million had a positive effect. This development was driven by an improved EBITDA, which increased by €497 million, mainly as a result of the full-year inclusion of ZF TRW. In terms of working capital, the effect resulting from the increase in receivables was partially offset by the positive effect of the increase in liabilities.

The cash flow from investing activities amounted to €-992 million (2015: €-9,572 million). The figure for 2015 included the acquisition of ZF TRW, which was reported as a cash outflow from the acquisition of consolidated companies. The cash received from the sale of the Engineered Fasteners & Components Business Unit and the sale of the Cherry Group had a positive impact on cash flow from investing activities.

There were further cash outflows for investments in associates and other participations. These outflows relate to the strategic strengthening of the technology portfolio and were incurred in the purchase of a stake in Ibeo Automotive Systems GmbH and the purchase of shares in doubleSlash Net-Business GmbH. Further outflows concern the purchase of shares as part of the takeover offer to the shareholders of Haldex Aktiebolag, which were later tendered to Knorr-Bremse AG. Moreover, there was a cash outflow of €1,185 million for investments in property, plant and equipment (2015: €1,290 million). Therefore, free cash flow amounted to €2,342 million and free cash flow adjusted for company acquisitions and disposals reached €2,000 million (2015: €1,361 million).

Cash flow from financing activities amounted to €-2,234 million in fiscal year 2016 (2015: €7,177 million). Of that amount, €-1,812 million was attributable to borrowings or repayments of borrowings compared with an inflow of €7,641 million in the previous year which included the acquisition financing of ZF TRW. The repayments in 2016 primarily referred to tranches of the syndicated loan and other advance repayments of a portion of the Group's bonds and bonded loans. Interest paid and transaction costs mainly include interest of €344 million (2015: €349 million) paid in conjunction with the financing of the acquisition of ZF TRW.

The net financial position including securities was €-6,635 million (2015: €-7,385 million) as of the reporting date. Since the refinancing of the syndicated loan in July 2016, it has consisted of the short-term and long-term financial liabilities excluding derivative financial instruments, less cash and cash equivalents as well as securities. Approximately €1 billion of securities were transferred in 2016 as part of a contractual trust arrangement (CTA) for the purpose of securing the pension obligations. Excluding this contribution of securities, the net financial position improved by €1,740 million compared with the prior year. Further debt relief continues to represent a central company target of ZF in fiscal year 2017.

### Consolidated statement of cash flows

in € million

	2016	2015
Cash flow from operating activities	3,334	2,770
Cash flow from investing activities	-992	-9,572
<b>Free cash flow</b>	<b>2,342</b>	<b>-6,802</b>
Cash flow from financing activities	-2,234	7,177
<b>Change in cash position</b>	<b>108</b>	<b>375</b>
Cash position at the beginning of the fiscal year	1,495	1,114
Changes in cash position from exchange rate effects	24	6
<b>Cash position at the end of the fiscal year</b>	<b>1,627</b>	<b>1,495</b>

## FORECAST, OPPORTUNITIES AND RISK REPORT

### Opportunities and Risk Report

#### RISK MANAGEMENT SYSTEM

The aim of risk management at ZF Friedrichshafen AG is to identify and assess risks as early as possible and to avoid such risks by initiating appropriate measures or to minimize their impact. The regular analysis of identified risks increases risk awareness and enables continuous improvement.

ZF defines risk as any event that results in negative deviations from our business plan. The Board of Management is responsible for the risk management system. The Board of Management reports to the Audit Committee and the Supervisory Board about the major existing risks on a regular basis. The ZF risk management system is regularly audited and assessed in terms of compliance by Internal Auditing. In addition, the external auditors annually check ZF's early detection system for risks.

The risk management system is set out in a ZF Group Directive, which was approved by the Board of Management and which can be accessed by all employees. This Group Directive describes processes and responsibilities of the risk management system. Risk areas are defined as structural elements along the value added chain, including risks such as quality, sales, procurement, restructuring, location and other risks. Risks are captured, assessed and tracked on the basis of these risk areas. The directive is regularly reviewed and updated and is binding for all ZF Group companies.

Risks are captured, assessed and tracked quarterly by the reporting units. The identified risks are combined on division and Group level and tracked in coordination with the responsible corporate function department. The ZF risk management system captures risks in terms of their potential financial impact in connection with their probability of occurrence where these risks exceed a limit defined by the Board of Management. Essential risks that exceed a second, defined limit are brought to the attention of the responsible party or person via an ad-hoc reporting process. This enables ZF to initiate effective risk control measures. Opportunities are included in the ZF risk management system if they have a direct material link to a risk.

Major risks in the ZF Group, which are subject to regular reporting, essentially involve the areas of market/customer, warranty obligations and material price development also since, as a result of these, the planned synergy effects cannot be realized due to market-driven developments. Risks are also reported that arise out of current business operations or result from antitrust law issues and transactions relevant under taxation law in connection with acquisitions.

### STRATEGIC RISKS

The ZF Group's strategic risks essentially entail risks from the following areas:

- **Industries and market**

ZF may well face risks, similar to those encountered by the automotive supplier industry as a whole, associated with negative developments in global markets, which may have negative repercussions on the business, profitability and financing conditions. One possible cause may include the difficulties resulting from the debt burden of certain countries within the European Monetary Union or from political developments such as Brexit. Moreover, risks may ensue from the changed scenario associated with the new U.S. government. Fiercer competition may also adversely affect sales development and sales prices. In the Asian market in particular, which is vital to ZF, a succession of new providers are set to enter the fray and hence intensify competition. Another earnings risk is associated with potential material price increases.

In addition to activities in the classic markets, ZF is also operating in the emerging markets such as Eastern Europe, Brazil or India. Economic downturns in these countries may lead to declining sales and payment defaults. The specifically promoted diversification and broadening of ZF's product portfolio decisively limit these kinds of risks.

- **Technology und quality**

ZF generates a substantial proportion of its sales with products used in the combustion engine driveline. The progressive electrification in the passenger car and commercial vehicle drive segment may jeopardize the hitherto strong market position. ZF combats this long-term development by expanding and bundling activities in the Electronic Systems and Electric Traction Drive Business Units in the E-Mobility Division which had been founded on January 1, 2016, and by means of the electric drive systems that are already being rolled out. In the case of high-volume ZF products such as the 8HP and 9HP automatic transmissions as well as airbags, faulty products may translate into substantial financial losses on account of warranty obligations. ZF consistently combats such possibilities with the aid of the certified ZF quality management system and by means of thorough quality checks and optimized process workflows.

**Risks minimized thanks to a targeted diversification strategy and a broader product portfolio**

- **IT**

Unauthorized access to IT systems and product piracy, industrial espionage or social engineering may also cause huge losses. Alongside security incident and problem management, preventive measures such as antivirus programs, source code scanning and hard disk encryption, which are continually adapted to the increasing threats, should help minimize the impact of the aforementioned risks.

- **Countries and locations**

ZF is represented with 230 locations in 40 countries worldwide. In some of these countries, risks associated, for instance, with unstable political conditions or on account of different competitive, legal and taxation systems pose a threat. Critical situations may also arise due to bottlenecks in the supply chain and financial problems affecting key suppliers. The risk of lost production due to strikes is also ever present.

- **Compliance/legal/taxation**

Antitrust authorities are increasingly focusing on investigating infringements of competition rules in many countries, which may result in losses through fines associated with unlawful conduct. ZF minimizes these risks through a comprehensive compliance management system. Additional tax demands may also be made as a consequence of regular audits by the tax authorities in the various countries in which ZF companies operate. Tax laws and circumstances relevant to tax could be interpreted and assessed in a different manner by local tax authorities than by ZF.

## **OPERATING RISKS**

Risks in the Car Powertrain Technology, Car Chassis Technology and Active & Passive Safety Technology Divisions result from the sustained market weakness in South America coupled with lower growth expectations in the Chinese market. Technology changes, potential warranty claims as well as product ramp-ups constitute further potential risk areas alongside price and competitive pressure.

A fall in orders due to insourcing coupled with increasing price pressure call for the systematic implementation of cost-cutting measures in the Commercial Vehicle Technology Division. The acquisition of the industrial drives and wind turbine gearbox segment from Bosch Rexroth AG completed in the prior year and the resulting integration not only provide an opportunity by extending the product portfolio, but also pose a challenge for the Industrial Technology Division. Risks may ensue from the various market developments in the segments and regions, as well as from the ramp-up of new products.

In the spare parts business, the increasing market power of wholesalers is ratcheting up the already high price pressure. This applies especially to merchandise. The ZF Aftermarket Division was established on January 1, 2017, in order to secure ZF's power on the market. As part of this process, the "Parts & Service" Business Unit in the Active & Passive Safety Technology Division is merged with the ZF Services Business Unit to create a joint organization.

## FINANCIAL RISKS

Liquidity, foreign currency, interest rate and counterparty risks as well as credit risks are monitored, controlled and, if necessary, hedged as part of central risk management in order to ensure the ZF Group's financial stability. Guidelines and provisions regarding the individual risk types have been put in place which determine how the particular risk must be assessed. Wherever possible and expedient, derivative financial instruments to hedge existing underlying or planned transactions are used to manage interest and currency risks in particular. Derivative financial instruments with plain vanilla character are used. These are used exclusively to hedge existing underlying or forecast transactions. The financing of the acquisition of TRW Automotive Holdings Corp. in 2015 and the resulting cash flows between the eurozone and U.S. dollar area may lead to risks that cannot be hedged in their entirety. In order to minimize these risks, a new Group strategy will be developed in 2017 to hedge currency risks.

In order to reduce counterparty risks within finance, all transactions are carried out only with banks having a first-class credit rating and as part of centrally stipulated limits. The necessary financial flexibility is guaranteed by means of central cash pooling with sufficient cash and confirmed credit lines with matching maturities. The financial stability of our suppliers and customers is continually checked; if necessary, measures are initiated to safeguard the supply chain or receivables.

Risks are also associated with the syndicated loan agreement of ZF Friedrichshafen AG. In addition to other obligations, this agreement also includes financial covenants, which must be complied with at all times. A breach of these financial covenants would mean that the creditor could demand immediate repayment of the syndicated loan. ZF Friedrichshafen AG has complied with the financial covenants at all times, including as of the reporting date. From a current perspective, ZF does not assume that these obligations will be breached in future.

## Opportunities

ZF's range of products and services coupled with its global presence ensure it is well placed to respond early and appropriately to the challenges of the expected megatrends and thus reap the benefits. The ZF 2025 Strategy is similarly tailored to these megatrends. The organic sales growth planned for 2017, the consistent implementation of cost engineering projects, improved material price structures, including as a result of forming a global purchasing organization, and the focus on cost and structural optimizations will help improve performance within the ZF Group's operating business. Opportunities also arise from continuously developing new and existing products, extending development expertise and setting up new locations, which can, in turn, further improve competitiveness.

**The future megatrends come along with diverse opportunities for ZF on the international markets.**

Particular opportunities arise from the integration of the new Active & Passive Safety Technology Division: Apart from reinforcing its strategic positioning by extending its technology and product portfolio, ZF also expects improved market access as well as synergies, especially in materials management and sales, and as a result of merging and extending shared services activities. Positive momentum is also expected from the merger of the ZF Services Business Unit with the Service area of the Active & Passive Safety Technology Division to create a uniform aftermarket organization. In the Commercial Vehicle Technology Division, the incorporation of the CV Steering Systems Business Unit should round off the technology portfolio.

New technology trends such as the connected car, autonomous driving and integrated safety technology are becoming increasingly ready for market and open up new opportunities, as do the current developments in the electrification of the driveline. The upgrading of development and testing capacities bears testimony to these trends. The consolidation of the activities of the previous Electronic Systems and Electronic Driveline Technology Business Units to create the E-Mobility Division as the core element in ZF's e-mobility strategy, and the ensuing bundling of expertise for electric drives in early 2016, have substantially bolstered ZF's position in this promising field.

## **BOARD OF MANAGEMENT OVERALL STATEMENT ON THE OPPORTUNITY AND RISK SITUATION**

An established risk management system is used to combat the aforementioned across-the-board potential risks at ZF. Based on information available at present, the individual risks illustrated in the financial statement and set out in this report, no additional market-related opportunities and risks can be identified which may substantially influence the ZF Group's results of operations, financial position and net assets, or jeopardize its continued existence in the fiscal year 2017. The Group's financial situation is stable; the need for financial means is currently covered by existing liquidity and available credit lines.

## **Forecast Report**

### **FUTURE ECONOMIC ENVIRONMENT**

#### **Growth picks up slightly**

Following the positive reports in the last quarter of 2016, the signs seem to point to a gradual improvement of the global economy in 2017. Key indicators such as the Ifo Business Climate Index improved in all economic regions in the fourth quarter of 2016. Most institutions forecast growth in global production (calculated on the basis of purchasing power parities) slightly above the 2016 figures. However, the United States presidential election, among other things, has added to the uncertainty surrounding future growth. With a sustained expansionary economic and financial policy in the advanced economies as well as growing demand in the

developing and newly industrialized countries, economic growth is likely to pick up marginally. This scenario is based on a moderate increase in growth of the industrialized countries from 1.7% to 2.1%. The pace of growth is set to increase in the newly industrialized countries thanks to a recovery in raw material prices. For China, the predicted scenario is that the pace of growth will fall slightly if the current expansionary monetary and fiscal policy measures are pared down somewhat to promote a more sustainable growth path.

#### Development of the industry still inconsistent

For the production of *passenger cars and light commercial vehicles* a fairly normal year is pending, with forecasts pointing to a marginal increase of 2%. Europe is expected to perform slightly better at +3%, while North America is forecast to move sideward at a high level. In China, the tax breaks for vehicle purchases (< 1,600 cc) are being retained in a slightly reduced form. As such, the market is once again being stimulated so that moderate growth of 4% is expected following the sharp 12% increase in 2016. India continues to grow, up 7%. The two crisis-hit markets of the past few years have good prospects of stabilizing (Brazil) or may already begin to grow again (Russia +8%) in 2017.

In the case of *heavy commercial vehicles*, production is expected to stagnate at the prior-year level. Europe will provide little momentum; only Russia is forecast double-digit growth. North America will continue its downward correction, with production expected to fall by 6% (2015: 18%). Following the sharp increase in production in China in 2016, only minimal growth is expected for 2017. India is expected to continue the success story of the past few years with a further increase of 6% while South America has a positive outlook (+13%) again, following the massive drop over the past few years.

The *off-road machinery markets* are finding the floor worldwide both in agricultural technology and in the construction machinery sector; as a result, moderate increases of around 1% can be expected. In *agricultural technology*, the markets in Asia (with the exception of China) and South America in particular are expected to see minimal growth of between 2% and 3%. India is managing to expand notably with growth forecast of 5%. Production in Europe (-1%) and North America (-2%) is, however, set to contract slightly once more. A similar picture is becoming apparent in the *construction machinery* segment. A moderate increase of around 1% worldwide is expected here in 2017. While the market in Europe will only grow moderately by 1% and the USA even post negative growth once more (-1%), the Asia-Pacific region is set to have bottomed out with

a growth forecast of 2%. In the industrial technology markets, the *rail drives* sector is seeing stable, slightly positive market growth. A marginally positive signal can be seen from Europe in the weaker *marine markets*. The other major markets remain on a low level. The market continues to struggle with overcapacity in the commercial craft sector. *Wind power technology* is showing signs of further positive momentum. Here, however, there is a high level of dependence on national political framework conditions.

#### FUTURE CORPORATE DEVELOPMENT

ZF expects Group sales for 2017 in the region of €36 billion. In the medium term, the overall expectation is to see organic growth of around 6% for the ZF Group, which is above average for the market as a whole. In this respect, the increase in sales is based on additional market penetration and stable market growth. Moderate growth is forecast for Europe; North America is expected to see sound, albeit limited positive growth, while South America is forecast to see a slight recovery, starting from the low market volume at present. Market growth in China and the emerging markets is also seen as moderate. The diversification strategy was driven further forward by means of the initiated integration of ZF TRW and the acquisition of the industrial drives and wind turbine gearbox business of Bosch Rexroth AG, which was completed at the end of 2015.

Continued positive growth is forecast for the Active & Passive Safety Technology Division as well as for the Car Powertrain Technology Division. Both divisions are outpacing growth in the automotive market. Products for adapting to new technology trends such as connected cars and autonomous driving pave the way for sustainable, long-term growth opportunities. The plug-in hybrid transmission based on the 8HP modular transmission system will boost success in reducing CO<sub>2</sub> emissions and improve market opportunities. Current developments in the airbag market are also having a positive impact. In the wake of a substantial sales increase in the previous year associated with volume production launches, the forecast for the Car Chassis Technology Division predicts temporarily weaker sales development in 2017. Sales in the Commercial Vehicle Technology Division may increase slightly again, despite sustained market weakness in South America and Russia. The further ramp-up of production of the new modular TraXon transmission system should make a considerable contribution in this respect. This system also provides original equipment manufacturers with PreVision GPS, the predictive shifting strategy for automated truck transmissions. The further integration of the industrial drive and wind turbine gearbox business acquired from Bosch Rexroth will, along with the good market positioning and development in the Wind Power Technology Business Unit and the slight recovery in the construction machinery market affecting the Industrial Technology Division, lead to a substantial

For 2017, ZF aims at Group sales in the region of €36 billion.

growth in sales. The activities bundled in the new E-Mobility Division will reinforce ZF's electronics expertise and further expand the position in relation to the future trends of e-mobility and efficiency improvement in the vehicle. Significant sales growth for the coming fiscal year is once again forecast here, among other things due to the volume production ramp-up of various hybrid applications. Growth at ZF Services is largely tied up with the merger of the ZF Services Business Unit with the Parts & Service Business Unit of the Active & Passive Safety Technology Division to create a joint aftermarket organization. Despite slightly slower growth in Germany and Europe, the markets continue to generate high volumes. The expansion of servicing for the 8HP and 9HP transmissions in the USA and China will have a positive impact on further sales developments.

ZF expects to see the investment ratio and the research and development ratio rise slightly in 2017 compared with 2016. In this way, ZF reflects the transformation of the automotive industry through digitalization, electromobility and autonomous driving. The headcount at ZF will increase slightly based on the outlined market developments.

Adjusted for effects from the purchase price allocation and M&A activities, ZF expects an adjusted EBIT margin of around 6%. The adjusted EBITDA margin is planned at over 10%.

Targeted measures designed to improve price quality, productivity and cost development, coupled with synergies from integrating ZF TRW, will contribute to improving operating performance.

Based on the planned development of the operating business, the intended investments, as well as the continuation of consistent working capital management, the aim is to achieve free cash flow adjusted for company acquisitions and disposals of well above €1 billion for 2017. Based on the strong free cash flow, the aim is to systematically reduce financial liabilities and continue to drive forward quickly the debt relief of the ZF Group.

The challenges for ZF continue to lie in the successful integration of ZF TRW. In addition to further improving operating profit quality and concentrating on core business, the focus will be on expanding technologies for autonomous driving, e-mobility and integrated safety.

Given the different development of the regional markets and divisions, ZF demonstrates sound organic growth, which is above average compared with the rest of the market, in the short and medium term when analyzing the overall picture. The Group is moving into new markets, continuing its diversification strategy, rolling out new promising products and underpinning its technology leadership through sustainable investment in research and development.

Taking into account the aforementioned factors, the trust of customers, suppliers and business partners in the collaboration with ZF as well as the committed, qualified employees willing to deliver outstanding performance and embrace change, ZF can rise to the upcoming challenges and look to the future with optimism.

Friedrichshafen, February 27, 2017  
 ZF Friedrichshafen AG  
 The Board of Management

**ZF actively addresses digital change within the automotive industry.**



# CONSOLIDATED FINANCIAL STATEMENTS

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## CONSOLIDATED STATEMENT OF PROFIT OR LOSS

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2016

in € million	Notes	2016	2015
Sales	1	35,166	29,154
Cost of sales	2	29,069	24,533
<b>Gross profit on sales</b>		<b>6,097</b>	<b>4,621</b>
Research and development costs	8	1,948	1,390
Selling expenses		1,263	1,081
General administrative expenses		1,317	1,099
Other income	3	530	653
Other expenses	4	485	623
<b>Operating profit or loss</b>		<b>1,614</b>	<b>1,081</b>
Result from associates	5	48	532
Other net result from participations	5	16	- 17
<b>EBIT</b>		<b>1,678</b>	<b>1,596</b>
Financial income	6	458	301
Financial expenses	6	855	809
<b>Net profit or loss before tax</b>		<b>1,281</b>	<b>1,088</b>
Income taxes	7	357	69
<b>Net profit or loss after tax</b>		<b>924</b>	<b>1,019</b>
thereof shareholders of ZF Friedrichshafen AG		859	974
thereof non-controlling interests		65	45

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

### ZF Friedrichshafen AG for the period dating January 1 to December 31, 2016

in € million	Notes	2016	2015
<b>Net profit or loss after tax</b>		<b>924</b>	<b>1,019</b>
<b>Line items that will be reclassified in the consolidated statement of profit or loss</b>			
Foreign currency translation differences		-28	169
Mark-to-market of securities			
Gains arising during the year		51	30
Amounts reclassified through profit or loss		-97	-18
Mark-to-market of cash flow hedges			
Gains arising during the year		-2	467
Amounts reclassified through profit or loss		-51	20
Amounts reclassified to acquisition costs through comprehensive income		-7	-890
Income taxes		12	129
Other comprehensive income from associates			
Amounts reclassified through profit or loss		0	-37
		<b>-122</b>	<b>-130</b>
<b>Line items that will not be reclassified in the consolidated statement of profit or loss</b>			
Actuarial losses (2015: gains) from pension obligations		-621	532
Income taxes		181	-145
		<b>-440</b>	<b>387</b>
<b>Other comprehensive income after tax</b>	<b>24</b>	<b>-562</b>	<b>257</b>
<b>Total comprehensive income</b>		<b>362</b>	<b>1,276</b>
thereof shareholders of ZF Friedrichshafen AG		308	1,243
thereof non-controlling interests		54	33

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

ZF Friedrichshafen AG as of December 31, 2016

Assets in € million	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>Current assets</b>			
Cash and cash equivalents		1,627	1,495
Financial assets	9	94	66
Trade receivables	10	5,220	4,777
Other assets	11	477	434
Income tax receivables		13	9
Inventories	12	2,864	2,879
		<b>10,295</b>	<b>9,660</b>
Assets held for sale and disposal groups	23	108	657
		<b>10,403</b>	<b>10,317</b>
<b>Non-current assets</b>			
Financial assets	13	764	1,809
Trade receivables	10	0	1
Other assets	11	213	184
Associates	14	386	308
Intangible assets	15	9,893	10,179
Property, plant and equipment	16	6,626	6,856
Investment property	18	1	5
Deferred taxes	7	842	673
		<b>18,725</b>	<b>20,015</b>
		<b>29,128</b>	<b>30,332</b>

Liabilities and equity in € million	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>Current liabilities</b>			
Financial liabilities	19	926	436
Trade payables		5,335	4,987
Other liabilities	20	1,843	1,754
Income tax provisions		488	402
Other provisions	21	725	580
		<b>9,317</b>	<b>8,159</b>
Liabilities of disposal groups	23	0	244
		<b>9,317</b>	<b>8,403</b>
<b>Non-current liabilities</b>			
Financial liabilities	19	7,504	9,471
Trade payables		26	16
Other liabilities	20	434	444
Provisions for pensions	22	4,140	4,465
Other provisions	21	643	613
Deferred taxes	7	949	1,070
		<b>13,696</b>	<b>16,079</b>
<b>Equity</b>			
Subscribed capital	24	500	500
Capital reserve	24	386	386
Retained earnings <sup>1)</sup>	24	4,930	4,667
<b>Equity attributable to shareholders of ZF Friedrichshafen AG</b>		<b>5,816</b>	<b>5,553</b>
Non-controlling interests		299	297
	24	<b>6,115</b>	<b>5,850</b>
		<b>29,128</b>	<b>30,332</b>

<sup>1)</sup> Disposal groups and assets held for sale account for €-2 million (2015: €23 million).

## CONSOLIDATED STATEMENT OF CASH FLOWS

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2016

in € million	Notes	2016	2015
Net profit or loss before income tax		1,281	1,088
Depreciation/Reversal of impairments for intangible assets and property, plant and equipment		2,173	1,758
Changes in non-current provisions made through profit or loss		128	-63
Income taxes paid		-364	-324
Results from first-time consolidation and deconsolidation		-37	-41
Results from the disposal of intangible assets and property, plant and equipment		9	3
Net result from participations and net financial result		333	-7
Increase (2015: decrease) in inventories		-30	90
Increase (2015: decrease) in trade receivables		-485	66
Increase in other assets		-118	-71
Increase in other liabilities		444	271
<b>Cash flow from operating activities</b>		<b>3,334</b>	<b>2,770</b>
Expenditures for investments in			
intangible assets		-309	-353
property, plant and equipment		-1,185	-1,290
associates		-39	-17
participations		-110	-4
financial receivables		-17	-11
Proceeds from the disposal of			
intangible assets		0	2
property, plant and equipment		20	100
associates		0	892
participations		9	0
financial receivables		64	134
Cash inflow from the sale of consolidated companies	28	487	389
Cash outflow (2015: outflow) from the acquisition of consolidated companies	27	0	-9,444
Dividends received		34	3
Interest received		54	27
<b>Cash flow from investing activities</b>		<b>-992</b>	<b>-9,572</b>

in € million	Notes	2016	2015
Dividends paid to ZF Friedrichshafen AG shareholders		- 50	- 50
Dividends paid to holders of non-controlling interests		- 28	- 65
Repayments of borrowings		- 2,880	- 3,490
Proceeds from borrowings		1,068	11,131
Interest paid and transaction costs		- 344	- 349
<b>Cash flow from financing activities</b>		<b>- 2,234</b>	<b>7,177</b>
<b>Net change in cash</b>		<b>108</b>	<b>375</b>
Cash position at the beginning of the fiscal year		1,495	1,114
Effects of exchange rate changes on cash		24	6
<b>Cash position at the end of the fiscal year</b>	<b>26</b>	<b>1,627</b>	<b>1,495</b>



Retained earnings					Equity attributable to shareholders of ZF Friedrichshafen AG	Non-controlling interests	Group equity
Other retained earnings	Foreign currency translation differences	Mark-to-market of securities	Mark-to-market of cash flow hedges	Actuarial gains and losses			
							24
4,149	149	35	254	-1,113	4,360	159	4,519
974					974	45	1,019
	148	5	-271	387	269	-12	257
974	148	5	-271	387	1,243	33	1,276
-50					-50	-65	-115
					0	170	170
5,073	297	40	-17	-726	5,553	297	5,850
859					859	65	924
	-17	-42	-52	-440	-551	-11	-562
859	-17	-42	-52	-440	308	54	362
-50					-50	-28	-78
-1					-1	-23	-24
6					6	-1	5
5,887	280	-2	-69	-1,166	5,816	299	6,115

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## of ZF Friedrichshafen AG for 2016

### Fundamental Principles

#### CORPORATE STRUCTURE

ZF Friedrichshafen AG is a corporation, of which 93.8% is owned by the Zeppelin Foundation and 6.2% by the Dr. Jürgen and Irmgard Ulderup Foundation. The company is headquartered in 88046 Friedrichshafen, Germany, Löwentaler Straße 20.

Further explanations on the corporate structure can be found in the management report.

#### GENERAL

The line items of the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of financial position, the consolidated statement of cash flows and the consolidated statement of changes in equity are broken down and explained in the notes to the consolidated financial statements.

The Group's currency is the euro. Unless otherwise stated, all amounts are reported in millions of euros (€ million).

The Board of Management of ZF Friedrichshafen AG approved these consolidated financial statements on February 27, 2017, and forwarded them to the Supervisory Board.

The consolidated financial statements, which were prepared as of December 31, 2016, as well as the group management report will be announced in the Electronic Federal Gazette.

The consolidated statement of financial position is broken down by maturities. The financial line items are divided into non-current and current assets and/or liabilities on the basis of whether they have a residual term of more than one year or up to one year, respectively.

Assets and liabilities included in a disposal group classified as held for sale as well as assets held for sale are presented separately from other assets and liabilities in the consolidated statement of financial position.

The recognition of assets and liabilities is carried out according to the historical cost principle. This does not include derivative financial instruments, securities and investments in participations that are recognized at fair value, as far as it can be determined reliably.

#### ADOPTION OF IFRS

As a company that is not publicly traded, ZF Friedrichshafen AG has chosen the option to draw up its consolidated financial statements on the basis of IFRS pursuant to § 315a Section 3 HGB (German Commercial Code).

The consolidated financial statements are in accordance with the standards and interpretations valid on the reporting date and issued by the International Accounting Standards Board (IASB), London (Great Britain), as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a HGB.

The following changes to standards were applied for the first time in the fiscal year 2016:

- Amendment to IAS 27 "Separate Financial Statements"
- Amendment to IAS 1 "Presentation of Financial Statements"
- Improvements to IFRS 2012 – 2014
- Amendments to IAS 16 "Property, Plant and Equipment" and IAS 38 "Intangible Assets"
- Amendment to IFRS 11 "Joint Arrangements"
- Amendment to IAS 16 "Property, Plant and Equipment" and IAS 41 "Agriculture"
- Amendments to IFRS 10 "Consolidated Financial Statements", IFRS 12 "Disclosure of Interests in Other Entities" and IAS 28 "Investments in Associates and Joint Ventures"

The amendment to IAS 27 is designed to reintroduce the application of the equity method in the separate financial statements; this means that interests of an investor held in subsidiaries, joint ventures and associates have to be accounted for either at amortized cost in accordance with IAS 39 or IFRS 9, respectively, or using the equity method. The selected method has to be applied consistently for each category of interests. The amendment has to be applied retrospectively.

The amendments to IAS 1 are intended to improve financial reporting in relation to disclosures. A stronger focus is put on the materiality principle. The amendments introduce further subdivisions of the minimum components of the statement of financial position as well as the presentation of subtotals. In addition, there is now a greater flexibility as regards the order of disclosures. Moreover, the provisions set out in IAS 1 with respect to the identification of significant accounting policies as a component of the notes were abolished.

The improvements of IFRS 2012 – 2014 describe a collective standard which was published in June 2014 and deals with amendments to various IFRS. The amendments are listed below:

- IFRS 5: In relation to non-current assets (or disposal groups) classified as held for distribution to owners, it is clarified that when a company reclassifies an asset from the held-for-sale category to the held-for-distribution category – or vice versa –, such reclassification is considered a continuation of the original plan of disposal or distribution, provided this is conducted without time delay. This means that the accounting rules for assets (or disposal groups) held for sale or for distribution may be applied. If a company determines that an asset (or a disposal group) no longer meets the criteria for being held for distribution, the company shall cease to classify it as held for distribution – similarly to the rules applicable for the discontinuation of the classification as held for sale. A change in the classification does not result in an extension of the period required to complete a sale or distribution.

- IFRS 7: Clarification of disclosure requirements for fully transferred assets comprising a servicing contract that is subject to a servicing fee. Due to the retained right to service the asset, disclosures on continuing involvement have to be made when the company has an interest in the future performance of the transferred financial asset. In addition, the applicability of the amendments to IFRS 7 in relation to disclosures on offsetting financial assets and financial liabilities to condensed interim financial statements was specified.
- IAS 19: Clarification that, in connection with determining the discount rate for post-employment benefits, only high-quality corporate or government bonds that are denominated in the same currency as the payments to be made may be used. This has the effect that the depth of the market for high-quality corporate or government bonds has to be assessed on currency rather than at country level.
- IAS 34: Clarification that the selected explanatory notes required by IAS 34 in an interim financial report are not required to be disclosed in the notes, but may be reported elsewhere in the interim financial report.

The amendments to IAS 16 and IAS 38 provide further guidance to determine acceptable methods of depreciation and amortization. Accordingly, sales-based methods of depreciation or amortization of property, plant and equipment and intangible assets, respectively, are only appropriate in particular exceptions.

The amendments to IFRS 11 clarify that the acquisition of both the initial interest and additional interests in a joint operation which constitutes a business has to be accounted for based on the accounting provisions for business combinations set out in IFRS 3, unless there is a conflict with the guidance set out in IFRS 11. The disclosure requirements of IFRS 3 also have to be met.

The amendments to IAS 16 and IAS 41 clarified that plants that are used solely to grow agricultural produce (bearer plants) are accounted for in the same way as property, plant and equipment (in accordance with IAS 16 “Property, Plant and Equipment”) since their operation is similar to that of manufacturing. These amendments have no significance for the consolidated ZF Group since they concern biological assets.

The amendments to IFRS 10, IFRS 12 and IAS 28 relate to the application of the consolidation exception in case the parent company meets the definition of an investment entity.

The above-mentioned changed standards were applied for the first time in the current fiscal year and did not lead to any change in the ZF Group accounting.

The IASB has passed the following standards and interpretations that the European Union has already endorsed into European law but which are not yet mandatory. There was no early adoption.

- IFRS 15 “Revenue from Contracts with Customers” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
- IFRS 9 “Financial Instruments” (mandatory adoption for fiscal years beginning on or after January 1, 2018)

The objective of IFRS 15 is to aggregate the revenue recognition rules included in various standards and interpretations and define uniform basic principles applicable to all industries and all types of sales transactions. IFRS 15 determines the timing and the amount of revenue recognition. The core principle is that revenue is recognized during the transfer of goods or services in an amount that reflects the expected consideration.

IFRS 15 comprises, amongst other things, expanded guidance for multiple-element arrangements as well as new rules for the treatment of service contracts and contract modifications. In addition, the new standard requires the disclosure of a number of quantitative and qualitative information to enable users of the consolidated financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers. IFRS 15 supersedes IAS 11 “Construction Contracts” and IAS 18 “Revenue” as well as the related interpretations.

A Group-wide project to introduce IFRS 15 was initiated in 2016. It comprises several stages. An initial impact analysis and the recording of revenue streams at business unit level was completed in the third quarter of 2016. After that, by categorizing the revenue streams into topics along the timelines of customer projects, a detailed contract analysis is conducted. This results in a functional specification, which provides a transition from the revenue recognition rules previously applicable in the Group to the new IFRS 15 rules and also comprises the need to adjust IT processes and systems. Based on the contract analysis conducted, the following material effects are expected:

- The separation of performance obligations, which is required under IFRS 15 if certain prerequisites are met, and the resulting allocation of the transaction price will affect the timing of revenue recognition.
- The capitalization of costs of obtaining a contract, which is mandatory under IFRS 15 if certain prerequisites are met, will increase total assets. Total assets will also increase due to the recognition of contract assets, i.e. from customer receivables for which there is no legal title yet.
- The application of the control concept will possibly lead to an earlier revenue recognition in relation to tool revenue and to a reduction of total assets.

A reliable estimate of the quantitative effect can only be made once the project has been completed. ZF does not make use of the option to early adopt IFRS 15 prior to the beginning of the fiscal year 2018. To implement the transition to the new standard, companies may adopt either a full retrospective approach (with optional practical expedients) or a modified retrospective approach. The latter permits the first-time adoption of the standard from the current reporting period without adjusting comparative periods, but requires additional disclosures. Against the backdrop of the detailed analysis of the effects of IFRS 15 on IT processes and systems, which has yet to be completed, a decision will be made during the fiscal year 2017 about the specification of the proposed alternative for a retrospective initial adoption.

IFRS 9 contains new provisions for the classification and measurement of financial assets and financial liabilities and is intended to replace IAS 39. According to this, financial assets are to be recognized depending on their respective characteristics and considering the business model or business models, either at amortized cost or at fair value through profit or loss.

Contrary to the currently valid provisions, equity instruments are generally to be measured at fair value. Changes in the fair value of the equity instruments may also be recorded in equity without affecting profit or loss. In this case, only certain income from participations is recognized through profit or loss for equity instruments. The initial adoption of IFRS 9 could have effects on the measurement of investments in participations. Until now, these have predominantly been recognized at cost because their fair values cannot be determined reliably. In addition, starting from the date of the first-time adoption, the unrealized fair value gains and losses from debt instruments that were previously recorded in equity are to be recognized in the consolidated statement of profit or loss. The implementation of the new accounting policies can lead to a higher volatility of the profit or loss after tax.

The previous provisions of IAS 39 are adopted to a large extent with regard to the classification and measurement of financial liabilities. One change affects the accounting of financial liabilities which are designated as at fair value through profit or loss. In the future, the part of the fair value change resulting from the change of one's own credit risk is to be recorded in other comprehensive income and not in the consolidated statement of profit or loss. Another change relates to liabilities from derivative financial instruments which are linked to equity instruments not listed on the stock exchange. In the future, these liabilities are always to be recognized at fair value, while the currently applicable provisions allow recognition at amortized cost.

In addition, IFRS 9 comprises new rules for hedge accounting. Changes to the previous accounting principles mainly refer to new provisions regarding the designation of instruments and risks, requirements for hedge effectiveness, the adjustment and discontinuation of hedging relationships and some rules for the recognition of hedging relationships. The Group currently does not expect that the amendments will have a significant impact on the presentation of financial statements. IFRS 9 supersedes IFRIC 9 “Reassessment of Embedded Derivatives” and also changes a number of existing standards, including IFRS 7, which governs the disclosure requirements for financial instruments, and the provisions of IFRS 9 in the versions published in 2009 and 2010. IFRS 9 was revised in July 2014. The amended standard includes revised provisions regarding classification and measurement of financial assets and, for the first time, provisions in relation to the impairment of financial instruments; the new “expected loss model” uses a forward-looking approach for the recognition of losses by recognizing both losses already incurred and losses expected for the future. The consideration of expected future losses in the measurement of contract assets in accordance with IFRS 9 is expected to result in higher loss allowances.

Furthermore, the following standards and interpretations, which may be relevant in part for ZF Friedrichshafen AG, have already been passed by the IASB, but have not yet been endorsed by the European Union. ZF Friedrichshafen AG will not adopt any of these standards earlier:

- Amendment to IFRS 2 “Share-based Payment” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
  - Amendment to IFRS 4 “Insurance Contracts” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
  - Improvements to IFRS 2014 – 2016 (mandatory adoption for fiscal years beginning on or after January 1, 2017 and January 1, 2018, respectively)
  - IFRIC 22 “Foreign Currency Transactions and Advance Consideration” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
  - Amendment to IAS 40 “Investment Property” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
  - Amendment to IFRS 15 “Revenue from Contracts with Customers” (mandatory adoption for fiscal years beginning on or after January 1, 2018)
- IFRS 16 in particular replaces and changes the previous provisions of IAS 17 in relation to the accounting for leases by lessees. The distinction previously made by the lessee pursuant to IAS 17 between recognized obligations from finance leases and unrecognized obligations from operating leases is revoked and replaced by an accounting model for lessees that introduces mandatory recognition. The procedure set out in IAS 17 for finance leases is largely followed. Accordingly, as per IFRS 16, an asset has to be recognized in form of a right-of-use asset in the amount of the present value of future lease payments and a corresponding liability from the right of use. Pursuant to IAS 17, the future obligations from operating leases were only subject to requirements as regards a disclosure in the notes. IFRS 16 only introduces exceptions for agreements with a term of up to one year and for assets that can be used independently, that are of low value and in future do not affect the financial statements, similarly to the operating lease set out in IAS 17, and that are recognized directly in profit or loss. Accordingly, depreciation expense for the asset has to be presented separately from the interest expense on the liability for the right of use, with interest expenses being recognized as a component of the net financial result.
- IFRS 16 “Leases” (mandatory adoption for fiscal years beginning on or after January 1, 2019)
  - Amendments to IFRS 10 “Consolidated Financial Statements” and IAS 28 “Investments in Associates and Joint Ventures” (the IASB resolved to defer the effective date for the first-time application of the amendments to a date to be determined by the IASB)
  - Amendment to IAS 12 “Income Taxes” (mandatory adoption for fiscal years beginning on or after January 1, 2017)
  - Amendment to IAS 7 “Statement of Cash Flows” (mandatory adoption for fiscal years beginning on or after January 1, 2017)

A Group-wide project to introduce IFRS 16 was initiated in 2016. The application of IFRS 16 is expected to have the following material effects:

- In contrast to the previous disclosure of the payment obligations from operating leases in the notes, the rights of use and the related liabilities have to be recognized in the balance sheet in future. The initial application of the standard is expected to result in an increase in financial liabilities and an increase in non-current assets in a similar amount.
- Expenses from operating leases were previously recognized in their full amount as part of the operating profit. In future, only the depreciation and amortization of recognized right-of-use assets are recorded in the operating profit, while the interest expense is recorded in the net financial result. This will result in an improvement of the operating profit, the EBIT and the cash flow from operating activities as well as in a reduction of the cash flow from financing activities.
- Pursuant to IAS 17, renewal options are not taken into account in the measurement of the financial liability from finance leases to the extent that such option is not exercised. In contrast, IFRS 16 requires that periods covered by options are taken into account if certain prerequisites are met. This may lead to changes regarding the previously recognized financial liabilities for specific contracts previously recognized as finance leases.

The transitional provisions of IFRS 16 permit both a fully retrospective and a modified retrospective initial application. Pursuant to the modified retrospective approach, lessees are not required to adjust comparative information for leases that were previously classified as operating leases. Instead, they have to recognize the cumulative effect from the first-time application of the new standard as an adjustment of the opening value of retained earnings (or other components of equity) in the statement of financial position at the date of first-time application. ZF expects to apply the modified retrospective method for the transition to IFRS 16 and will, to a great extent, make use of the practical expedients. A reliable estimate of the quantitative effect can only be made once the project has been completed.

The amendments to IFRS 10 and IAS 28 address a known inconsistency between both standards as regards the sale or contribution of assets between an investor and its associate or joint venture. If the transaction affects a business as defined in IFRS 3, the investor recognizes the full gains or losses from that transaction; if the transaction is only a sale of assets that do not represent a business, only a portion of the gains or losses is recognized. The Group currently does not expect that the amendments, if adopted by the EU in this form, will have a significant impact on the presentation of financial statements.

The amendments to IAS 12 include guidelines as to how a company has to determine taxable income and has to explain the circumstances in which future taxable income may include amounts from the realization of assets above the carrying amount.

The amendments to IAS 7 are intended to improve the information published in the IFRS financial statements on changes in the company's indebtedness. Pursuant to the amendments, a company has to provide additional disclosures about the changes of financial liabilities where the related cash proceeds and cash payments are shown as part of the cash flows from financing activities in the consolidated statement of cash flows.

The amendments to IFRS 2 refer to the classification of share-based payment transactions that are settled on a net basis as well as to the accounting for a modification that changes the classification of share-based payment transactions from "cash-settled" to "equity-settled". In addition, there was a clarification how to take into consideration vesting conditions within the framework of the measurement of cash-settled share-based payment transactions.

The adjustments to IFRS 4 refer to the first-time adoption of IFRS 9 for insurers. Without these adjustments, the different effective dates for IFRS 9 and the new standard for insurance contracts result in an increased volatility of earnings for a transition period as well as a double transition effort.

The improvements to IFRS 2014 – 2016 describe a collective standard which was published in December 2016 and deals with amendments to various IFRS. The amendments are listed below:

- IFRS 1: Deletion of short-term exemptions for first-time adopters pursuant to IFRS 1. Appendix E.
- IFRS 12: Clarification that the disclosure requirements of the standard – except for IFRS 12.B10-B16 – also apply to interests that are within the scope of IFRS 5.
- IAS 28: Clarification that the election to measure an investment in an associate or joint venture held by a venture capital organization or another qualifying entity may be exercised differently for each such investment.

The publication of IFRIC 22 clarifies a question as to the application of IAS 21 which refers to the date to be used to determine the exchange rate for the translation of foreign currency transactions that involve the receipt or the payment of advance consideration. Accordingly, the date of the transaction relevant for determining the exchange rate to be used for the related asset, income or expense is the date on which an entity initially recognizes the asset or liability arising from the advance consideration.

The amendment to IAS 40 clarifies in which cases the classification of a property as an "investment property" begins or ends, respectively, when the property is under construction or in development. Due to the fact that the list previously set out in IAS 40.57 was phrased as an exhaustive list, the classification of unfinished property was not clarified unambiguously. The list is now explicitly deemed to be a non-exhaustive list so that unfinished property now also falls under the scope of the provisions.

The amendment to IFRS 15 includes clarifications regarding various rules set out in IFRS 15 as well as practical expedients for the transition to the new standard. The clarifications mainly relate to the identification of the performance obligations from a contract as well as the estimate as to whether a company is the principal or the agent to a transaction.

## BASIS OF CONSOLIDATION

In addition to ZF Friedrichshafen AG, 22 domestic and 250 foreign subsidiaries controlled by ZF Friedrichshafen AG are included in the consolidated financial statements.

The following table shows the composition of the consolidated ZF Group (without ZF Friedrichshafen AG):

	Jan. 1, 2016	First-time consoli- dations	Legal changes	Deconsoli- dations	Dec. 31, 2016
Subsidiaries	296	4	-1	27	272
of which domestic	22	1	1	2	22
of which foreign	274	3	-2	25	250
Joint ventures	9	0	0	0	9
Associates	7	3	0	2	8

## COMPANY ACQUISITIONS IN THE PRIOR-YEAR PERIOD

On May 15, 2015, ZF completed the purchase of 100% of the shares in ZF TRW Automotive Holdings Corp. (former TRW Automotive Holdings Corp.) by way of a cash transaction. ZF TRW is an automotive supplier of active and passive safety technology as well as state-of-the-art advanced driver assistance systems. The acquisition strengthened the market position of the consolidated ZF Group and expanded the product portfolio in an attractive segment.

The finalization of the purchase price allocation particularly resulted in effects on deferred taxes in the low double-digit million range for the period from January 1, 2016 to May 14, 2016.

With effect from November 30, 2015, ZF acquired the industrial drive and wind turbine gearbox business from Bosch Rexroth AG within the context of an asset deal. The industrial drive and wind turbine gearbox business develops and produces industrial drives used in wind turbines as well as in the oil production and mining industry. The acquisition was intended to expand our Industrial Technology portfolio.

The finalization of the purchase price allocation did not result in any essential changes for the period from January 1 to November 29, 2016.

## DISPOSALS OF COMPANIES

On January 25, 2016, ZF concluded an agreement with Illinois Tool Works (ITW) to sell its Engineered Fasteners & Components business activity after the Supervisory Board of ZF Friedrichshafen AG had granted its consent in December 2015. The full transfer of the business activity was successfully completed on July 1, 2016. The disposal did not lead to any expenses or income from deconsolidation. The Engineered Fasteners & Components business activity, with its headquarters in Enkenbach-Alsenborn (Germany), comprises five companies and employs 2,800 people at 13 locations in nine countries worldwide.

On October 12, 2016, an agreement was concluded with GENUI Fünfte Beteiligungsgesellschaft mbH to sell ZF Friedrichshafen AG's 100% shareholding in the Cherry Group. The Cherry Group comprises the computer input devices business and consists of four companies with sales of around €80 million. The transaction was successfully completed on November 14, 2016. The book profit from the sale in the amount of €30 million is recognized in other income.

As of year-end 2016, an agreement was entered into with Voit Automotive GmbH on the sale of 51% of the shareholding in ZF Fonderie Lorraine S.A.S. The company produces internal transmission parts and transmission housings in Grosbliederstroff (France) and has around 400 employees. The transaction was successfully completed on December 30, 2016. The remaining company shares are accounted for using the equity method and the company is classified as an associate.

All of the assets and liabilities disposed are disclosed in Note (28).

#### OTHER CHANGES IN THE BASIS OF CONSOLIDATION

In the fiscal year 2016, the following companies have been included in the consolidated financial statements of ZF Friedrichshafen AG for the first time:

in %	Share in capital
Alfaro Brakes S.L.U., Corella, Spain	100
doubleSlash Net-Business GmbH, Friedrichshafen, Germany	40
Ibeo Automotive Systems GmbH, Hamburg, Germany	40
ZF Chassis System (Rayong) Co. Ltd., Rayong, Thailand	100
ZF Getriebe Brandenburg GmbH, Brandenburg, Germany	100
ZF Occupant Safety Systems de la Laguna, S. de R.L. de C.V., Durango, Mexico	100
Zukunft Ventures GmbH, Friedrichshafen, Germany	100

In addition to the above-mentioned disposals of companies, 21 companies were also deconsolidated in the fiscal year 2016 as a result of merger, liquidation or sale.

#### CONSOLIDATION PRINCIPLES

The consolidation of investments in subsidiaries is carried out according to the purchase method. When control was obtained, the revalued assets and liabilities of the subsidiary and contingent liabilities, if they do not depend on a future event, are offset against the fair value of the consideration paid for the shares. Contingent purchase price payments are recognized at the amount expected. Subsequent adjustments of contingent purchase price payments are recognized in profit or loss. Acquisition-related expenses are recognized in profit or loss when they are incurred.

Any excess remaining after capital consolidation is recognized as goodwill and recorded under intangible assets. The goodwill is tested for impairment as of the reporting date. An impairment test is performed during the year if there are any triggering events. Negative differences arising on the consolidation of investments in subsidiaries are recognized in profit or loss in the consolidated statement of profit or loss under other income.

If not all interests are acquired during an acquisition, the non-controlling interests can be recognized at the amount of the proportionally revalued net assets or at their proportional total company value including the applicable goodwill. This right of choice is applicable to every company acquisition. As of December 31, 2016, all non-controlling interests are reported with the proportional net assets.

In the case of a step acquisition, the already existing interests in the company to be consolidated are revalued at the fair value at the date when control is obtained. The difference to the carrying amount of the investment is recognized in profit or loss.

The acquisition of additional interests of already consolidated subsidiaries is recognized as an equity transaction. In this method, the difference between the cost of the investment acquired and the carrying amount of the non-controlling interest is recognized in retained earnings. The effects of a sale of interests, which does not lead to a loss of control over a subsidiary, are to be recognized in equity with no effect on profit or loss by offsetting the capital gain or loss against retained earnings and by increasing the non-controlling interests to the amount of the proportional net assets.

The deconsolidation of subsidiaries is carried out on the date of the loss of control or the date of liquidation. The gain or loss on deconsolidation is recognized in other income or expenses, respectively. Remaining interests are recognized at fair value under investments in participations.

Consolidation of receivables, liabilities, provisions, income and expenses as well as gains or losses is effected for the companies included in the basis of consolidation. Guarantees and warranties between consolidated companies are eliminated.

#### **FOREIGN CURRENCY TRANSLATION**

The financial statements of consolidated group companies prepared in foreign currencies are translated on the basis of the concept of functional currency by the modified closing rate method. Since the subsidiaries operate independently from a financial, economic and organizational point of view, the functional currency is generally identical with the company's local currency. Accordingly, the income and expenses in the financial statements of subsidiaries drawn up in foreign currencies are translated in the consolidated financial statements applying

average rates, and assets and liabilities at the closing rate. The exchange difference resulting from the translation of equity at historical rates and the exchange differences resulting from the translation of the consolidated statement of profit or loss at the average exchange rate are recognized in retained earnings without effect on profit or loss.

Upon initial recognition, foreign currency receivables and liabilities are measured at the rate valid on the day of transaction in the individual financial statements of ZF Friedrichshafen AG and its subsidiaries. The closing rate on the reporting date will be used for subsequent measurements. Foreign exchange gains and losses from the revaluation of trade receivables and trade payables on the reporting date are recognized in other income and expenses. Foreign exchange gains and losses from financial assets and liabilities are generally recognized within other financial income and financial expenses. To the extent that non-current financial receivables or liabilities denominated in foreign currency exist towards a foreign operation, the settlement of which is neither planned nor likely in the foreseeable future, any translation differences are not recognized in profit or loss in other financial income and expenses, but directly in equity as other comprehensive income. A transfer to the consolidated income statement only occurs upon repayment or sale of the foreign operation.

The translation of any goodwill carried in foreign currency is based on the closing rate as of the reporting date. The differences resulting from foreign currency translation are recognized in equity through other comprehensive income as foreign currency translation differences.

The exchange rates used for foreign currency translation with a significant influence on the consolidated financial statements changed as follows in relation to one euro:

	Closing rate		Average rate	
	Dec. 31, 2016	Dec. 31, 2015	2016	2015
U.S. dollar	1.0541	1.0887	1.1067	1.1139
British pound	0.8562	0.734	0.8198	0.7286
Chinese renminbi	7.3202	7.0608	7.3521	6.9981
Brazilian real	3.4305	4.3117	3.8545	3.6699
Mexican peso	21.7719	18.9145	20.6678	17.6268

## ACCOUNTING POLICIES

The financial statements of ZF Friedrichshafen AG and the companies included in the consolidated financial statements are drawn up as of December 31 of each fiscal year, applying uniform Group accounting principles.

### Recognition of expenses and income

*Sales* from the sale of products are recognized at the time of transfer of ownership or the risk to the customer, when a price is agreed or can be determined and when payment is probable. Sales are reported net of cash discounts, price reductions, customer bonuses and rebates. Sales from services are recognized according to the stage of completion if the amount of sales can be reliably measured and an economic benefit from the business can be reasonably expected. Royalties are recognized on an accrual basis in accordance with the terms of the underlying contract.

*Cost of sales* comprises the cost of conversion of products sold as well as the purchase costs of sold merchandise. In addition to the directly attributable material and production costs, it also includes indirect production-related overheads, including depreciation on property, plant and equipment used and amortization of intangible assets. Cost of sales also includes write-downs of inventories to the lower net realizable value.

*Research costs* and non-capitalizable *development costs* are recognized in profit or loss when incurred.

*Borrowing costs* that are directly attributable to the acquisition or production of an asset which requires a considerable amount of time in order to be brought into the intended usable or sellable state are recognized as part of the cost of that asset. All other borrowing costs are recognized immediately as expenses.

*Interest income* is recognized in profit or loss when it is incurred.

*Dividend income* is recognized at the time the payout entitlement arises.

### Hedging transactions

Derivative financial instruments are used at the consolidated ZF Group for hedging in order to reduce foreign currency and raw material price risks as well as interest rate and market price risks. In accordance with IAS 39, all derivative financial instruments are recognized at market value.

If the criteria for hedge accounting are met, they are accounted for as fair value hedge or cash flow hedge. If hedge accounting is not applicable, the derivative financial instruments are measured at their fair values and changes in fair value are recognized in profit or loss.

Fair value hedges are used to hedge risks of changes in the value of items recognized in the statement of financial position. If the criteria are met, the results from mark-to-market of derivative financial instruments and the underlying hedged items are reflected in profit or loss.

Cash flow hedges are used to hedge exposure to variability in future cash flows. If the market value of derivative financial instruments – used for cash flow hedges – changes, the unrealized gains and losses in the amount of the effective portion are initially recognized in the retained earnings without affecting profit or loss. Reclassification to the consolidated statement of profit or loss is effected in the same period during which the hedged transaction affects profit or loss. The ineffective part of market value changes is reflected directly in the consolidated statement of profit or loss.

Impacts on profit or loss resulting from hedging transactions that have been concluded in order to hedge risks relating to raw material price changes are shown under cost of sales. The profit and loss derived from foreign currency hedging in connection with hedging operating transactions is recognized under other income and expenses or as part of acquisition cost. The gains and losses from derivative financial instruments used to hedge interest rate, market price or foreign currency risks related to financial assets or liabilities are shown under other financial results.

#### **Cash and cash equivalents**

Cash and cash equivalents comprise cash on hand, bank deposits available any time and short-term overnight money.

#### **Financial assets**

Current and non-current financial assets are divided into the following categories:

- Loans and receivables
- Available-for-sale financial assets
- Financial assets at fair value through profit or loss
- Financial assets held for trading

The “Loans and receivables” category comprises cash and cash equivalents, financial receivables as well as trade receivables. Loans as well as earmarked time deposit investments and bank deposits are shown under financial receivables. They are recognized at amortized cost using the effective interest method. Trade receivables are recognized at the original invoice amount.

If there are objective indications for an impairment of the loans and receivables, the impairment losses are calculated as the difference between the present value of the expected future cash flows and the carrying amount and recognized in profit or loss using a separate allowance account. In case they are expected to be uncollectible, a direct impairment is recognized.

The “Available-for-sale financial assets” category includes securities as well as investments in participations. Following their initial recognition, available-for-sale financial assets are generally measured at fair value. Investments in participations for which there is no active market and fair values therefore cannot be reliably determined, are recognized at cost. Sale of these shares is currently not planned.

Gains and losses resulting from changes in the fair value of available-for-sale financial assets are recognized directly in equity within retained earnings. Reclassification to the consolidated statement of profit or loss is effected as soon as an impairment is recognized, but no later than the date of disposal of financial assets.

In the case of objective evidence for prolonged impairment, such as a continuous decrease of the financial assets' fair values or a considerable decline of the issuer's credit rating, the accumulated net loss is removed from equity and shown under the net financial result. The accumulated net loss is the difference between the acquisition cost and the current fair value, less any impairment loss on the financial asset previously recognized in profit or loss. Subsequent reversals of impairments for equity instruments are registered without affecting profit or loss. In the case of debt instruments, reversals of impairments made through profit or loss are at maximum effected at the level of previously recorded impairments. If there are indications for impairment of investments in participations which are valued at amortized cost, the impairment loss is recognized in profit or loss. There is no reversal of such impairment losses.

Securities which contain embedded derivatives are assigned to the "Financial assets at fair value through profit or loss" category, since the fair value of the embedded derivatives cannot be reliably determined. The unrealized fair value gains and losses are recorded in other financial results.

"Financial assets and liabilities held for trading" affect derivative financial instruments that do not meet the hedge accounting criteria. Changes in fair value of derivative financial instruments are recognized within other financial income and expenses.

As a rule, financial assets are capitalized as of the settlement date.

A financial asset is derecognized as of the settlement date when the contractual rights to receive cash flows from the asset have expired or substantially all risks and rewards have been transferred. A derecognition is performed ahead of the settlement date, once it is established that the trade receivables as well as financial receivables are uncollectible.

Financial assets and liabilities are offset and the resulting net amount is reported in the consolidated statement of financial position when the entity currently has a legally enforceable right to set off the recognized amounts and it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

### **Inventories**

As a general rule, raw materials and supplies as well as merchandise are measured at the lower of average cost and net realizable value. Work in progress and finished goods are recognized at cost of conversion, taking into account the lower net realizable value. The cost of conversion includes all costs directly attributable to the manufacturing process and appropriate portions of the production-related overheads. This includes production-related depreciation, prorated general administrative expenses and prorated social expenses.

### Investments in associates and joint ventures

Investments in associates and joint ventures are generally recognized in accordance with the equity method with the proportionate equity. If, on the reporting date, there is objective evidence for the impairment of an investment, an impairment test is performed. The share of the ZF Group in the profit for the period of the associate or joint venture, respectively, is recognized separately in the consolidated statement of profit or loss. Income and expenses that are directly recognized in the equity of the associate or joint venture are recognized in the consolidated ZF Group without effect on profit or loss as well and presented separately in the consolidated statement of comprehensive income.

### Intangible assets

Purchased or internally generated intangible assets are capitalized if a future economic benefit can be expected from the use of the asset and the costs of the assets can be reliably determined.

For recognition and measurement of *goodwill*, please refer to the explanations on the consolidation principles.

*Tooling subsidies* to suppliers are capitalized when they represent a right granted by the supplier or a fee for a service still to be rendered by the supplier. Tooling subsidies paid are amortized over a period of one to six years.

*Development costs* are capitalized at cost if both technical feasibility and marketability are ensured. It must furthermore be sufficiently probable that the development activity will generate future economic benefits. Capitalized development costs comprise all costs directly attributable to the development process. Capitalized development costs are amortized from the start of production over an expected product life cycle of five years.

*Other intangible assets* are recognized at cost and amortized based on the following useful lives:

	in years
Software	3 to 5
Patents, trademarks and licenses	5
Customer relations	3 to 30

Intangible assets with indefinite useful lives affect trademarks and are not amortized.

### Property, plant and equipment

The entire *property, plant and equipment* is used for business purposes and is measured at cost less depreciation for wear and tear. Depreciation on property, plant and equipment is recorded on the basis of the straight-line method in accordance with its utilization. Throughout the consolidated group, systematic depreciation is based on the following useful lives:

	in years
Buildings	9 to 33
Technical equipment and machines	2 to 14
Other equipment, factory and office equipment	2 to 13

The depreciation on machines used in multi-shift operations is increased accordingly by shift allowances.

The residual values, depreciation methods and useful lives of assets are reviewed annually and adapted, if necessary.

In accordance with the provisions on accounting for leases, economic ownership is attributed to the lessee if it bears substantially all of the risks and rewards associated with ownership. Lease agreements which meet these requirements are classified as *finance leases*. Leased assets are recognized at the commencement of the lease term at fair value or the lower present value of the minimum lease payments. The assets are depreciated on a straight-line basis over the expected useful life or the shorter term of the lease.

The discounted payment obligations resulting from the future leasing installments are recognized under financial liabilities.

In subsequent periods, leasing payments are divided into principal and interest payments. The interest portion is recognized in the net financial result. The principal payments reduce financial liabilities.

Lease and rent payments resulting from *operating lease* contracts are recognized as expenses in the consolidated statement of profit or loss on a straight-line basis over the duration of the lease term. The future burdens under operating lease relationships are disclosed under other financial obligations.

### **Investment property**

Property that is not owner-occupied, but held to earn rentals or for capital appreciation is reported separately in the statement of financial position under "Investment property". Land and buildings are recognized at amortized cost. Depreciation is based on the method used for buildings which are part of property, plant and equipment.

### **Government grants**

Government grants are recognized only if there is reliable evidence that the related conditions are met and the subsidies are likely to be granted. Investment subsidies are deducted from property, plant and equipment in the period in which they were received. Expense subsidies are recognized as income during the same period in which the expenses, for which compensation was granted, are incurred.

Current market interest rates are used for the valuation of non-interest-bearing or low-interest-bearing government loans. The difference between the discounted value and the repayment value is deferred and recognized under other liabilities. The deferred amount is broken down over the duration of the loan contract and recognized in interest expenses.

### **Assets held for sale and disposal groups**

Assets and liabilities are reported as disposal groups when these are to be disposed of by sale together as a group in a single transaction which is highly probable. Individual assets are reported in the statement of financial position as assets held for sale. The affected assets and liabilities are presented separately in the statement of financial position in current assets and liabilities as "Assets held for sale and disposal groups" and "Liabilities of disposal groups", respectively. Income and expenses of the assets and liabilities affected are included in the profit or loss from continuing operations until disposal.

The disposal group is measured upon initial recognition in accordance with the relevant IFRS standards. Subsequently, the disposal group is measured at the lower of its carrying amount or fair value less costs to sell.

#### Impairment tests

For *investments in associates*, *intangible assets* already in use as well as *property, plant and equipment*, it is verified as of the reporting date whether there are indications of potential impairment. If there are any indications, an impairment test must be performed. Intangible assets that are not yet ready to be used and intangible assets with indefinite useful lives are subject to an annual impairment test.

To perform the impairment test, the recoverable amount is determined. This is the higher amount of the asset's or the smallest cash-generating unit's fair value less costs to sell and their value in use. The recoverable amount is determined for the individual asset or a cash-generating unit, if no cash flows can be allocated to the individual asset. The cash-generating units underlying the impairment tests are defined on the basis of the Group's business units or the regional organization of the Group. The Group's business units also represent the organizational level which is subject to regular review by the management.

The value in use is the net present value of future cash flows, which are expected from the continued use of the asset or the cash-generating unit and its disposal at the end of its useful life. The value in use is determined by the discounted cash flow method on the basis of the current corporate planning data which refers to a three-year planning horizon. The capital cost rates of the consolidated ZF Group, which are determined on the basis of the WACC (Weighted Average Cost of Capital) method, are used to discount the cash flows.

The forecast for cash flows is based on the current operational planning of the consolidated ZF Group, in which general economic data from external macroeconomic research as well as financial surveys is also taken into consideration. The assumptions made consider the country-specific rates of inflation for the period investigated. Cost of materials is forecast based on the individual premises at the level of each cash-generating unit. The development of personnel expenses is also forecast individually on the basis of the collective agreements in effect. Based on these cash flow predictions, the value in use of the cash-generating units is determined assuming a discount factor before tax of 10% to 12% (2015: 12% to 14%) and an unchanged growth rate of 1.5%. For perpetuity going beyond the three-year planning horizon, the cash flows are extrapolated taking into account the respective sustainable expected margin of the individual cash-generating units.

Fair values less costs to sell for property, plant and equipment are estimated on the basis of discounted cash flows as well as a cost-based approach for comparable assets that are generally not based on parameters observable on the market.

An impairment loss is recognized if the recoverable amount falls below the carrying amount of the asset or the cash-generating unit.

If the reason for an impairment loss recognized in an earlier period ceases to exist, the impairment loss is reversed, however up to a maximum of the carrying amount that would have been determined (net of depreciation or amortization) if no impairment loss had been recognized. Impairment losses and reversals of impairment losses for intangible assets and property, plant and equipment are assigned to the functional areas of the consolidated statement of profit or loss.

*Goodwill* from business combinations is allocated to those groups of cash-generating units that derive benefit from the business combinations. In the consolidated ZF Group, these are the respective divisions and business units. An impairment test for goodwill is performed annually using the impairment test in accordance with the above-described methods. An impairment of goodwill is recognized if the recoverable amount of the corresponding cash-generating unit is below its carrying amount. Impairment losses for goodwill are reported under other expenses. Impairment losses recognized on goodwill are not reversed.

#### **Financial liabilities and other liabilities**

Financial liabilities and other liabilities are recognized initially at cost, which represents the fair value of the consideration received. The transaction costs are also taken into account here. In subsequent periods, the liabilities are measured at amortized cost based on the effective interest method. To the extent that financial liabilities have not been utilized, transaction costs are deferred within other assets. Recognition through profit or loss is made using the item "Other financial expenses". The derecognition of financial liabilities and other liabilities will take place as soon as the obligations they are based on have been fulfilled or terminated.

A best estimate is made for the risks of financial guarantee contracts issued by the Group as of the reporting date. To the extent that utilization is probable, a financial liability is recognized in the amount of the expected cash outflow.

The consolidated ZF Group basically dispenses with applying the fair value option to register financial liabilities upon first-time valuation under the category of "Financial liabilities at fair value through profit or loss".

#### **Tooling subsidies received**

Tooling subsidies received represent a consideration in exchange for services to be rendered or rights granted to the payer of the subsidy. The subsidies are deferred as tooling subsidies received under other liabilities. The reversal takes place during the project duration.

#### **Provisions for pensions**

Provisions for pensions are recognized in accordance with the projected unit credit method. Under this method, not only pensions and vested interests recognized as of the reporting date are taken into account, but also increases in pensions and current salaries and wages that are expected in the future. The calculation is based on actuarial reports, taking into account biometric calculation bases. The plan assets, which are solely used for satisfying the pension obligations and which are restricted from the access of all other creditors, are offset against provisions. If these exceed the amount of provisions, such excess is reported under non-current financial assets. The plan assets are recognized at fair value. Expenses resulting from unwinding the discount on pension obligations and expected returns on plan assets are offset and recognized in interest expenses. Actuarial gains and losses are recognized in full in other comprehensive income in the period in which they occur. All other expenses resulting from the addition to pension provisions are assigned to the affected functional areas within the consolidated statement of profit or loss.

### Other provisions

Other provisions are recognized if an obligation to third parties exists, which will probably result in the outflow of resources, and if a reliable estimate can be made of the amount required.

As a general rule, all cost elements that are capitalized in inventories are reflected in the measurement of provisions relating to sales, in particular those for warranties and potential losses on pending transactions. The measurement takes place at the value of the best possible estimate of expenses which are necessary to fulfill the obligation on the reporting date. The measurement of provisions for warranty costs takes place on the basis of actual warranty expenses under consideration of warranty and goodwill periods as well as sales development over several years.

Personnel-related obligations affect long-service awards and semi-retirement obligations in particular. Provisions for employee long-service bonuses are calculated on an actuarial basis. The provisions for semi-retirement obligations comprise individual or pay-scale-related top-up benefits for pension insurance as well as the wages and salaries to be paid during the release phase. They are accrued on a pro-rata basis when the obligation arises.

Semi-retirement obligations are protected against insolvency using a trust model. For this purpose, shares held in a special fund are assigned to a trustee. The shares in the special fund are measured at fair value. The assets, which are solely used for satisfying the semi-retirement obligations and which are restricted from the access of all other creditors, are offset against provisions (plan assets). If these exceed the amount of provisions, such excess is reported under non-current financial assets. The return on plan assets is offset against expenses from the interest cost of provisions and reported in the statement of profit or loss.

Non-current provisions with a residual term of more than a year are recognized at the reporting date with their discounted settlement amount. They are discounted when the effect of the time value of money is material.

### Income taxes

The *actual income tax receivables and provisions* for current and previous periods are measured using the amount for which reimbursement from or payment to tax authorities is expected. The amount is calculated using the tax rates and the tax laws that are in effect on the reporting date.

*Deferred tax assets and liabilities* are recognized via temporary differences between the tax basis and the IFRS carrying amounts. Deferred tax assets also include tax reductions that will result from the expected utilization of existing tax loss carryforwards and tax credits in the subsequent years. Deferred taxes are computed on the basis of the tax rates that will or are expected to apply on the realization date with sufficient probability in accordance with the current legal situation in the individual countries.

Deferred tax assets on temporary differences and on tax loss carryforwards are only recognized if there is sufficient probability that the tax reductions resulting from them will actually occur in future.

The carrying amount of deferred tax assets is reviewed on each reporting date and written down accordingly, if it is anticipated that there will not be enough taxable profit to offset the tax assets at least in part. Unrecognized deferred tax assets are reviewed on each reporting date and recognized to the extent that a future taxable income allows the utilization of deferred tax assets.

In addition, no deferred tax assets and liabilities are recognized if these result from the initial recognition of goodwill, an asset or a liability as part of a business transaction which is not a business combination, and if, through this initial recognition, neither the accounting net profit or loss before income tax nor the taxable profit is influenced.

Deferred taxes that refer to line items that are directly recognized in equity are also recognized in equity and not in the consolidated statement of profit or loss.

Deferred tax receivables and deferred tax liabilities are offset against each other, if the consolidated group has a recoverable right to offsetting the actual tax refunds against actual tax liabilities and if they apply to the income taxes of the same tax subject levied by the same tax authority.

#### **Judgments and uncertainties in connection with estimates**

Preparation of the consolidated financial statements requires assumptions to be made and estimates to be applied, which affect the reported amounts and disclosure of assets and liabilities, income and expenses, and contingent liabilities.

Essential assumptions and estimates as used in the recognition and measurement of the balance sheet items are explained below.

Management estimates as to technical and economic feasibility of development projects influence the decision to *capitalize development costs* (Note 15). The valuation of the capitalized development costs depends on the assumptions about amount and timing of expected future cash flows, as well as on the discount rates to be applied.

For the accounting of other *intangible assets* and *property, plant and equipment*, the assumptions and estimates essentially relate to the definition of useful lives.

Measurement as well as the determination of the useful lives of assets, liabilities and contingent liabilities to be recognized in the context of acquisitions were primarily made using cash-flow-based estimates. The allocation of purchased goodwill was subject to estimates as regards the amount and the timing of future cash flows resulting from synergies.

In the context of the *impairment tests* (Note 17), assumptions and estimates are used in determining the future cash flows to be expected as well as for defining discount rates. This may have an influence on the values of intangible assets and liabilities in particular.

The assessment of the recoverability of *trade receivables* (Note 10) is subject to judgment as regards the future solvency of the debtors.

In accounting the *deferred tax assets* (Note 7), the assumptions and estimates essentially relate to the likelihood of expected tax reductions actually occurring in the future.

When determining the *outstanding customer charges or credits* (Note 20) in the consolidated financial statements in connection with differences in prices or quantities, assumptions and estimates were made based on ongoing customer negotiations or experience with customers.

The actuarial valuation of *provisions for pensions* (Note 22) is particularly based on assumption as to discount rates, future pension developments, age shifts and the development of the general cost of living.

Determination of *warranty provisions* (Note 21) is subject to assumptions and estimates which refer to the time period between delivery date and the occurrence of the warranty event, warranty and goodwill periods as well as future warranty burdens.

The determination of non-current *provisions for onerous contracts* (Note 21) is subject to judgment with respect to the interpretation of supply contracts. In this respect, the major decision criteria are the bindingly defined term of delivery as well as quantities and prices.

The amount of impairment losses for the *available-for-sale financial assets* is impacted by the judgments relating to the estimate whether fair value losses are considered significant or prolonged, and in terms of the credit rating of the issuers.

No other major judgments were made.

In individual cases, actual amounts could differ from these assumptions and estimates. Changes are recognized in profit or loss as soon as better information is available.

When preparing the consolidated financial statements, the underlying estimates were not subject to any major risks; therefore, no major adjustments to the assets and liabilities recognized in the consolidated statement of financial position are expected during the subsequent fiscal year.

## NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

The consolidated statement of profit or loss has been drawn up in accordance with the cost of sales method.

### 1 SALES

in € million	2016	2015
Domestic	7,790	6,774
Western Europe	6,859	5,593
Eastern Europe	2,130	1,456
North America	9,681	8,115
South America	845	633
Asia-Pacific	7,649	6,363
Africa	212	220
	<b>35,166</b>	<b>29,154</b>

Sales include €34,417 million (2015: €28,484 million) from the sale of goods and €686 million (2015: €611 million) for the rendering of services as well as €63 million (2015: €59 million) for royalties.

### 2 COST OF SALES

in € million	2016	2015
Cost of materials	21,158	17,572
Personnel expenses	4,419	4,163
Depreciation and amortization	1,807	1,481
Other	1,685	1,317
	<b>29,069</b>	<b>24,533</b>

Depreciation on property, plant and equipment comprises reversals of previously recognized impairment losses of €4 million (2015: €5 million). Impairment losses in the cost of sales were not required to be recorded in the current year under review and in the previous year.

### 3 OTHER INCOME

in € million	2016	2015
Foreign exchange gains	337	501
Income from hedging	55	41
Compensation payment and reimbursement of costs	14	12
Income from the disposal of intangible assets and property, plant and equipment	7	8
Income from rentals and lease payments	3	3
Income from deconsolidations	37	0
Negative goodwill from company acquisition	0	41
Miscellaneous income	77	47
	<b>530</b>	<b>653</b>

### 4 OTHER EXPENSES

in € million	2016	2015
Foreign exchange losses	330	521
Expenses from hedging	112	59
Changes of allowances for receivables	-5	-9
Losses on the disposal of intangible assets and property, plant and equipment	16	9
Miscellaneous expenses	32	43
	<b>485</b>	<b>623</b>

### 5 NET RESULT FROM PARTICIPATIONS

in € million	2016	2015
Income from deconsolidations	5	510
Result from at-equity valuation	43	22
<b>Result from associates</b>	<b>48</b>	<b>532</b>
Income from participations	15	3
Write-downs of participations	1	2
Income from the disposal of participations	4	0
Expenses from the disposal of participations	2	0
Expenses from risks in participations	0	18
<b>Other net result from participations</b>	<b>16</b>	<b>-17</b>
<b>Net result from participations</b>	<b>64</b>	<b>515</b>

## 6 NET FINANCIAL RESULT

in € million	2016	2015
Interest from current financial investments	36	29
Interest from non-current financial investments	31	17
<b>Interest income</b>	<b>67</b>	<b>46</b>
Foreign exchange gains	128	181
Income from derivative financial instruments	153	47
Income from the disposal of securities	110	27
<b>Other financial income</b>	<b>391</b>	<b>255</b>
<b>Financial income</b>	<b>458</b>	<b>301</b>
Interest on financial liabilities	347	306
Other interest	19	26
Interest from pension provisions	98	80
Unwinding the discount on other non-current items	5	1
<b>Interest expenses</b>	<b>469</b>	<b>413</b>
Foreign exchange losses	86	135
Expenses from derivative financial instruments	195	55
Losses on the disposal of securities	20	11
Unrealized fair value losses from securities	0	14
Transaction costs and incidental expenses	85	181
<b>Other financial expenses</b>	<b>386</b>	<b>396</b>
<b>Financial expenses</b>	<b>855</b>	<b>809</b>
<b>Net financial result</b>	<b>-397</b>	<b>-508</b>

## 7 INCOME TAXES

Income tax expenses are comprised of as follows:

in € million	2016	2015
Current taxes	474	409
Deferred taxes	-117	-340
<b>Income tax expenses</b>	<b>357</b>	<b>69</b>

Current income tax expenses include adjustments in the amount of €52 million (2015: €163 million) for current taxes of prior fiscal years. Deferred tax income includes tax income of €180 million (2015: €218 million) in connection with the development of temporary differences.

The current taxes in Germany were determined on the basis of an overall tax rate of 29%, derived from the corporate income tax rate of 15%, the solidarity surcharge of 5.5% and an average trade tax rate of 13.175%. The current taxes of foreign subsidiaries are determined on the basis of relevant national tax laws and the tax rate applicable in the country of incorporation. Deferred tax assets and liabilities are measured at the tax rates in Germany and abroad, respectively, which are expected to apply at the time of realizing the asset or discharging the liability.

The (current and deferred) income tax expenses expected on the basis of the German overall tax rate of 29% deviate from the reported amounts as set out below:

in € million	2016	2015
<b>Expected income tax expenses</b>	<b>371</b>	<b>316</b>
Increase/decrease in income taxes due to		
Tax effects due to different national tax rates and taxation systems	-56	-47
Effects of changes in tax laws	-7	-61
Tax effects due to non-recognition and write-down of deferred tax assets and their reversal	-2	-96
Tax effects due to permanent differences	11	-92
Tax effects due to prior-period items	33	50
Other	7	-1
<b>Reported income tax expenses</b>	<b>357</b>	<b>69</b>

The gross amounts of deferred tax assets and liabilities result from the following line items:

in € million	2016	2015
<b>Assets</b>		
Non-current and current assets	260	183
Liabilities and provisions	1,117	906
Other	112	117
Tax loss carryforwards and tax credits	401	516
Netting	-1,048	-1,049
<b>Deferred tax assets</b>	<b>842</b>	<b>673</b>
<b>Liabilities</b>		
Non-current and current assets	1,777	1,888
Liabilities and provisions	200	189
Other	20	42
Netting	-1,048	-1,049
<b>Deferred tax liabilities</b>	<b>949</b>	<b>1,070</b>
<b>Total deferred tax assets (+)/ liabilities (-) (net)</b>	<b>-107</b>	<b>-397</b>

Based on mark-to-market of securities and cash flow hedges, deferred tax assets are recognized in equity in the amount of €24 million (2015: €12 million). The recognition of actuarial gains and losses for pension provisions in equity without affecting profit or loss leads to deferred tax assets in the amount of €480 million (2015: €299 million). As a result, equity is increased by €181 million (2015: reduction by €2 million). Another change of the deferred taxes of €-6 million (2015: €2 million), recognized without effect on profit or loss, is the result of closing-date exchange rate differences. Beyond that, all other changes, except changes due to first-time consolidations and deconsolidations, have been recognized in profit or loss.

At the end of the fiscal year, the company reported tax loss carryforwards which were subject to offsetting restrictions. To that extent, no deferred tax assets were recognized for these since their utilization due to future positive taxable profit is not probable.

No deferred tax assets were recorded for the following matters (gross amounts):

in € million	2016	2015
Deductible temporary differences	484	339
Tax loss carryforwards and tax credits	1,182	898
	<b>1,666</b>	<b>1,237</b>

Of the unrecognized tax loss carryforwards, €545 million (2015: €483 million) had a limited expiration period of up to 20 years and €637 million (2015: €415 million) were unlimited.

The reduction in current tax expenses due to use of losses not yet taken into consideration, tax credits or as a result of a temporary difference from prior periods not yet recognized, amounts to €1 million (2015: €24 million). The decrease in deferred tax expenses due to the first-time recognition of losses not yet taken into consideration, tax credits or as a result of a temporary difference from prior periods not yet recognized, amounts to €4 million (2015: €109 million).

The income resulting from non-recognition and the impairment of deferred taxes (or their reversal) in cases where it is no longer likely (or likely again) that sufficient taxable profit will be available to use the deferred tax asset, either in part or in full, amount to €2 million (2015: €96 million).

The change of deferred tax assets due to business combinations amounts to €0 million (2015: increase of €159 million).

Deferred taxes are to be recognized for temporary differences in relation to subsidiaries if their realization is probable. Deferred tax liabilities of €148 million (2015: €143 million) were recorded for reserves generated by subsidiaries. Apart from that, no deferred taxes have been recognized for the reserves generated by subsidiaries, as the profits are normally not subject to any considerable further taxation or are to be reinvested for an indefinite period of time. Furthermore, €0 million (2015: €50 million) of deferred tax liabilities were recorded in the reporting year for the future tax burden resulting from the sale of subsidiaries or joint ventures.

#### 8 OTHER NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

The consolidated statement of profit or loss includes the following cost of materials:

in € million	2016	2015
Cost of raw materials, supplies and merchandise	21,083	17,757
Cost of purchased services	309	276
Other cost of materials	28	23
	<b>21,420</b>	<b>18,056</b>

In the current fiscal year and the previous year, the cost of raw materials, supplies and merchandise does not comprise costs resulting from hedging against raw material price changes.

The breakdown of personnel expenses is as follows:

in € million	2016	2015
Wages and salaries	5,821	4,809
Social security and benefits expenses	1,051	923
Pension expenses	253	243
	<b>7,125</b>	<b>5,975</b>

Personnel expenses include expenses for defined contribution plans in the amount of €345 million (2015: €353 million). The expenses contained for the state plans amounting to €270 million (2015: €274 million) primarily comprise the employer's contribution to the state pension scheme, which is included in the social security expenses.

Termination benefits and other long-term employee benefits of €23 million (2015: €25 million) were recorded in the consolidated statement of profit or loss. They affect severance pay as well as expenses from additions to restructuring provisions.

Impairment losses on intangible assets in the amount of €2 million (2015: €1 million) are included in the research and development costs and in the amount of €1 million (2015: €0 million) in general administrative expenses.

Impairment losses on property, plant and equipment in the amount of €2 million (2015: €0 million) are included in research and development costs, in the amount of €4 million (2015: €1 million) under selling expenses as well as in the amount of €2 million (2015: €0 million) in general administrative expenses in the consolidated statement of profit or loss.

Research and development costs include full or partial reversals of impairment losses on intangible assets in the amount of €2 million (2015: €0 million).

Explanations on the impairments and the reversals of impairment losses are given under Note (17).

Amortization on intangible assets is included in the following consolidated statement of profit or loss items:

in € million	2016	2015
Cost of sales	617	461
Research and development costs	27	19
Selling expenses	209	149
General administrative expenses	23	17
	<b>876</b>	<b>646</b>

Depreciation on property, plant and equipment is included in the following consolidated statement of profit or loss items:

in € million	2016	2015
Cost of sales	1,194	1,025
Research and development costs	34	31
Selling expenses	10	9
General administrative expenses	54	50
	<b>1,292</b>	<b>1,115</b>

Research and development costs recorded in the fiscal year reached €1,948 million (2015: €1,390 million). This figure includes amortization for capitalized development costs of €20 million (2015: €13 million).

In the fiscal year, payments from operating leases or rental agreements in the amount of €207 million (2015: €175 million) were recognized in the consolidated statement of profit or loss.

## NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### 9 CURRENT FINANCIAL ASSETS

in € million	Dec. 31, 2016	Dec. 31, 2015
Financial receivables	37	22
Derivative financial instruments	57	44
	<b>94</b>	<b>66</b>

The financial receivables do not include any overdue amounts that are not impaired. The financial receivables contain earmarked bank deposits of €8 million (2015: €8 million).

The allowances for the financial receivables have developed as follows:

in € million	2016	2015
Carrying amount as of Jan. 1	2	4
Net exchange differences	0	-1
Utilization	0	1
Carrying amount as of Dec. 31	<b>2</b>	<b>2</b>

The gross value of the impaired financial receivables is €2 million (2015: €2 million).

As far as the financial receivables are concerned which are neither impaired nor overdue there have, as of the closing date, been no indications that the debtors would not meet their payment obligations.

### 10 TRADE RECEIVABLES

The trade receivables have the following age distribution:

in € million	Carrying amount	Thereof current	Neither impaired nor overdue	Not impaired and overdue for			
				1 to 30 days	31 to 60 days	61 to 360 days	more than 360 days
Dec. 31, 2016	5,220	5,220	4,834	300	34	45	7
Dec. 31, 2015	4,778	4,777	4,521	171	54	2	29

If payment plans have been agreed with customers, and provided that these are adhered to, these receivables are recognized as neither impaired nor overdue.

The allowances for current and non-current trade receivables have developed as follows:

in € million	2016	2015
Carrying amount as of Jan. 1	63	56
Net exchange differences	2	2
Changes in the basis of consolidation	0	21
Additions	11	22
Utilization	5	25
Reversals	15	13
Carrying amount as of Dec. 31	56	63

The gross value of the impaired trade receivables is €56 million (2015: €64 million).

As far as the trade receivables are concerned which are neither impaired nor overdue there have, as of the closing date, been no indications that the debtors would not meet their payment obligations.

## 11 OTHER ASSETS

in € million	Dec. 31, 2016		Dec. 31, 2015	
	Total	Thereof current	Total	Thereof current
Other tax receivables	349	318	358	316
Prepaid expenses	101	50	120	58
Receivables from employees	11	11	8	8
Sundry assets	229	98	132	52
	690	477	618	434

Other tax receivables are, for the most part, sales tax refund entitlements. Sundry assets comprise, in general, payments in advance and reimbursement claims.

The other assets do not include any overdue amounts that are not impaired.

The allowances for other current and non-current assets have developed as follows:

in € million	2016	2015
Carrying amount as of Jan. 1	1	1
Reversals	1	0
Carrying amount as of Dec. 31	0	1

The gross value of the impaired receivables is €0 million (2015: €1 million).

## 12 INVENTORIES

in € million	Dec. 31, 2016	Dec. 31, 2015
Raw materials and supplies	1,319	1,336
Work in progress	535	555
Finished goods and merchandise	991	975
Payments in advance	19	13
	2,864	2,879

Write-downs of inventories increased by €10 million (2015: increase by €48 million) to €190 million (2015: €180 million) in the fiscal year 2016.

### 13 NON-CURRENT FINANCIAL ASSETS

in € million	Dec. 31, 2016	Dec. 31, 2015
Investments in participations	52	71
Securities	0	958
Financial receivables	66	160
Net assets from defined benefit plans	573	600
Net assets for other performance obligations toward employees	58	2
Derivative financial instruments	15	18
	<b>764</b>	<b>1,809</b>

Investments in participations have developed as follows:

in € million	2016	2015
Carrying amount as of Jan. 1	71	69
Changes in the basis of consolidation	0	1
Additions	110	4
Disposals	18	0
Write-downs	1	3
Reclassifications	-110	0
Carrying amount as of Dec. 31	<b>52</b>	<b>71</b>

No essential book profits resulted from the disposals of investments in participations.

In order to secure pension obligations, the securities were transferred to the newly founded ZF Asset Trust e.V., Friedrichshafen, during the fiscal year.

The financial receivables contain non-current earmarked bank deposits and time deposit investments of €2 million (2015: €77 million).

The financial receivables also include granted loans and direct insurance claims against life insurances of €37 million (2015: €38 million).

The financial receivables do not include any overdue amounts that are not impaired. No allowances on financial receivables are recorded as of the reporting date.

Concerning the non-current financial receivables, there are no indications that the debtors would not meet their payment obligations.

### 14 ASSOCIATES

in € million	Dec. 31, 2016	Dec. 31, 2015
Investments in joint ventures	186	177
Investments in associates	200	131
	<b>386</b>	<b>308</b>

The joint ventures and associates, including the shareholding, are set out in the list of shares held.

ZF PWK Mécacentre S.A.S., St. Etienne, France, is classified as an associate despite the participation quota of 50%, as the company is not jointly controlled.

The total comprehensive income of the associates is as follows:

in € million	Investments in joint ventures		Investments in associates	
	2016	2015	2016	2015
Net profit or loss after tax	18	8	25	14
Other comprehensive income	0	0	0	0
<b>Total comprehensive income</b>	<b>18</b>	<b>8</b>	<b>25</b>	<b>14</b>

## 15 INTANGIBLE ASSETS

in € million	Goodwill	Patents, licenses, software and similar rights and assets	Development costs	Payments in advance	Total
<b>Cost as of Jan. 1, 2015</b>	<b>446</b>	<b>974</b>	<b>46</b>	<b>13</b>	<b>1,479</b>
Company acquisitions	4,109	5,310	173	0	9,592
Changes in the basis of consolidation	0	-1	0	0	-1
Net exchange differences	113	238	7	-1	357
Additions	0	285	11	57	353
Reclassifications	-216	-155	0	-9	-380
Disposals	0	83	7	1	91
<b>Cost as of Dec. 31, 2015</b>	<b>4,452</b>	<b>6,568</b>	<b>230</b>	<b>59</b>	<b>11,309</b>
<b>Accumulated amortization as of Jan. 1, 2015</b>	<b>41</b>	<b>507</b>	<b>26</b>	<b>0</b>	<b>574</b>
Changes in the basis of consolidation	0	-1	0	0	-1
Net exchange differences	0	11	0	0	11
Additions (amortization)	0	633	13	0	646
Additions (impairments)	0	1	0	0	1
Reclassifications	0	-17	0	0	-17
Disposals	0	77	7	0	84
<b>Accumulated amortization as of Dec. 31, 2015</b>	<b>41</b>	<b>1,057</b>	<b>32</b>	<b>0</b>	<b>1,130</b>
<b>Carrying amount as of Dec. 31, 2015</b>	<b>4,411</b>	<b>5,511</b>	<b>198</b>	<b>59</b>	<b>10,179</b>
<b>Cost as of Jan. 1, 2016</b>	<b>4,452</b>	<b>6,568</b>	<b>230</b>	<b>59</b>	<b>11,309</b>
Company acquisitions	-35	0	0	0	-35
Changes in the basis of consolidation	0	-17	0	0	-17
Net exchange differences	84	168	6	-1	257
Additions	0	208	10	91	309
Reclassifications	75	179	0	-41	213
Disposals	0	240	1	0	241
<b>Cost as of Dec. 31, 2016</b>	<b>4,576</b>	<b>6,866</b>	<b>245</b>	<b>108</b>	<b>11,795</b>
<b>Accumulated amortization as of Jan. 1, 2016</b>	<b>41</b>	<b>1,057</b>	<b>32</b>	<b>0</b>	<b>1,130</b>
Changes in the basis of consolidation	0	-8	0	0	-8
Net exchange differences	0	42	1	0	43
Additions (amortization)	0	856	20	0	876
Additions (impairments)	0	3	0	0	3
Reclassifications	0	101	0	0	101
Disposals	0	240	1	0	241
Reversals of impairments	0	2	0	0	2
<b>Accumulated amortization as of Dec. 31, 2016</b>	<b>41</b>	<b>1,809</b>	<b>52</b>	<b>0</b>	<b>1,902</b>
<b>Carrying amount as of Dec. 31, 2016</b>	<b>4,535</b>	<b>5,057</b>	<b>193</b>	<b>108</b>	<b>9,893</b>

In addition to EDP software acquired in return for payment, tooling subsidies paid to suppliers and capitalized development costs, intangible assets primarily comprise goodwill from the acquisition of companies.

Trademarks included at €501 million (2015: €485 million) are classified as intangible assets with indefinite useful lives since there is no foreseeable delimitation of the period during which the trademarks will presumably generate cash inflows. They are mainly allocated to the Active & Passive Safety Technology Division.

### Goodwill

Goodwill from the consolidation of investments in subsidiaries and from the individual financial statements is shown below:

in € million	Dec. 31, 2016	Dec. 31, 2015
Car Powertrain Technology	700	700
Car Chassis Technology	320	320
Commercial Vehicle Technology	354	354
Industrial Technology	186	186
Active & Passive Safety Technology	2,789	2,665
E-Mobility	54	54
ZF Services	132	132
	<b>4,535</b>	<b>4,411</b>

Goodwill mainly represents synergies in the areas of materials purchasing and administrative company organization.

## 16 PROPERTY, PLANT AND EQUIPMENT

in € million	Land and buildings	Technical equipment and machines	Other equipment, factory and office equipment	Payments in advance and construction in progress	Total
<b>Cost as of Jan. 1, 2015</b>	<b>1,944</b>	<b>6,307</b>	<b>2,208</b>	<b>547</b>	<b>11,006</b>
Company acquisitions	580	1,799	250	392	3,021
Changes in the basis of consolidation	0	-9	-1	-2	-12
Net exchange differences	11	-77	-10	11	-65
Additions	29	331	237	693	1,290
Reclassifications	29	446	65	-708	-168
Disposals	4	175	81	0	260
<b>Cost as of Dec. 31, 2015</b>	<b>2,589</b>	<b>8,622</b>	<b>2,668</b>	<b>933</b>	<b>14,812</b>
<b>Accumulated depreciation as of Jan. 1, 2015</b>	<b>835</b>	<b>4,544</b>	<b>1,621</b>	<b>0</b>	<b>7,000</b>
Changes in the basis of consolidation	0	-4	-1	0	-5
Net exchange differences	3	14	0	0	17
Additions (depreciation)	79	762	274	0	1,115
Additions (impairments)	0	1	0	0	1
Reclassifications	-1	-2	-2	0	-5
Disposals	2	102	58	0	162
Reversals of impairments	0	3	2	0	5
<b>Accumulated depreciation as of Dec. 31, 2015</b>	<b>914</b>	<b>5,210</b>	<b>1,832</b>	<b>0</b>	<b>7,956</b>
<b>Carrying amount as of Dec. 31, 2015</b>	<b>1,675</b>	<b>3,412</b>	<b>836</b>	<b>933</b>	<b>6,856</b>
<b>Cost as of Jan. 1, 2016</b>	<b>2,589</b>	<b>8,622</b>	<b>2,668</b>	<b>933</b>	<b>14,812</b>
Changes in the basis of consolidation	-7	-83	-39	-5	-134
Net exchange differences	19	25	13	5	62
Additions	35	203	190	757	1,185
Reclassifications	101	213	389	-827	-124
Disposals	6	131	86	2	225
<b>Cost as of Dec. 31, 2016</b>	<b>2,731</b>	<b>8,849</b>	<b>3,135</b>	<b>861</b>	<b>15,576</b>
<b>Accumulated depreciation as of Jan. 1, 2016</b>	<b>914</b>	<b>5,210</b>	<b>1,832</b>	<b>0</b>	<b>7,956</b>
Changes in the basis of consolidation	-2	-51	-26	0	-79
Net exchange differences	5	38	17	0	60
Additions (depreciation)	91	875	326	0	1,292
Additions (impairments)	1	6	0	1	8
Reclassifications	0	-197	110	0	-87
Disposals	6	119	71	0	196
Reversals of impairments	0	3	1	0	4
<b>Accumulated depreciation as of Dec. 31, 2016</b>	<b>1,003</b>	<b>5,759</b>	<b>2,187</b>	<b>1</b>	<b>8,950</b>
<b>Carrying amount as of Dec. 31, 2016</b>	<b>1,728</b>	<b>3,090</b>	<b>948</b>	<b>860</b>	<b>6,626</b>

Assets from property, plant and equipment in the amount of €1 million (2015: €21 million) have been pledged as collateral for financial liabilities as well as for possible obligations from finance court cases.

The details on the minimum lease payments under the respective leasing contracts for buildings, technical equipment and machines as well as factory and office equipment are as follows:

in € million	Dec. 31, 2016	Dec. 31, 2015
<b>Total future minimum lease payments</b>		
due within a year	5	6
due between one and five years	20	20
due after more than five years	11	15
	<b>36</b>	<b>41</b>
<b>Interest portion included in the future minimum lease payments</b>		
due within a year	1	2
due between one and five years	2	6
due after more than five years	5	7
	<b>8</b>	<b>15</b>
<b>Present value of the future minimum lease payments</b>		
due within a year	4	4
due between one and five years	18	14
due after more than five years	6	8
	<b>28</b>	<b>26</b>

Property, plant and equipment includes rented buildings in the amount of €8 million (2015: €12 million) that, due to the content of the leasing contracts (finance lease), are considered the economic property of the Group.

Impairments were recognized for property, plant and equipment in the following divisions:

## 17 IMPAIRMENT TESTS

In the fourth quarter of 2016, the consolidated ZF Group performed impairment tests to assess the impairment of its assets. The reasons for these impairment tests were current developments in the macroeconomic environment of individual economies that are attributable to political developments or negative economic changes.

in € million	2016	2015
Commercial Vehicle Technology	1	0
Industrial Technology	1	0
Active & Passive Safety Technology	6	1
	<b>8</b>	<b>1</b>

As part of the process, the assets of individual cash-generating units were measured at fair value less costs to sell.

The impairment losses are distributed by regions as follows:

in € million	2016	2015
Europe	6	1
Asia-Pacific	1	0
South America	1	0
	<b>8</b>	<b>1</b>

In the fiscal year 2016, the Industrial Technology Division recorded reversals of impairment losses in the amount of €4 million. In the previous year, reversals of impairment losses were recognized in the Car Powertrain Technology Division in the amount of €2 million and in the Industrial Technology Division in the amount of €3 million.

For intangible assets, an impairment loss of €2 million was recorded by the ZF Services Business Unit, while the Active & Passive Safety Technology Division recognized an impairment loss of €1 million. In the prior year, the ZF Services Business Unit recorded an impairment loss of €1 million.

In the fiscal year 2016, the ZF Services Business Unit recorded reversals of impairment losses for intangible assets in the amount of €2 million. No reversals of impairment losses for intangible assets were recorded in the previous year.

The annual impairment tests of goodwill and intangible assets with indefinite useful lives (trademark) led to no impairments as in the previous year. In addition, a sensitivity analysis regarding material measurement parameters was conducted in the context of these impairment tests. This involved an analysis to what extent, if assessed on an isolated basis, a reduction of the sustainable operating profit by 10%, a reduction of the sustainable growth rate to 1.0% or an increase of the capitalization rate by 10% would have an effect on the recoverability of goodwill. This sensitivity analysis would not have led to an impairment of goodwill even in all of the scenarios analyzed.

Inter alia, assumptions were made with regard to the development of sales in order to calculate the impairment tests. The assumptions made for the average sales increase in the three-year planning period are as follows:

in %	2016	2015
Car Powertrain Technology	12	10
Car Chassis Technology	5	3
Commercial Vehicle Technology	6	4
Industrial Technology	6 to 9	6 to 12
Active & Passive Safety Technology	4	5
Electronic Systems	–	12
E-Mobility	13	–
ZF Services	7	6

## 18 INVESTMENT PROPERTY

An expert report on the determination of the fair value for the properties reported in this item was not obtained by the reporting date. It is assumed that the fair values are within a range of 10% compared to their carrying amount.

in € million	2016	2015
Cost as of Jan. 1	15	13
Reclassification	0	2
Disposals	12	0
<b>Cost as of Dec. 31.</b>	<b>3</b>	<b>15</b>
Accumulated depreciation as of Jan. 1	10	8
Reclassification	0	2
Disposals	8	0
<b>Accumulated depreciation as of Dec. 31</b>	<b>2</b>	<b>10</b>
<b>Carrying amount as of Dec. 31</b>	<b>1</b>	<b>5</b>

**19 FINANCIAL LIABILITIES**

in € million	Carrying amount as of Dec. 31, 2016		Carrying amount as of Dec. 31, 2015	
	Total	Thereof current	Total	Thereof current
Bonds	5,599	63	5,592	63
Bonded loans	2,308	504	2,334	38
Liabilities to banks	307	205	1,836	237
Other financial liabilities	20	20	50	50
Liabilities from finance leases	28	4	26	4
Derivative financial instruments	168	130	69	44
	<b>8,430</b>	<b>926</b>	<b>9,907</b>	<b>436</b>

Under current financial liabilities, non-current loans are recognized with their redemption installments due within one year. Moreover, current liabilities which serve short-term financing purposes are included under this item. The country-specific interest rates on these short-term loans fluctuate between 0.9% (2015: 0.6%) and 5.7% (2015: 8.9%).

The country-specific interest rate on the loans reported in non-current financial liabilities is between 1.25% (2015: 1.25%) and 4.75% (2015: 4.75%). Approximately two-thirds of these loans have a fixed interest rate. Most of the loans are due at the end of the contractual term.

In July 2016, the syndicated loan existing since the acquisition of ZF TRW was redeemed by syndicated financing with a total volume of €3.5 billion. Apart from other obligations, the loan agreement also includes financial covenants that ZF has to comply with. One of the financial covenants is defined as the ratio of net financial debt to adjusted, consolidated EBITDA. This financial covenant is tested quarterly and provides for an upper limit of indebtedness of 3.0. ZF met the requirement at all test dates in the past and on the reporting date.

**20 OTHER LIABILITIES**

in € million	Dec. 31, 2016		Dec. 31, 2015	
	Total	Thereof current	Total	Thereof current
Liabilities to employees	719	696	630	629
Social contributions	59	59	65	65
Other tax liabilities	233	232	266	265
Tooling subsidies received	624	274	640	271
Prepayments received	81	61	94	70
Professional association	6	6	6	6
Deferred income	33	13	27	6
Sundry liabilities	522	502	470	442
	<b>2,277</b>	<b>1,843</b>	<b>2,198</b>	<b>1,754</b>

Other tax liabilities are mainly sales tax liabilities. Sundry liabilities include, among others, outstanding charges and customer credits, deferred liabilities for legal costs and costs of litigation as well as liabilities for licenses and commissions.

## 21 OTHER PROVISIONS

in € million	Dec. 31, 2016		Dec. 31, 2015	
	Total	Thereof current	Total	Thereof current
Obligations from sales	817	517	724	435
Obligations from personnel	214	40	190	30
Other obligations	337	168	279	115
	<b>1,368</b>	<b>725</b>	<b>1,193</b>	<b>580</b>

in € million	Jan. 1, 2016	Net exchange differences	Change of basis of consolidation	Addition	Unwinding of the discount	Utilization	Reversals	Dec. 31, 2016
Obligations from sales	724	3	0	426	1	255	82	817
Obligations from personnel	190	-1	-1	51	3	13	15	214
Other obligations	279	8	0	122	0	61	11	337
	<b>1,193</b>	<b>10</b>	<b>-1</b>	<b>599</b>	<b>4</b>	<b>329</b>	<b>108</b>	<b>1,368</b>

The provisions for obligations from sales primarily include provisions for warranty, product liability and punitive damages as well as for potential losses from delivery obligations.

The obligations from personnel mainly include provisions for profit sharing, restructuring measures and long-service expenses. Provisions for restructuring measures, above all, contain expenses for severance pay which will arise within the context of plant closures and relocations.

Other obligations include, among other things, provisions for litigation risks, environmental protection measures, other punitive damages as well as other tax risks.

Utilization of all current provisions is expected for the following fiscal year.

Non-current obligations from sales are expected to be utilized at a rate of 92% within the next five years. Also, about 38% of the provisions contained in the non-current obligations from personnel and about 40% of other non-current obligations will presumably be utilized in the next five years.

Expected reimbursements as of December 31, 2016, amount to €39 million (2015: €45 million), of which €39 million (2015: €44 million) was capitalized as assets.

## 22 PROVISIONS FOR PENSIONS

Provisions for pensions are set up for obligations from vested benefits and current pensions for entitled current and former employees of the consolidated ZF Group and their surviving dependents. Various retirement pension fund systems exist that depend on the legal, economic and tax situation in the respective country, which – as a regular rule – are based on the length of service and emoluments of the employees. A distinction has to be made in connection with company pension schemes between defined contribution plans and defined benefit plans.

Under defined contribution plans, the consolidated ZF Group does not enter into any obligations apart from the payment of contributions into earmarked funds and private pension insurance carriers.

Under defined benefit plans, the obligation of the consolidated ZF Group consists of fulfilling promised benefits to current and former employees, whereby a distinction is made between unfunded and funded pension systems.

The following paragraphs describe the most significant pension and post-employment medical care plans of the consolidated ZF Group. The essential risks for the company lie with the actuarial parameters, in particular interest rate and pension trend, the longevity risk and the development of general cost of living (inflation).

### Germany (D)

Until December 31, 1993, defined benefit obligations depending on time of service and salary were granted. These were frozen and since then, they have been further developed according to the cost of living index. As of January 1, 1997, so-called pension modules were promised to pay-scale employees; the amount depends on the pensionable income in relation to the social security contribution ceiling of the statutory pension insurance. Since January 1, 2005, the annual pension modules have been decoupled from the social security contribution ceiling. Since then, its determination has been dependent upon the salary, the respective classification of the position within the company hierarchy and the employee's age.

Within the scope of the acquisition of ZF TRW, ZF also acquired unfunded defined benefit plans in Germany. The plans are only open for new entries of executive managers. The plan benefits depend upon salary, length of service and the cost of living index.

A Group-internal contractual trust arrangement (CTA) was concluded in 2016 to hedge various direct defined benefit obligations. In the context of a trusteeship agreement and to have adequate capital for pension obligations, assets in the amount of €1,034 million were transferred to ZF Asset Trust e.V., Friedrichshafen, which acts as a trustee. This created plan assets, which are settled with the pension obligations on which they are based in the consolidated statement of financial position. In Germany, there are no legal or regulatory minimum funding requirements.

In addition, ZF participates in a multi-employer plan which is recognized as defined benefit plan. The contributions to the multi-employer plan correspond to a fixed percentage of 1% and 5% of the regular monthly income.

#### United States of America (USA)

Due to the acquisition of ZF TRW, ZF maintains defined benefit plans in the USA. These plans are closed for new entrants. Any vesting of further entitlements is also no longer possible. The plans are mainly funded and comply with the provisions of the U.S. Employee Retirement Income Security Act (ERISA).

In addition, ZF finances several unfunded post-employment medical care plans. These plans are closed for new entrants. The level of the benefits and the contributions for pensioners differ depending on the location. The major risks for grants of medical care benefits are increasing medical care costs as well as a decreasing participation of the government in these costs. Moreover, these plans are subject to risks typical for defined-benefit grants, in particular the risk from changes in discount rates.

#### United Kingdom (GB)

ZF maintains funded defined benefit plans that have been closed. The major part of the defined benefit plans result from the acquisition of ZF TRW. The plans are maintained pursuant to legal provisions and are managed by trust companies. The necessary financing is determined every three years by technical valuations in compliance with local provisions.

#### Defined benefit plans

Changes in the present value of the defined benefit obligation and the fair value of the plan assets can be based on actuarial gains and losses. These can be caused, among other things, by changes in the calculation parameters, changes in estimates with regard to the risk trend of the pension obligations and differences between the actual and the expected return on plan assets.

The amount of the pension obligations (present value of the defined benefit obligation) was calculated in accordance with actuarial methods for which estimates are unavoidable. In addition to assumptions on life expectancy, fluctuation and expected salary increases, the following premises have a material effect on the amount of the obligation:

in %	2016		
	D	USA	GB
Discount rate	1.9	4.2	2.9
Pension increases	1.3	0.0	2.3 – 3.4

in %	2015		
	D	USA	GB
Discount rate	2.6	4.5	3.9
Pension increases	1.3 – 1.8	0.0	2.0 – 3.0

The average maturity period of the defined benefit obligations is as follows:

in years	2016		
	D	USA	GB
Average maturity	19	15	22

in years	2015		
	D	USA	GB
Average maturity	18	15	19

The pension obligations were measured using current mortality tables as of December 31 of the relevant fiscal year. The following mortality tables were used in the significant countries as of December 31, 2016:

D	Heubeck 2005 G
USA	RP2014, projected by MP2014
GB	S1PMA and S1PFA with CMI2015

The pension obligations resulting under the projected unit credit method are netted in the case of a funded pension system with the plan assets measured at fair value. As soon as the plan assets exceed the pension obligations, an asset is created which is recognized under non-current financial assets.

The funding status of the pension obligations is as follows:

in € million	2016				
	D	USA	GB	Other	Total
Present value of unfunded defined benefit obligations	3,406	6	118	94	3,624
Present value of funded defined benefit obligations	1,812	323	1,454	83	3,672
<b>Present value of the defined benefit obligations</b>	<b>5,218</b>	<b>329</b>	<b>1,572</b>	<b>177</b>	<b>7,296</b>
Plan assets	1,591	270	2,092	86	4,039
<b>Net liabilities</b>	<b>3,627</b>	<b>59</b>	<b>-520</b>	<b>91</b>	<b>3,257</b>

in € million	2015				
	D	USA	GB	Other	Total
Present value of unfunded defined benefit obligations	3,925	29	17	79	4,050
Present value of funded defined benefit obligations	520	292	1,344	88	2,244
<b>Present value of the defined benefit obligations</b>	<b>4,445</b>	<b>321</b>	<b>1,361</b>	<b>167</b>	<b>6,294</b>
Plan assets	494	231	1,934	73	2,732
<b>Net liabilities</b>	<b>3,951</b>	<b>90</b>	<b>-573</b>	<b>94</b>	<b>3,562</b>

The development of the present value of the defined benefit obligations and the plan assets at fair value is presented as follows:

in € million	2016				
	D	USA	GB	Other	Total
<b>Present value of the defined benefit obligations as of Jan. 1</b>	<b>4,445</b>	<b>321</b>	<b>1,361</b>	<b>167</b>	<b>6,294</b>
Net exchange differences from plans abroad	0	7	-202	3	-192
Current service costs	115	1	1	15	132
Past service costs	17	0	0	0	17
Settlements	0	-1	4	-3	0
Interest expenses	113	14	43	6	176
Contributions by plan participants	56	0	0	0	56
Actuarial gains (-) and losses (+) from the change in demographic assumptions	-2	0	38	0	36
Actuarial gains (-) and losses (+) from the change in financial assumptions	638	17	373	4	1,032
Actuarial gains (-) and losses (+) due to experience adjustments	-16	0	28	0	12
Additions (+)/disposals (-)	-2	0	0	-13	-15
Pension payments	138	30	54	4	226
Other changes	-8	0	-20	2	-26
<b>Present value of the defined benefit obligations as of Dec. 31</b>	<b>5,218</b>	<b>329</b>	<b>1,572</b>	<b>177</b>	<b>7,296</b>
<b>Plan assets at fair value as of Jan. 1</b>	<b>494</b>	<b>231</b>	<b>1,934</b>	<b>73</b>	<b>2,732</b>
Net exchange differences from plans abroad	0	8	-281	3	-270
Settlements	0	-1	-20	0	-21
Expected return on plan assets	12	10	65	3	90
Actuarial gains (-) and losses (+) from the change in financial assumptions	6	14	446	3	469
Employer contributions to the plan assets	19	40	5	15	79
Employee contributions	47	0	0	0	47
Transfers to plan assets (+)/transfers from plan assets (-)	0	0	0	-5	-5
Pension payments	21	29	54	5	109
Other changes	1,034	-3	-3	-1	1,027
<b>Plan assets at fair value as of Dec. 31</b>	<b>1,591</b>	<b>270</b>	<b>2,092</b>	<b>86</b>	<b>4,039</b>
<b>Financing status as of Jan. 1</b>	<b>3,951</b>	<b>90</b>	<b>-573</b>	<b>94</b>	<b>3,562</b>
<b>Financing status as of Dec. 31</b>	<b>3,627</b>	<b>59</b>	<b>-520</b>	<b>91</b>	<b>3,257</b>

in € million

	2015				
	D	USA	GB	Other	Total
<b>Present value of the defined benefit obligations as of Jan. 1</b>	<b>4,143</b>	<b>4</b>	<b>164</b>	<b>71</b>	<b>4,382</b>
Net exchange differences from plans abroad	2	15	29	-4	42
Company acquisitions	575	322	1,330	94	2,321
Current service costs	123	1	1	7	132
Past service costs	13	0	0	0	13
Settlements	0	0	0	10	10
Interest expenses	82	9	36	4	131
Contributions by plan participants	13	0	0	0	13
Actuarial gains (-) and losses (+) from the change in demographic assumptions	0	0	13	1	14
Actuarial gains (-) and losses (+) from the change in financial assumptions	-409	-25	-164	-5	-603
Actuarial gains (-) and losses (+) due to experience adjustments	29	-3	-18	2	10
Pension payments	126	2	30	13	171
<b>Present value of the defined benefit obligations as of Dec. 31</b>	<b>4,445</b>	<b>321</b>	<b>1,361</b>	<b>167</b>	<b>6,294</b>
<b>Plan assets at fair value as of Jan. 1</b>	<b>465</b>	<b>2</b>	<b>94</b>	<b>18</b>	<b>579</b>
Net exchange differences from plans abroad	0	10	32	-4	38
Company acquisitions	29	226	1,846	54	2,155
Settlements	0	0	0	-2	-2
Expected return on plan assets	4	6	46	3	59
Actuarial gains (+) and losses (-) from the change in financial assumptions	0	-16	-54	-1	-71
Employer contributions to the plan assets	10	9	2	9	30
Pension payments	14	2	30	4	50
Other changes	0	-4	-2	0	-6
<b>Plan assets at fair value as of Dec. 31</b>	<b>494</b>	<b>231</b>	<b>1,934</b>	<b>73</b>	<b>2,732</b>
<b>Financing status as of Jan. 1</b>	<b>3,678</b>	<b>2</b>	<b>70</b>	<b>53</b>	<b>3,803</b>
<b>Financing status as of Dec. 31</b>	<b>3,951</b>	<b>90</b>	<b>-573</b>	<b>94</b>	<b>3,562</b>

The financing status at the end of the year can be transferred to the balance sheet disclosure as follows:

in € million	2016	2015
Financing status of defined benefit plans	3,257	3,562
Financing status of medical care benefits	310	303
Total provisions	<b>3,567</b>	<b>3,865</b>
Net assets from defined benefit plans	573	600
<b>Provisions for pensions</b>	<b>4,140</b>	<b>4,465</b>

The net assets from defined benefit plans are shown under non-current financial assets in the consolidated statement of financial position.

The pension obligations result in expenses recognized through profit or loss of €236 million (2015: €227 million), which are made up of the following components:

in € million	2016				
	D	USA	GB	Other	Total
Current service costs	115	1	1	15	132
Past service costs	17	0	0	0	17
Curtailments and settlements	0	0	4	-3	1
Unwinding the discount on net liabilities	101	4	-22	3	86
	<b>233</b>	<b>5</b>	<b>-17</b>	<b>15</b>	<b>236</b>

in € million	2015				
	D	USA	GB	Other	Total
Current service costs	123	1	1	7	132
Past service costs	13	0	0	0	13
Curtailments and settlements	0	0	0	10	10
Unwinding the discount on net liabilities	78	3	-10	1	72
	<b>214</b>	<b>4</b>	<b>-9</b>	<b>18</b>	<b>227</b>

All components of the pension expenses recognized in profit or loss, with the exception of the interest portion, are reported in the functional areas.

The actuarial losses amounting to €611 million (2015: gains of €508 million) are recorded in retained earnings with no effect on profit or loss.

The plan assets consist of the following items:

in € million	2016	2015
Cash and cash equivalents	157	224
Securities		
Equity instruments	444	111
Debt instruments	3,103	2,237
Fund shares	644	69
Land and buildings	21	73
Derivatives	-153	1
Others	-177	17
	<b>4,039</b>	<b>2,732</b>

Securities are measured at prices quoted on active markets.

According to the best possible estimate, contributions to external pension funds will amount to €69 million for the next year. The 2015 estimate for the fiscal year 2016 was €60 million.

Pension payments until 2060 are as follows:

in € million	2016	2015
within the upcoming fiscal year	228	206
between 2 and 5 years	856	759
between 5 and 10 years	1,408	1,144
due after more than 10 years	10,894	10,297

The calculation presents the actual pension payments and not just the pension modules earned by employee service rendered as of the closing date, i.e. pension modules that are to be allocated in future are also considered. In addition, it was assumed that the number of active employees remains constant. For the other calculation assumptions, the same parameters were used as for the determination of the defined benefit obligations.

The effect of a change in significant assumptions on the defined benefit obligations is shown in the following:

in € million	2016				
	D	USA	GB	Other	Total
Discount rate					
-0.25%	+292	+12	+89	+14	+407
+0.25%	-215	-12	-81	-13	-321
Pension increases					
-0.25%	-160	0	-61	0	-221
+0.25%	+167	0	+66	0	+233
Life expectancy					
-1 year	-200	-7	-20	-11	-238
+1 year	198	7	65	12	282

in € million	2015				
	D	USA	GB	Other	Total
Discount rate					
-0.25%	+157	+11	+65	+14	+247
+0.25%	-146	-11	-60	-13	-230
Pension increases					
-0.25%	-96	0	-45	-1	-142
+0.25%	+102	0	+48	+1	+151
Life expectancy					
-1 year	-146	-5	-31	-1	-183
+1 year	+145	+5	+30	+1	+181

For the sensitivity analysis, pension obligations were re-measured. It was assumed that all other factors remain unchanged. For calculating the sensitivity of life expectancy, it was assumed that the average life expectancy of a 65-year-old individual will be increased and/or reduced by one year.

### Disclosures on medical care benefits

Certain foreign subsidiaries, in particular in the USA and Canada, grant post-retirement benefits to their employees if specific conditions as to age and period of employment are met.

The average maturity period of the defined benefit obligations is 11 years (2015: 9 years).

The development of the present value of the defined benefit obligations and the plan assets at fair value is presented as follows:

in € million	2016	2015
<b>Present value of the defined benefit obligations as of Jan. 1</b>	<b>303</b>	<b>0</b>
Company acquisitions	0	339
Net exchange differences from plans abroad	11	3
Current service costs	0	1
Past service costs	0	-7
Interest expenses	12	8
Contributions by plan participants	1	1
Actuarial gains (-) and losses (+) from the change in demographic assumptions	-2	-1
Actuarial gains (-) and losses (+) from the change in financial assumptions	17	-21
Actuarial gains (-) and losses (+) due to experience adjustments	-5	-2
Pension payments	27	18
<b>Present value of the defined benefit obligations as of Dec. 31</b>	<b>310</b>	<b>303</b>
<b>Plan assets at fair value as of Jan. 1</b>	<b>0</b>	<b>0</b>
Employer contributions to the plan assets	26	17
Employee contributions	1	1
Pension payments	27	18
<b>Plan assets at fair value as of Dec. 31</b>	<b>0</b>	<b>0</b>
<b>Financing status as of Jan. 1</b>	<b>303</b>	<b>0</b>
<b>Financing status as of Dec. 31</b>	<b>310</b>	<b>303</b>

The premises for discounting for the purpose of calculating the obligations for medical care benefits vary depending on the circumstances in the individual countries. As of December 31, 2016, the valuation factors for discounting were between 1.9% and 3.4% (2016: 3.8% and 3.9%).

The net expenses of the obligations for medical care benefits are comprised of as follows:

in € million	2016	2015
Current service costs	0	1
Past service costs	0	-7
Unwinding the discount on net liabilities	12	8
	<b>12</b>	<b>2</b>

The actuarial losses amounting to €10 million (2015: gains of €24 million) are recorded in retained earnings with no effect on profit or loss.

The effect of a change in significant assumptions on the medical care obligations is shown in the following:

in € million	2016	2015
Discount rate		
-0.25%	+7	+7
+0.25%	-6	-6
Life expectancy		
-1 year	-16	-4
+1 year	+16	+4

**23 ASSETS HELD FOR SALE AND DISPOSAL GROUPS**

in € million	2016	2015
Current assets		
Cash and cash equivalents	0	16
Trade receivables	0	70
Other assets	0	2
Inventories	0	19
Non-current assets		
Financial assets	108	0
Other assets	0	18
Intangible assets	0	408
Property, plant and equipment	0	118
Deferred taxes	0	6
<b>Assets of disposal groups</b>	<b>108</b>	<b>657</b>
Current liabilities		
Financial liabilities	0	4
Trade payables	0	89
Other liabilities	0	39
Income tax provisions	0	2
Other provisions	0	1
Non-current liabilities		
Other liabilities	0	39
Provisions for pensions	0	13
Other provisions	0	1
Deferred taxes	0	56
<b>Liabilities of disposal groups</b>	<b>0</b>	<b>244</b>

On August 4, 2016, ZF presented an offer to the shareholders of Haldex Aktiebolag, Stockholm (Sweden) to take over the entire share capital. The conclusion of the offer was subject to an acceptance threshold of 50% plus one share at the end of the deadline on October 3, 2016. Since this condition was not fulfilled, the ZF Group now aims at selling the remaining Haldex share block. In accordance with the rules set out in IFRS 5, the shares put for sale qualify as assets held for sale and were reclassified accordingly.

The assets and liabilities of the Engineered Fasteners & Components business activity recorded under this item in the previous year, were sold completely as of July 1, 2016.

**24 EQUITY**

**Subscribed capital**

At the end of the fiscal year, the subscribed capital still amounts to €500 million. As of December 31, 2016, the subscribed capital is divided into 500,000,000 registered shares. All shares are fully paid in.

**Capital reserve**

At the end of the fiscal year, the capital reserve still amounts to €386 million. The capital reserve comprises the premium on the issuance of shares. It is subject to the restrictions of § 150 AktG (German Stock Corporation Law).

### Other retained earnings

Other retained earnings contain the legal reserve of ZF Friedrichshafen AG and the accumulated earnings of the companies included in the consolidated financial statements to the extent not distributed. Asset and liability differences resulting from the capital consolidation in accordance with the book value method and the previously used accounting policies are also accounted for in this line item. Other components include the reserves from the first-time adoption of IFRS and the cumulative currency translation adjustments, which were reclassified when changing over to IFRS.

### Foreign currency translation differences

The line item contains amounts not affecting profit or loss that result from the currency translation of the financial statements from foreign subsidiaries (non-euro area) recognized starting from the date of the first-time adoption of IFRS.

The change in equity resulting from foreign currency translation differences amounting to €-28 million (2015: €136 million) is attributed to non-controlling interests with €-11 million (2015: €-12 million).

### Mark-to-market of securities and cash flow hedges

This line item includes the post-tax effects of the financial instruments valuation that does not affect profit or loss.

### Actuarial gains and losses

This line item contains the actuarial gains and losses from employer pension plans after tax, with no effect on profit or loss.

### Deferred taxes on equity items not affecting profit or loss

in € million	2016			2015		
	Before income tax	Income tax	After tax	Before income tax	Income tax	After tax
Foreign currency translation differences	-28	0	-28	169	0	169
Mark-to-market of securities	-46	4	-42	12	-3	9
Mark-to-market of cash flow hedges	-60	8	-52	-403	132	-271
Actuarial gains and losses	-621	181	-440	532	-145	387
Other comprehensive income from associates	0	0	0	-37	0	-37
<b>Other comprehensive income</b>	<b>-755</b>	<b>193</b>	<b>-562</b>	<b>273</b>	<b>-16</b>	<b>257</b>

### Dividends

ZF Friedrichshafen AG has proposed a dividend payout of €50 million for the fiscal year 2016 (€0.10 per share). In the fiscal year, a dividend of €50 million (€0.10 per share) for 2015 was paid.

## 25 DISCLOSURES ON CAPITAL MANAGEMENT

The primary objective of capital management at the consolidated ZF Group is to ensure the financial stability and independence of ZF and to meet the requirements of the shareholders and lenders. Ensuring a sufficient equity ratio is an important basis for achieving this objective. The net financial position and the debt-equity ratio (net debt in relation to EBITDA) are central parameters for capital management at ZF with regard to external financing. The credit rating by the commissioned rating agencies is another vital indicator. The objective is to receive and maintain a solid Group rating in the investment grade range.

To achieve the named objectives, ZF seeks a systematic redemption of the financial liabilities borrowed in connection with the acquisition of ZF TRW.

In order to determine the equity ratio, the equity disclosed in the consolidated statement of financial position is used.

	Dec. 31, 2016	Dec. 31, 2015
Equity in € million	6,115	5,850
Equity ratio in %	21	19

ZF Friedrichshafen AG is not subject to by-laws-based capital requirements.

## NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

### 26 GENERAL

The consolidated statement of cash flows shows how the cash position of the consolidated ZF Group changed during the fiscal year due to the inflow and outflow of funds. A distinction is drawn between cash flows from operating, investing and financing activities.

The cash position presented in the consolidated statement of cash flows covers all cash and cash equivalents reported in the consolidated statement of financial position, i.e. cash on hand and cash at banks, available at any time for use by the consolidated ZF Group.

The cash flows from investing and financing activities are determined on the basis of payments. The cash flow from operating activities, on the other hand, is indirectly derived from the net profit or loss before income tax.

Dividends and interest received are assigned to the cash flow from investing activities. Interest and transaction costs paid for borrowings are included in cash flow from financing activities. To this end, the net profit or loss before income tax in the cash flow from operating activities is adjusted by the net result from participations and the financial result.

As part of the indirect calculation, the changes in financial line items taken into account in conjunction with the operating activities are adjusted for effects from the translation of foreign currencies and changes in the basis of consolidation. Changes in the respective financial line items can therefore not be reconciled to the corresponding values on the basis of the published consolidated statement of financial position.

## 27 ACQUISITIONS OF SHARES IN CONSOLIDATED COMPANIES

In the previous year, the assets and liabilities of consolidated companies received on the date of acquisition were composed as follows:

in € million	2015
Current assets	4,979
thereof cash and cash equivalents	703
Non-current assets	9,726
Current liabilities	4,172
Non-current liabilities	4,284

The complete purchase price of €10,147 million was paid in cash.

## 28 PROCEEDS FROM THE SALE OF CONSOLIDATED COMPANIES

The divestments in assets and liabilities from the share deals relate to the following:

in € million	2016	2015
Current assets	639	172
thereof cash and cash equivalents	11	7
Non-current assets	69	378
Current liabilities	219	144
Non-current liabilities	22	10

The sales price amounted to €501 million (2015: €396 million), €498 million (2015: €396 million) of which was paid in cash.

## OTHER DISCLOSURES

### 29 CONTINGENT LIABILITIES

No provisions were set up for the following contingent liabilities, which are recognized at nominal values, because the probability of a claim is deemed to be low:

in € million	Dec. 31, 2016	Dec. 31, 2015
Guarantees	55	66
thereof for participations	2	19
Other	168	106
	<b>223</b>	<b>172</b>

The guarantees are due within a year when fully utilized. The other contingent liabilities essentially refer to potential liabilities from procurement and personnel as well as from litigation and other taxes. Like in 2015, there were no collaterals for contingent liabilities during the fiscal year.

### 30 OTHER FINANCIAL OBLIGATIONS

In addition to liabilities, provisions and contingent liabilities, other financial obligations result in particular from rental and leasing agreements, investment projects launched and procurement agreements initiated.

in € million	Dec. 31, 2016	Dec. 31, 2015
Rental and leasing payments	631	631
Purchase commitments	736	768
Payment obligations on participations	14	2
	<b>1,381</b>	<b>1,401</b>

The purchase commitments account for €209 million (2015: €187 million) for intangible assets and €527 million (2015: €581 million) for property, plant and equipment.

The total future minimum lease payments from non-cancelable rental agreements and operating leases by maturities are as follows:

in € million	Dec. 31, 2016	Dec. 31, 2015
<b>Nominal total future minimum lease payments</b>		
due within a year	147	159
due between one and five years	344	351
due after more than five years	140	121
	<b>631</b>	<b>631</b>

The major rental agreements refer to production, warehousing and office buildings with terms of up to 30 years. Besides price adjustment clauses that provide for an annual fixed percentage increase, some contracts also contain agreements that are aligned with a change in the defined consumer price indexes. Most agreements include extension options or automatic contract extensions. For some leased objects, the option to acquire them is part of the agreement. Additional leasing contracts refer to fleet, machines, computer hardware and software as well as other factory and office equipment with terms of up to ten years.

For some of these contracts, extension options or automatic contract extensions are available, as well as options to acquire the object leased at the end of the contractual period at market value.

### 31 LITIGATION

For a pending antitrust case at ZF TRW, a provision for risks existing in this context has been recorded. The point of time at which the suit will be completed as well as the outcome of the procedure are uncertain.

In the fiscal year 2014, the premises of a ZF subsidiary were searched in connection with an ongoing antitrust investigation procedure. The reason for the investigation was the suspected involvement of the subsidiary in illegal antitrust price agreements. ZF is fully cooperating with the investigating authorities. The duration and outcome of the procedure are uncertain.

In addition, the premises of ZF were searched in the past fiscal year in connection with another antitrust investigation procedure. The reason for this investigation was the suspicion of the Bundeskartellamt [Federal Cartel Office] that ZF was involved in agreements regarding steel purchasing that violate antitrust law. In this case, ZF again fully cooperates with the investigating authorities. The duration and outcome of the procedure are uncertain.

Apart from that, ZF is involved in ongoing arbitration proceedings for which adequate provisions were made. In addition, neither ZF nor any of its Group companies are engaged in current or foreseeable court or arbitration proceedings, which have had in the past or could have a significant impact on the economic situation of the consolidated ZF Group.

## 32 DISCLOSURES ON FINANCIAL INSTRUMENTS

### Carrying amounts of the financial instruments by categories

The following table shows the recognized financial assets and liabilities by measurement categories:

in € million	Dec. 31, 2016	Dec. 31, 2015
<b>Assets</b>		
Loans and receivables	6,950	6,457
Available-for-sale financial assets	52	1,019
Financial assets at fair value through profit or loss	0	10
Financial assets held for trading	0	6
Derivative financial instruments (hedge accounting) <sup>1)</sup>	72	56
	<b>7,074</b>	<b>7,548</b>
<b>Liabilities</b>		
Financial liabilities at amortized cost	13,595	14,815
Liabilities from finance leases <sup>1)</sup>	28	26
Financial liabilities held for trading	8	0
Derivative financial instruments (hedge accounting) <sup>1)</sup>	160	69
	<b>13,791</b>	<b>14,910</b>

<sup>1)</sup> No IAS 39 measurement categories.

### Fair values

The fair values of the financial assets and liabilities are presented below. Provided that financial assets and liabilities are recognized at amortized cost, the fair value is compared to the carrying amount.

The following table shows the carrying amounts and the fair values of the financial assets and liabilities recognized at amortized cost. Due to short maturities, the carrying amounts of the current financial instruments recognized at cost approximate the fair values.

in € million	Dec. 31, 2016		Dec. 31, 2015	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Assets</b>				
Loans and receivables				
Cash and cash equivalents	1,627	1,627	1,495	1,495
Financial receivables	103	103	160	160
Trade receivables	5,220	5,220	4,778	4,778
Securities	0	0	24	24
	<b>6,950</b>	<b>6,950</b>	<b>6,457</b>	<b>6,457</b>
<b>Liabilities</b>				
Financial liabilities at amortized cost				
Bonds	5,599	5,889	5,592	5,555
Bonded loans	2,308	2,382	2,334	2,373
Liabilities to banks	307	300	1,836	1,894
Other financial liabilities	20	20	50	50
Trade payables	5,361	5,361	5,003	5,003
Liabilities from finance leases <sup>1)</sup>	28	28	26	27
	<b>13,623</b>	<b>13,980</b>	<b>14,841</b>	<b>14,902</b>

<sup>1)</sup> No IAS 39 measurement categories.

In the previous year, securities of €24 million were shown in the consolidated statement of financial position under financial receivables from non-current financial assets.

The following table shows the allocation of the fair values of the financial instruments recognized at amortized cost to the three levels of the fair value hierarchy:

in € million	Dec. 31, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Loans and receivables				
Cash and cash equivalents	0	1,627	0	1,627
Financial receivables	0	103	0	103
Trade receivables	0	5,220	0	5,220
	<b>0</b>	<b>6,950</b>	<b>0</b>	<b>6,950</b>
<b>Liabilities</b>				
Financial liabilities at amortized cost				
Bonds	5,889	0	0	5,889
Bonded loans	0	2,382	0	2,382
Liabilities to banks	0	300	0	300
Other financial liabilities	0	20	0	20
Trade payables	0	5,361	0	5,361
Liabilities from finance leases <sup>1)</sup>	0	28	0	28
	<b>5,889</b>	<b>8,091</b>	<b>0</b>	<b>13,980</b>

<sup>1)</sup> No IAS 39 measurement categories.

in € million	Dec. 31, 2015			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Loans and receivables				
Cash and cash equivalents	0	1,495	0	1,495
Financial receivables	0	160	0	160
Trade receivables	0	4,778	0	4,778
Securities	0	0	24	24
	<b>0</b>	<b>6,433</b>	<b>24</b>	<b>6,457</b>
<b>Liabilities</b>				
Financial liabilities at amortized cost				
Bonds	5,555	0	0	5,555
Bonded loans	0	2,373	0	2,373
Liabilities to banks	0	1,894	0	1,894
Other financial liabilities	0	50	0	50
Trade payables	0	5,003	0	5,003
Liabilities from finance leases <sup>1)</sup>	0	27	0	27
	<b>5,555</b>	<b>9,347</b>	<b>0</b>	<b>14,902</b>

<sup>1)</sup> No IAS 39 measurement categories.

Except for bonds, the market values of assets and liabilities were calculated using the net present value method. Here, the future cash flows were discounted with the current risk-free interest rates matching the maturities plus a ZF-specific credit risk markup. Bonds were calculated using the fair value on the market.

Financial liabilities from finance lease contracts are recognized considering the contractually agreed interest rate. The fair value was determined according to the standard market interest rate.

The following table shows the financial instruments recognized at fair value. Of the fair value of investments in participations, which amount to a total of €52 million, the amount of €50 million cannot be determined reliably because there is no active market for these participations and their fair value cannot be determined reliably. The investments in participations are included in the available-for-sale financial assets category.

in € million	Dec. 31, 2016	Dec. 31, 2015
<b>Assets</b>		
Available-for-sale financial assets		
Securities	0	948
Investments in participations	2	2
Financial assets at fair value through profit or loss		
Securities	0	10
Financial assets held for trading		
Derivative financial instruments	0	6
Derivative financial instruments (hedge accounting) <sup>1)</sup>	72	56
	<b>74</b>	<b>1,022</b>
<b>Liabilities</b>		
Financial liabilities held for trading		
Derivative financial instruments	8	0
Derivative financial instruments (hedge accounting) <sup>1)</sup>	160	69
	<b>168</b>	<b>69</b>

<sup>1)</sup> No IAS 39 measurement categories.

In the following, the financial instruments recognized at fair value are allocated to the three levels of the fair value hierarchy based on the input parameters drawn on for the valuation. The classification as well as the need to perform reclassifications is reviewed on the reporting date. Level 1 covers those financial instruments for which prices for identical assets and liabilities

quoted on active markets are available. Allocation to level 2 occurs if input parameters are drawn on for valuating the financial instruments that are directly (e.g. prices) or indirectly (e.g. derived from prices) observable on the market. In level 3, financial instruments are accounted for whose valuation is based on information that is not observable on the market.

in € million	Dec. 31, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Investments in participations	2	0	0	2
Derivative financial instruments	0	72	0	72
	<b>2</b>	<b>72</b>	<b>0</b>	<b>74</b>
<b>Liabilities</b>				
Derivative financial instruments	0	168	0	168

in € million	Dec. 31, 2015			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Securities				
Shares	132	0	0	132
Fixed-interest securities	296	13	0	309
Fund shares	386	0	2	388
Alternative investments	34	80	15	129
Investments in participations	2	0	0	2
Derivative financial instruments	2	60	0	62
	<b>852</b>	<b>153</b>	<b>17</b>	<b>1,022</b>
<b>Liabilities</b>				
Derivative financial instruments	1	68	0	69

For level 1 securities, the fair value is recognized directly as the quoted price on an always active market. The active market is either the stock exchange of the respective country or a comparable trading platform offering the liquidity and transparency of the underlying asset. An active market is characterized by the fact that mainly homogeneous assets are traded at publicly available prices and that there are usually willing buyers and sellers at any time, e.g. stock exchanges or commodity exchanges.

Level 2 includes classes whose prices can be derived or modeled from parameters which can be observed on the market. This includes in particular observable interest rates, exchange rates or comparable instruments. Interest-bearing securities with slightly delayed direct quotation are also included in level 2. For real estate funds contained in level 2, the continued ability for redemption on an active market is contractually ensured.

In the fiscal year, no reclassification took place between levels 1 and 2 of the fair value hierarchies.

In the previous year, the level 3 securities involved interests in private equity funds. The private equity umbrella funds hold shares in non-listed companies. The market values of level 3 securities were determined on the basis of currently available information from the funds' managers. A significant change of the underlying future cash flows and the interest rate, which implies a change of the discount factor, would influence the fair values of these securities.

Investments in participations which are traded on an active market are recognized at share prices of the stock exchange of the respective country.

Derivative financial instruments of level 1 concern tradable derivatives, such as futures. Their fair value corresponds to the value traded on the futures exchange.

The level 2 derivative financial instruments concern non-tradable derivatives. Fair values are determined on the basis of fixed prices quoted on approved stock exchanges discounted for the remaining term (foreign currency exchange rates, interest rates and raw material price indexes).

The following table illustrates the development of securities assigned to level 3 of the fair value hierarchy:

in € million	Securities		Derivatives	
	2016	2015	2016	2015
<b>As of Jan. 1</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>155</b>
Fair value changes recognized through profit and loss	-1	0	0	0
Fair value changes recognized through other comprehensive income	1	0	0	209
Purchases	15	2	0	0
Sales	-32	-2	0	0
Liquidation of derivative positions	0	0	0	-364
<b>As of Dec. 31</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>

Gains and losses recognized in profit or loss are recognized in other financial income and financial expenses. Gains not affecting profit or loss are recognized in the market valuation of securities or market valuation of cash flow hedges.

## Net gains and losses by measurement categories

in € million

	Interests	Impairments	Other net gains and losses	Total net gains and losses
<b>2016</b>				
Loans and receivables	37	-10	57	84
Available-for-sale financial assets				
recognized at fair value	19	-5	51	65
recognized at cost	0	-1	18	17
Financial assets at fair value through profit or loss	0	0	2	2
Financial instruments held for trading	0	0	6	6
Financial liabilities at amortized cost	-349	0	-6	-355
<b>2015</b>				
Loans and receivables	32	-11	39	60
Available-for-sale financial assets				
recognized at fair value	14	-13	10	11
recognized at cost	0	-2	3	1
Financial assets at fair value through profit or loss	0	0	5	5
Financial instruments held for trading	0	0	16	16
Financial liabilities at amortized cost	-306	0	-26	-332

Other net gains and losses related to “Loans and receivables” primarily contain exchange rate gains and losses from foreign currency receivables as well as income derived from the disposal of financial receivables.

The other net gains and losses in the “Available-for-sale financial assets (recognized at fair value)” measurement category include exchange rate gains and losses as well as income from the disposal of securities. The gain or loss recognized in other comprehensive income during the reporting period as well as the amount reclassified from equity to profit or loss is shown in the consolidated statement of comprehensive income.

The other net gains and losses in the “Available-for-sale financial assets (recognized at cost)” measurement category essentially include the dividend income from participations.

The other net gains and losses of the “Financial assets recognized at fair value through profit or loss” measurement category include, in particular, the fair value gains and losses from securities in this category as well as exchange rate gains and losses.

The other net gains and losses of “Financial instruments held for trading” mainly include exchange rate gains and losses as well as unrealized income and expenses from the valuation of derivative financial instruments.

The other net gains and losses from the “Financial liabilities at amortized cost” measurement category primarily contain all exchange rate gains and losses from foreign currency liabilities as well as income from derecognized liabilities.

#### Offsetting financial assets and financial liabilities

Financial assets and liabilities which are subject to settlement agreements, enforceable master netting arrangements, and similar agreements:

in € million	Dec. 31, 2016		
	Gross amount	Offsetting	Net amount
<b>Offset items</b>			
Trade receivables (current)	5,303	83	5,220
Trade payables (current)	5,418	83	5,335
<b>Eligible for offsetting in the event of insolvency</b>			
Derivative financial instruments (assets)	72	57	15
Derivative financial instruments (liabilities)	168	57	111

in € million	Dec. 31, 2015		
	Gross amount	Offsetting	Net amount
<b>Offset items</b>			
Trade receivables (current)	4,838	61	4,777
Trade payables (current)	5,048	61	4,987
<b>Eligible for offsetting in the event of insolvency</b>			
Derivative financial instruments (assets)	62	12	50
Derivative financial instruments (liabilities)	69	12	57

The framework contracts concluded with the banks for financial futures regulate, among other things, that in the event of insolvency of a contracting party, existing contracts will have to be terminated and settled at the respective market value. Provided that several transactions are settled for a contracting party, positive and negative market values are offset and only the remaining difference is settled. As of December 31, 2016, no risk arises from this regulation due to the excellent credit rating of our banks.

### 33 RISKS FROM FINANCIAL INSTRUMENTS

#### Management of financial risks

The risk management system of ZF’s Finance Department covers counterparty and credit risks with customers and suppliers, liquidity and interest rate risks as well as currency and raw material price risks.

Reports on the essential risk positions of the consolidated ZF Group are presented to the Board of Management and the Supervisory Board on a regular basis. Compliance with the guidelines is audited by the internal auditors. The market price risk from securities as well as the foreign currency risk is measured based on a value-at-risk analysis. The value-at-risk indicates only the potential risk of loss, which with defined probability will not be exceeded within a specifically determined time frame (holding period). However, the method does not provide any information as to the time such a threshold might be crossed or the amount of the expected loss in case the value-at-risk is exceeded. As a result, the actual development may deviate from the result of the value-at-risk analysis.

The companies of the consolidated ZF Group hedge their interest rate, foreign currency and raw material price risks at prevailing market conditions either through ZF Cash Management at ZF Friedrichshafen AG or directly with banks. Derivative financial instruments with plain vanilla character are used. These are used exclusively to hedge existing underlying or forecast transactions.

Risk items of ZF Cash Management are hedged externally at banks with excellent credit rating taking into account prescribed risk limits. Hedging transactions are concluded in accordance with uniform corporate policies and in line with bank regulations on conducting trading transactions. They are subject to stringent monitoring, which is ensured in particular by the strict separation of duties between trading, settlement and control.

#### Credit and counterparty risk

Credit risk is the risk that contractual partners in the areas of financial investments, financial receivables and trade receivables will not meet their payment obligations.

In order to reduce the counterparty risk for financial investments, all financial transactions are carried out only with banks with a first-class credit rating within the framework of defined limits.

The financial assets of the consolidated group lead to a maximum credit risk if one counterparty defaults, amounting to the carrying amount of the respective financial line item without considering collaterals received (plus the maximum utilization for financial guarantees as well as loan commitments to third parties).

The amount of outstanding trade receivables mainly concerns passenger car, commercial vehicle and off-road machinery manufacturers worldwide.

In order to reduce the credit risk, the credit worthiness of customers with whom business is conducted on a credit basis as well as our receivables are subject to continuous monitoring. In some instances, credit risks are reduced by appropriate hedging measures such as trade credit insurances. The carrying amount of trade receivables covered by trade credit insurances is €279 million (2015: €293 million). In addition, trade receivables are sold to a small extent. The major risks are transferred to the purchaser upon the assignment of such receivables, and the receivables are therefore derecognized.

The creditworthiness of our strategic suppliers is constantly monitored in order to secure our value added chain. By concentrating new contract awarding decisions on creditworthy suppliers, the portfolio quality of our suppliers is continuously improved.

#### Liquidity risk

The expected future outflow of funds due to principal and interest payments for financial liabilities and trade payables is contained in the medium-term liquidity planning.

The following table lists the maturity structure of principal and interest payments for the financial liabilities and trade payables:

in € million	Carrying amount as of Dec. 31, 2016	Cash outflow		
	Total	2017	2018 to 2022	2023 and beyond
Bonds	5,599	203	3,955	2,733
Bonded loans	2,308	515	1,442	483
Liabilities to banks	307	237	91	10
Other financial liabilities	20	20	0	0
Trade payables	5,361	5,335	26	0
Liabilities from finance leases	28	5	20	11
	<b>13,623</b>	<b>6,315</b>	<b>5,534</b>	<b>3,237</b>

in € million	Carrying amount as of Dec. 31, 2015	Cash outflow		
		Total	2016	2017 to 2021
Bonds	5,592	207	2,993	3,837
Bonded loans	2,334	55	1,997	497
Liabilities to banks	1,836	266	1,681	20
Other financial liabilities	50	51	0	0
Trade payables	5,003	4,987	16	0
Liabilities from finance leases	26	6	20	15
	<b>14,841</b>	<b>5,572</b>	<b>6,707</b>	<b>4,369</b>

In the context of the acquisition of ZF TRW, syndicated financing was entered into as part of the overall financing structure; this syndicated refinancing was already refinanced in July 2016. The new syndicated loan has an overall volume of €3.5 billion and consists of a term loan of €0.5 billion and a revolving credit facility (RCF) of €3.0 billion. The term loan has a term of up to three years, while the maximum term of the RCF is five years, including two renewal options to extend the term in each case by one year based on a corresponding agreement with the financing banks. The term loan had been terminated and fully repaid by December 31, 2016. The revolving credit line in the amount of €3 billion was not utilized at the end of the fiscal year.

In connection with the acquisition of ZF TRW, ZF Friedrichshafen AG also issued a bonded loan in 2015 in a total volume of €2.2 billion in various tranches with original terms of three, five and seven years. An amount of €2.2 billion was outstanding as of the reporting date. One tranche of €411 million was terminated in December 2016 with effect from January 20, 2017 and has been repaid in the meantime.

Further major anchor financing of the ZF Group exists in the form of outstanding euro and U.S. dollar bonds, which had also been used to finance the acquisition of ZF TRW. The euro bonds have a nominal volume of €2.25 billion as of December 31, 2016 and are mature in 2019 (€1.15 billion) and 2023 (€1.1 billion), respectively.

The U.S. dollar bonds have a total nominal volume of \$3.4 billion and are mature in 2020 (\$1.0 billion), 2022 (\$1.0 billion) and 2025 (\$1.4 billion), respectively. The above-mentioned bonds were issued by the U.S. subsidiary ZF North America Capital Inc., while ZF Friedrichshafen AG issued a guarantee for the benefit of the bondholders.

In the context of a project, ZF assumed contingent financial commitments in the amount of €25 million (2015: €25 million) to the benefit of a business partner which in case of utilization would lead to an immediate cash outflow. We still rate the probability as very low that this results in financial claims which must be recognized in the consolidated statement of financial position.

#### Market price risk from securities

The market price risk from securities is the risk that the fair value of securities decreases due to changes in list prices. The securities for hedging pension obligations and credit balances from pre-retirement part-time work contained in the special fund were assigned to a trustee.

#### Foreign currency risk

The foreign currency risk is the risk that the fair values or future cash flows of monetary items are negatively influenced due to exchange rate changes.

Hedging measures for planned foreign currency sales from the volume production business are carried out in the consolidated ZF Group within the framework of prescribed hedging ranges and within defined maximum limits. The net principle applies to foreign currency hedging, i.e. hedging takes place for the net items from bilateral cash flows. Foreign currency hedging is carried out mainly via forward exchange options. At the end of the fiscal year, 99% of the hedging volume was allocated to the U.S. dollar.

Individual hedging is carried out for the project business (gross principle).

The translation risk from the measurement of line items is not hedged – the risks thereof will be controlled and gradually reduced via consistent localization of our main activities.

The expected cash outflow from derivative financial instruments results from the following presentation:

in € million

	Market value	Cash outflow		
		Total	Within a year	1 to 5 years
<b>Dec. 31, 2016</b>				
Foreign currency hedging contracts				
Assets	72	1,383	1,020	363
Liabilities	- 168	2,778	2,143	635
<b>Dec. 31, 2015</b>				
Foreign currency hedging contracts				
Assets	62	1,539	1,043	496
Liabilities	- 69	1,647	1,164	483

As of December 31, 2016, there are derivative financial instruments held as assets in the amount of €19 million (2015: €56 million) and derivative financial instruments held as liabilities in the amount of €111 million (2015: €64 million) that are used to hedge future cash flows. The hedged cash flows will come into effect between 2017 and 2021. If the prerequisites of hedge accounting are met, market value changes recognized with no effect on profit or loss are reclassified to profit or loss for the period and/or are recognized in the acquisition costs.

For fair value hedges, changes in value from hedging transactions amount to €-3 million (2015: €-5 million) as well as changes in value from underlying transactions of €3 million (2015: €5 million).

As a result of its international orientation, the ZF Group carries out transactions in different currencies. From the viewpoint of the consolidated group, the exchange rate fluctuations of the U.S. dollar represent a substantial currency risk. In the ZF Group, the currency risk is currently monitored using a value-at-risk analysis, without taking into account ZF TRW.

With no change in relation to the prior year, the value-at-risk is calculated based on a variance-covariance method under the assumption of a confidence level of 84.1% with a holding period of twelve months. Based on the analysis available as of the reporting date, the potential maximum risk of loss amounts to €21 million (2015: €55 million). The calculation was based on an average

exchange rate volatility of 10.65% (2015: 10.05%) as well as a target price of \$1.10 per euro. The method applied does not account for effects from favorable exchange rate changes and assumes a uniform open U.S. dollar position. Deviating from the maximum potential risk of loss as of the reporting date, the average maximum potential risk of loss in fiscal year 2016 amounted to €17 million.

The maximum risk of loss is calculated taking into account the average exchange rate volatility of the past twelve months in relation to the open U.S. dollar position from operational business. The open U.S. dollar position is calculated based on the amount of cash and loans in U.S. dollars at the closing date that are administered by ZF Cash Management and net incoming payments expected to be received in the following twelve months based on current corporate planning, taking into account the hedged amounts. To limit the risk of loss, an upper limit was agreed upon with the Board of Management.

Since the open U.S. dollar positions include, as of the reporting date, the net incoming payments expected based on the current corporate planning, the analysis is not representative for the U.S. dollar balance as of the reporting date.

ZF TRW follows a central and systematic approach to hedge foreign currency sales using defined hedging targets based on a quarterly rolling 3-year forecast of foreign currency cash flows.

The following table shows the hypothetical effects on equity and profit or loss (in both cases excluding tax effects) if the U.S. dollar increases or decreases in value by 10% against the major currencies of ZF TRW:

in € million	Effect on equity	Effect on profit or loss
Appreciation of the U.S. dollar by +10%	-8	0
Devaluation of the U.S. dollar by -10%	9	0

#### Raw material price risk

The raw material price risk is the risk that the acquisition cost from the purchase of production equipment and operational materials will change.

Derivative financial instruments are used to a minor extent at the consolidated ZF Group to reduce raw material price risks. The risk from these hedging transactions can be rated as insignificant for the fiscal year. Therefore, a sensitivity analysis for such derivative financial instruments is dispensed with.

#### Interest rate risk

The interest rate risk is the risk that the fair values or future cash flows of financial instruments will fluctuate due to changes in the market interest rate.

The interest rate risk is hedged on a case-by-case basis. The market values of the interest swaps can be rated as insignificant for the fiscal year.

An increase by 30 (2015: 30) base points in the average interest rate for financial liabilities on a floating rate basis, which are not covered by interest hedging transactions, would influence the net profit or loss before income tax in the amount of €-7 million (2015: €-8 million). In case of a reduction of the average interest rate by 30 (2015: 30) base points, the interest rate for material financial liabilities would be below 0%. Therefore, the interest rate reduction would not have any material effect on net profit or loss before income tax due to the contractual arrangements.

An increase by 30 (2015: 30) base points of the average interest rate on financial investments would raise the net profit or loss before income tax by €3 million (2015: €8 million). In case of a reduction of the average interest rate by 30 (2015: 30) base points, the interest rate for financial investments would be below 0%. As ZF did not have to pay any negative interest for financial investments in the past, the interest rate reduction would not have any material effect on net profit or loss before income tax due to the contractual arrangements.

The sensitivity analysis was drawn up under the assumption that the amount of loans from banks and of financial investments as well as the ratio of fixed and variable interest rates will remain at the same level. The base points used for the calculation were not changed compared to the previous year due to the most recent interest rate development.

### 34 GOVERNMENT GRANTS

In the fiscal year 2016, €18 million (2015: €28 million) in government grants was received. They were divided as follows:

in € million	2016	2015
Investment grants	12	17
Expense subsidies	6	11

Investment grants were basically received for investments at various locations in the USA, Germany, Belgium, Russia and Australia.

Expense subsidies mainly comprise research subsidies and subsidies for education and vocational training.

### 35 RELATED PARTY TRANSACTIONS

In accordance with IAS 24, persons or companies that control or are controlled by the consolidated ZF Group have to be disclosed to the extent that they are not already included in the consolidated financial statements of ZF Friedrichshafen AG as a consolidated company. Here, control is exercised if a shareholder holds more than half of the voting rights or is able, by virtue of terms in the by-laws or contractual agreements, to govern management's financial and operating policies. In addition, the disclosure obligations under IAS 24 extend to transactions with associates and transactions with persons

who exercise a significant influence over the financial and operating policies, including close members of the family or interposed companies. A significant influence on the financial and operating policies of the consolidated ZF Group can be based on a shareholding of 20% or more in ZF Friedrichshafen AG, a seat on ZF Friedrichshafen AG's Board of Management or Supervisory Board or another key position in management.

Accordingly, the related parties of ZF Friedrichshafen AG include joint ventures, associates and enterprises in which ZF Friedrichshafen AG holds at least 20% of the shares, the Zeppelin Foundation as a special fund of the City of Friedrichshafen, the Dr. Jürgen and Irmgard Ulderup Foundation as well as its affiliated companies.

Transactions with related companies and the receivables and liabilities existing on the reporting date result without exception from the ordinary business activities and are displayed as follows:

in € million	Joint ventures	Associates	Other participations
<b>2016</b>			
Supplies and services rendered			
Sale of goods	68	4	28
Services	2	0	1
Other services	5	0	12
Supplies and services received			
Sale of goods	9	58	17
Services	0	1	45
Other services	0	0	3
Receivables			
	20	17	68
Liabilities			
	1	11	40

in € million	Joint ventures	Associates	Other participations
<b>2015</b>			
Supplies and services rendered			
Sale of goods	5	3	99
Services	3	0	1
Other services	1	1	2
Supplies and services received			
Sale of goods	2	21	119
Services	0	0	37
Other services	0	0	0
Receivables	5	3	45
Liabilities	0	4	60

A transaction beyond ordinary business activities as of the reporting date includes a loan of €2 million (2015: €8 million) granted by ZF Friedrichshafen AG to Internationale Bodensee-Messe Friedrichshafen GmbH, Friedrichshafen (Germany). This loan bears an interest rate of 4.0% p.a. (2015: 4.0%).

### **36 BOARD OF MANAGEMENT AND SUPERVISORY BOARD COMPENSATION**

The current emoluments of the active members of the Board of Management for the fiscal year 2016 amount to €13.4 million (2015: €9.5 million). Payments for pensions rights acquired in the fiscal year for the active members of the Board of Management total €2.6 million (2015: €2.2 million). The claim to contingent other long-term benefits attributable to the fiscal year amounts to €12.4 million (2015: €2.4 million). The increase is primarily due to the positive business development and catch-up effects from the previous year.

Total emoluments thus amount to €28.4 million (2015: €14.1 million).

The emoluments of former members of the Board of Management and their surviving dependents amount to €5.8 million (2015: €6.7 million). The pension provisions for former members of the Board of Management and their surviving dependents amount to €65.8 million (2015: €57.9 million).

The emoluments of the Supervisory Board for the fiscal year 2016 amount to €1.4 million (2015: €1.4 million).

Moreover, the companies of the consolidated ZF Group have not carried out any reportable transactions whatsoever with members of the Board of Management or the Supervisory Board of ZF Friedrichshafen AG and other members of management in key positions, or with companies in whose management or supervisory bodies these persons are represented. This also applies to close family members of this group of persons.

### **37 PERSONNEL**

The annual average number of employees was 137,258 (2015: 121,253), of whom 72,369 were direct employees (2015: 63,629) and 64,889 were indirect employees (2015: 57,624). At the end of the year, the consolidated ZF Group had 136,820 (2015: 138,269) employees. Direct employees are employees whose activities depend on the production volume and can be allocated directly to the products.

### **37 APPOINTED AUDITOR FEES**

Fees of the consolidated group's auditing firm, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, recorded in the consolidated statement of profit or loss amount to €3 million for auditing services. The total consolidated Group-wide fees of Ernst & Young amount to €12 million for auditing services and €2 million for tax advisory services. Apart from Ernst & Young, other auditing companies work for the consolidated group.

## 39 LISTING OF THE SHARES HELD AS OF DECEMBER 31, 2016

### Consolidated subsidiaries

#### Domestic

	Share in capital in %
FTU Beteiligungsverwaltung GmbH, Auerbach, Germany	100.0 <sup>1)</sup>
GAT - Gesellschaft für Antriebstechnik mbH, Alsdorf, Germany	100.0 <sup>1)</sup>
Lemförder Electronic GmbH, Espelkamp, Germany	100.0 <sup>1) 3)</sup>
Lucas Automotive GmbH, Koblenz, Germany	100.0 <sup>1)</sup>
Lucas Varity GmbH, Koblenz, Germany	100.0 <sup>1)</sup>
TRW Airbag Systems GmbH, Aschau am Inn, Germany	100.0 <sup>1)</sup>
TRW Automotive Electronics & Components GmbH, Radolfzell, Germany	100.0 <sup>1)</sup>
TRW Automotive GmbH, Alfdorf, Germany	100.0 <sup>1)</sup>
TRW Automotive Holding GmbH & Co. KG, Alfdorf, Germany	100.0
TRW Automotive Holding Verwaltungs GmbH, Alfdorf, Germany	100.0
TRW Automotive Mexico GmbH, Alfdorf, Germany	100.0
TRW Automotive Safety Systems GmbH, Aschaffenburg, Germany	100.0 <sup>1)</sup>
TRW Deutschland Holding GmbH, Koblenz, Germany	100.0 <sup>1)</sup>
TRW KFZ Ausrüstung GmbH, Neuwied, Germany	100.0 <sup>1)</sup>
TRW Logistics Services GmbH, Überherrn, Germany	100.0 <sup>1)</sup>
TRW Receivables Finance GmbH, Eschborn, Germany	100.0 <sup>1)</sup>
ZF Getriebe Brandenburg GmbH, Brandenburg, Germany	100.0 <sup>1)2)3)</sup>
ZF Gusstechnologie GmbH, Nuremberg, Germany	100.0 <sup>1) 2)</sup>
ZF Industrieantriebe Witten GmbH, Witten, Germany	100.0 <sup>1) 2)</sup>
ZF Luftfahrttechnik GmbH, Calden, Germany	100.0 <sup>1) 2)</sup>
ZF RACE ENGINEERING GmbH, Schweinfurt, Germany	100.0 <sup>1) 2)</sup>
Zukunft Ventures GmbH, Friedrichshafen, Germany	100.0 <sup>1) 2)</sup>

#### Foreign

	Share in capital in %
Alfaro Brakes S.L.U., Corella, Spain	100.0
Austrian Holdco L.L.C., Livonia, USA	100.0
Autocruise Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
Autocruise S.A.S., Plouzane, France	100.0
Automotive Holdings (Korea) Ltd., Ansan, Korea (Republic)	100.0
Automotive Holdings (Spain) S.L.U., Vigo, Spain	100.0
Automotive Holdings (UK) Limited, Shirley, Great Britain	100.0
Bryce Berger Limited, Shirley, Great Britain	100.0
Cityday Limited, Shirley, Great Britain	100.0
Compagnie Financière de ZF SAS, Andrézieux-Bouthéon, France	100.0

Foreign	Share in capital in %
Dalphi Metal España, S.A., Vigo, Spain	78.4
Dalphi Metal Internacional, S.A., Madrid, Spain	51.0
Dalphi Metal Portugal, S.A., Vila Nova de Cerveira, Portugal	51.0
Dalphi Metal Seguridad, S.A., Vigo, Spain	51.0
DalphiMetal Tunisie S.A.R.L., Ben Arous, Tunisia	78.4
Duly & Hansford Pty Ltd, Zetland, Australia	100.0
Eurofren Investment, S. de R.L. de C.V., Cienega de Flores, Mexico	100.0
Eurofren Systems S.L.U, Mutliva Baja, Spain	100.0 <sup>3)</sup>
Fortuna Assurance Company, Burlington, USA	100.0
Frenos y Mecanismos, S. de R.L. de C.V., Santa Rosa de Jarequi, Mexico	100.0
Friction Materials Group North America, Inc., Livonia, USA	100.0 <sup>3)</sup>
Girling Limited, Shirley, Great Britain	100.0
HANSEN DRIVES LIMITED, Hong Kong, China	100.0
HANSEN DRIVES PTE. LTD., Singapore Central, Singapore	100.0
ID Information Systems Limited, Shirley, Great Britain	100.0
Joseph Lucas Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
Kelsey-Hayes Company, Livonia, USA	100.0
Kelsey-Hayes Holdings Inc., Livonia, USA	100.0
Kelsey-Hayes Mexico LLC, Reynosa, Mexico	100.0
KH Holdings, Inc., Livonia, USA	100.0
Les Minquiers Limited, Shirley, Great Britain	100.0
Liuzhou ZF Machinery Co., Ltd., Liuzhou, China	51.0
Lucas Automotive Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
Lucas Automotive SDN. BHD., Senai, Malaysia	100.0 <sup>3)</sup>
Lucas Export Services Limited, Shirley, Great Britain	100.0
Lucas Industries Limited, Shirley, Great Britain	100.0
Lucas Investments Limited, Shirley, Great Britain	100.0
Lucas Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
Lucas Service UK Limited, Shirley, Great Britain	100.0
Lucas Support Services Limited, Shirley, Great Britain	100.0
LucasVarity, Shirley, Great Britain	100.0
LucasVarity (M) SDN. BHD., Bukit Beruntung, Malaysia	100.0
LucasVarity (Thailand) Co., Ltd., Rayong, Thailand	100.0
LucasVarity Automotive Holding Company, Livonia, USA	100.0
LucasVarity Langzhong Brake Company Limited, Langfang, China	70.0
Mercant Comércio e Serviços Ltda., Sorocaba, Brazil	100.0
Midwest Lemförder Limited, Darlaston, Great Britain	100.0
No. 1 Deansgate (Residential) Limited, London, Great Britain	100.0 <sup>5)</sup>
OOO ZF Kama, Naberezhnye Chelny, Russia	51.0 <sup>3)</sup>
OOO ZF Russia, Saint Petersburg, Russia	100.0
Openmatics s.r.o., Plzeň, Czech Republic	100.0
Qingdao FMG Asia Pacific Co., Ltd., Qingdao, China	100.0 <sup>3)</sup>
Revestimientos Especiales de México, S. de R.L. de C.V., Cienega de Flores, Mexico	100.0

<b>Foreign</b>	<b>Share in capital in %</b>
Roadster Automotive B.V., Amsterdam, Netherlands	100.0
Roadster Holdings (Canada) Inc., Toronto, Canada	100.0
Sachs Automotive Components & Systems Shanghai Co., Ltd., Shanghai, China	100.0
Safebag - Indústria Componentes de Segurança Automovel S.A., Ponte de Lima, Portugal	78.4
Safe-Life - Indústria de Componentes de Segurança Automovel S.A., Ponte de Lima, Portugal	78.4
Shanghai Sachs Huizhong Shock Absorber Co., Ltd., Shanghai, China	60.0
SISTEMAS DE CHASSIS IRACEMÁPOLIS LTDA., Iracemópolis, Brazil	100.0
Thompson Ramo Wooldridge Inc., Livonia, USA	100.0
TRW (Suzhou) Automotive Electronics Co., Ltd., Suzhou, China	74.2
TRW Aftermarket Asia Pacific PTE LTD, Singapore Central, Singapore	100.0
TRW Aftermarket Japan Co., Ltd., Tokyo, Japan	100.0 <sup>3)</sup>
TRW Airbag Systems S.R.L., Roman, Romania	100.0 <sup>3)</sup>
TRW Asia Pacific Co., Ltd., Shanghai, China	100.0
TRW Asiatic (M) SDN BHD, Selangor, Malaysia	51.0 <sup>3)</sup>
TRW Asiatic Co., Ltd., Bangkok, Thailand	51.0
TRW AUSTRALIA HOLDINGS PTY LTD, Zetland, Australia	100.0
TRW Australia Pty Ltd, Zetland, Australia	100.0
TRW Auto B.V., Amsterdam, Netherlands	100.0
TRW Auto Holdings Inc., Livonia, USA	100.0
TRW Autoelektronika s.r.o., Benesov, Czech Republic	100.0
TRW Automotive (LV) Corp., Livonia, USA	100.0
TRW Automotive (Slovakia), s.r.o., Nove Mesto nad Vahom, Slovakia	100.0
TRW Automotive Australia Pty Ltd., Zetland, Australia	100.0
TRW Automotive Bonneval S.A.S., Bonneval, France	100.0
TRW Automotive China Holdings Ltd., Ebene, Mauritius	100.0
TRW Automotive Components (Shanghai) Co., Ltd., Shanghai, China	100.0
TRW Automotive Components (Suzhou) Co., Ltd., Suzhou, China	100.0
TRW Automotive Components Technical Service Shanghai Co., Ltd., Shanghai, China	100.0
TRW Automotive Czech s.r.o., Jablonec nad Nisou, Czech Republic	100.0
TRW Automotive Distribution France S.A.S., Paris La Défense, France	100.0
TRW Automotive España S.L.U., Pamplona, Spain	100.0
TRW Automotive Holding Company, Livonia, USA	100.0
TRW Automotive Holding Italia S.r.l., Torino, Italy	100.0
TRW Automotive Holding Mexico LLC, Reynosa, Mexico	100.0
TRW Automotive Holdings (France) S.A.S., Paris La Défense, France	100.0
TRW Automotive Inc., Livonia, USA	100.0
TRW Automotive India Private Limited, Haryana, India	100.0
TRW Automotive Italia S.r.l., Torino, Italy	100.0
TRW Automotive J.V. LLC, Livonia, USA	100.0

Foreign	Share in capital in %
TRW Automotive Japan Co., Ltd., Yokohama, Japan	100.0
TRW Automotive Korea Co., Ltd., Ansan, Korea (Republic)	100.0 <sup>3)</sup>
TRW Automotive LLC, Moscow, Russia	100.0
TRW Automotive Ltda., Limeira, Brazil	100.0
TRW Automotive Portugal Lda., Santos Domingos de Rana, Portugal	100.0
TRW Automotive Research And Development (Shanghai) Co. Ltd., Shanghai, China	100.0
TRW Automotive Safety Systems SRL, Timisoara, Romania	100.0 <sup>3)</sup>
TRW Automotive Safety Technologies (Zhangjiagang) Co., Ltd., Zhangjiagang, China	100.0
TRW Automotive Services SDN BHD, Shah Alam, Malaysia	100.0
TRW Automotive Sweden AB, Arvidsjaur, Sweden	100.0
TRW Automotive Technologies (Shanghai) Co., Ltd., Shanghai, China	100.0
TRW Automotive U.S. LLC, Livonia, USA	100.0
TRW Braking Systems Polska Sp. z o.o., Gliwice, Poland	100.0
TRW Brazil LLC, Livonia, USA	100.0
TRW Canada Limited/TRW Canada Limitee, Woodstock, Canada	100.0 <sup>3)</sup>
TRW China Holdings Ltd., Grand Cayman, Cayman Islands	100.0
TRW Coöperatief W.A., Amsterdam, Netherlands	100.0
TRW Delplas, S. de R.L. de C.V., El Marqués, Mexico	100.0
TRW Dongfang (Xi'an) Airbag Inflator Co., Ltd., Xi'an, China	90.0 <sup>3)</sup>
TRW Electronica Ensamblados, S. de R.L. de C.V., Reynosa, Mexico	100.0
TRW Employees Benefit Trust Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
TRW FAWER Automobile Safety Systems (Changchun) Co., Ltd., Changchun, China	60.0 <sup>3)</sup>
TRW FAWER Commercial Vehicle Steering (Changchun) Co., Ltd., Changchun, China	55.0 <sup>3)</sup>
TRW France S.A.S, Longvic, France	100.0
TRW Integrated Chassis Systems LLC, Livonia, USA	100.0
TRW Intellectual Property Corp., Livonia, USA	100.0
TRW Investment Management Company Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
TRW International Holdings B.V., Amsterdam, Netherlands	100.0
TRW Limited, Shirley, Great Britain	100.0
TRW LucasVarity Electric Steering Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
TRW LucasVarity Limited, Shirley, Great Britain	100.0
TRW Occupant Restraints de Chihuahua, S. de R.L. de C.V., Chihuahua, Mexico	100.0
TRW Occupant Restraints South Africa Inc., Livonia, USA	100.0
TRW Odyssey Inc., Livonia, USA	100.0
TRW Odyssey Mexico LLC, Reynosa, Mexico	100.0
TRW Otomotiv Dagitim ve Ticaret A.S., Istanbul, Turkey	99.7
TRW Overseas Inc., Livonia, USA	100.0
TRW Paris S.A.S., Paris, France	100.0
TRW Pensions Trust Limited, Shirley, Great Britain	100.0

Foreign	Share in capital in %
TRW Polska Sp. z o.o., Czestochowa, Poland	100.0
TRW Safety Systems Inc., Livonia, USA	100.0
TRW Safety Systems Mexico LLC, Reynosa, Mexico	100.0
TRW Sistemas de Direcciones, S. de R.L. de C.V., El Marqués, Mexico	100.0
TRW Sistemas de Frenado S. de R.L. de C.V., El Marqués, Mexico	100.0
TRW Steering & Suspension Co., Ltd., Rayong, Thailand	100.0
TRW Steering Co. Ltd., Ansan, Korea (Republic)	71.0 <sup>3)</sup>
TRW Steering Systems Limited, Shirley, Great Britain	100.0 <sup>5)</sup>
TRW Steering Systems Poland Sp. z o.o., Czechowice-Dziedzice, Poland	100.0
TRW Steering Wheel Systems de Chihuahua, S. de R.L. de C.V., Chihuahua, Mexico	100.0
TRW Systemes de Freinage S.A.S., Bouzonville, France	100.0
TRW Systems Limited, Solihull, Great Britain	100.0
TRW U.K. Limited, Shirley, Great Britain	100.0
TRW Vehicle Safety Systems de Mexico, S. de R.L. de C.V., Reynosa, Mexico	100.0
TRW Vehicle Safety Systems Inc., Washington, USA	100.0
TRW-Carr s.r.o., Stara Boleslav, Czech Republic	100.0
Varga Servicos Automotivos Ltda., Limeira, Brazil	100.0
Worldwide Distribution Centers, Inc., Livonia, USA	100.0
ZF (China) Investment Co., Ltd., Shanghai, China	100.0
ZF (Thailand) Limited, Bangkok, Thailand	100.0
ZF ANSA Lemförder S.L. (Sociedad Unipersonal), Burgos, Spain	100.0
ZF Argentina S.A., San Francisco, Argentina	100.0
ZF Asia Pacific Pte. Ltd., Singapore Central, Singapore	100.0
ZF Axle Drives Marysville, LLC, Marysville, USA	100.0 <sup>3)</sup>
ZF BAIC (Beijing) Chassis Systems Co., Ltd., Beijing, China	51.0
ZF Boge Elastmetall Espana S.A. (Sociedad Unipersonal), Santa Perpètua de Mogoda, Spain	100.0
ZF Bouthéon SAS, Andrézieux-Bouthéon, France	100.0
ZF Chassis Components, LLC, Newton, USA	100.0
ZF Chassis Systems (Beijing) Co., Ltd., Beijing, China	100.0
ZF Chassis Systems Chicago, LLC, Chicago, USA	100.0
ZF Chassis Systems Duncan, LLC, Duncan, USA	100.0
ZF Chassis System (Rayong) Co., Ltd., Rayong, Thailand	100.0
ZF Chassis Systems Sdn. Bhd., Padang Serai, Malaysia	100.0
ZF Chassis Systems Tuscaloosa, LLC, Tuscaloosa, USA	100.0
ZF Chassis Technology S.A. de C.V., Toluca, Mexico	100.0
ZF Chassistech Commercial Vehicles (Shanghai) Co., Ltd., Shanghai, China	100.0
ZF do Brasil Ltda., Sorocaba, Brazil	100.0
ZF Dongfeng Shock Absorber Shiyan Co., Ltd., Shiyan, China	51.0
ZF Drivetech (Hangzhou) Co., Ltd., Hangzhou, China	100.0
ZF Drivetech (Suzhou) Co., Ltd., Suzhou, China	100.0
ZF Electronic Systems Juárez, S.A. de C.V., Juárez, Mexico	100.0
ZF Electronic Systems Pleasant Prairie, LLC, Pleasant Prairie, USA	100.0

Foreign	Share in capital in %
ZF Electronics (Zhuhai) Co., Ltd., Zhuhai, China	100.0
ZF Electronics Klášterec s.r.o., Klášterec nad Ohří, Czech Republic	100.0
ZF Engineering Plzeň s.r.o., Plzeň, Czech Republic	100.0
ZF Faster Propulsion Systems Co., Ltd., Kaohsiung, Taiwan	100.0
ZF FAWER Chassis Technology (Changchun) Co., Ltd., Changchun, China	51.0
ZF Gainesville, LLC, Gainesville, USA	100.0
ZF Holding Austria GmbH, Steyr, Austria	100.0
ZF Holding Dover, Inc., Northville, USA	100.0
ZF Holdings Australia Pty. Ltd., Dingley Village, Australia	100.0
ZF Hungária Ipari és Kereskedelmi Korlátolt Felelősségű Társaság, Eger, Hungary	100.0
ZF India Pvt. Ltd., Pune, India	100.0
ZF Inmobiliaria S.A. de C.V., Saltillo, Mexico	100.0
ZF International B.V., Den Haag, Netherlands	100.0
ZF Italia Holding S.p.A., Selvazzano Dentro, Italy	100.0
ZF Italia S.r.l., Assago, Italy	100.0
ZF Japan Co., Ltd., Tokyo, Japan	100.0
ZF Lemforder (Thailand) Co., Ltd., Rayong, Thailand	100.0
ZF Lemförder Achssysteme Ges.m.b.H., Lebring, Austria	100.0
ZF Lemförder Aks Modülleri Sanayi ve Ticaret Anonim Sirket, Izmir, Turkey	100.0
ZF Lemforder Australia Pty. Limited, Edinburgh, Australia	100.0
ZF Lemforder Automotive Systems (Shenyang) Co., Ltd., Shenyang, China	100.0
ZF Lemförder Chassis Technology Korea Co., Ltd., Gumi, Korea (Republic)	59.3
ZF Lemförder Métal France S.A.S., Florange, France	100.0
ZF Lemförder SA (Pty.) Ltd., Rosslyn, South Africa	100.0
ZF Lemforder Shanghai Chassistech Co., Ltd., Shanghai, China	76.0
ZF Lemförder Sverige AB i likvidation, Trollhättan, Sweden	100.0
ZF Lemförder TLM Dış Ticaret Limited Şirketi, Izmir, Turkey	100.0
ZF Lemförder TVA, S.A., Ermua, Spain	100.0
ZF Lemforder UK Limited, Darlaston, Great Britain	100.0
ZF Marine (Zhuhai) Co., Ltd., Zhuhai, China	100.0
ZF Marine Krimpen B.V., Krimpen aan de Lek, Netherlands	100.0
ZF Marine Propulsion Systems Miramar, LLC, Miramar, USA	100.0
ZF México, S.A. de C.V., Guadalajara, Mexico	100.0
ZF Middle East FZE, Dubai, United Arab Emirates	100.0
ZF North America Capital Inc., Northville, USA	100.0
ZF North America Inc., Northville, USA	100.0
ZF Occupant Safety Systems de la Laguna, S. de R.L. de C.V., Durango, Mexico	100.0
ZF Österreich Gesellschaft m.b.H., Vienna, Austria	100.0
ZF Padova S.r.l., Selvazzano Dentro, Italy	100.0
ZF Philippines Inc., Manila, Philippines	100.0
ZF Powertrain Modules (Shanghai) Co., Ltd., Shanghai, China	100.0

Foreign	Share in capital in %
ZF Powertrain Modules Saltillo, S.A. de C.V., Ramos Arizpe, Mexico	100.0
ZF Powertrain Systems (Beijing) Co., Ltd., Beijing, China	100.0
ZF Sachs España S.A. (Sociedad Unipersonal), Bilbao, Spain	100.0
ZF Sachs Italia S.p.A., Candiolo, Italy	100.0
ZF Sachs Korea Co., Ltd., Changwon, Korea (Republic)	91.5
ZF Sachs South Africa Proprietary Limited, Alberton, South Africa	100.0
ZF Sachs Süspaniyon Sistemleri Sanayi ve Ticaret A.Ş., Gebze, Turkey	100.0
ZF Sales and Service (Malaysia) Sdn. Bhd., Petaling Jaya, Malaysia	100.0
ZF Services (China) Co., Ltd., Shanghai, China	100.0
ZF Services (Shanghai) Co., Ltd., Shanghai, China	100.0
ZF Services Australia Pty. Ltd., Arndell Park, Australia	100.0
ZF Services Belgium N.V.-SA, Brussels, Belgium	100.0
ZF Services España S.L.U., Sant Cugat del Vallès, Spain	100.0
ZF Services France S.A.S., Antony, France	100.0
ZF Services Hong Kong Limited, Hong Kong, China	100.0
ZF Services Korea Co., Ltd., Incheon, Korea (Republic)	100.0
ZF Services Middle East Limited Liability Company, Dubai, United Arab Emirates	49.0 <sup>4)</sup>
ZF Services Nederland B.V., Delfgauw, Netherlands	100.0
ZF Services Schweiz AG, Volketswil, Switzerland	100.0
ZF Services South Africa (Proprietary) Ltd., Johannesburg, South Africa	100.0
ZF Services Türk San. ve Tic. A.Ş., Istanbul, Turkey	100.0
ZF Services UK Limited, Nottingham, Great Britain	100.0
ZF Services, LLC, Vernon Hills, USA	100.0
ZF Services, S.A. de C.V., Guadalajara, Mexico	100.0
ZF Slovakia a.s., Trnava, Slovakia	100.0
ZF Staňkov s.r.o., Stankov, Czech Republic	100.0
ZF Steyr Ges.m.b.H., Steyr, Austria	100.0
ZF Steyr Präzisionstechnik GmbH, Steyr, Austria	100.0 <sup>3)</sup>
ZF Suspension Technology Guadalajara, S.A. de C.V., Guadalajara, Mexico	100.0
ZF Transmissions Gray Court, LLC, Gray Court, USA	100.0
ZF Transmissions Shanghai Co., Ltd., Shanghai, China	51.0
ZF TRW Automotive Holdings Corp., Livonia, USA	100.0
ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China	99.7
ZF Wind Power Antwerpen NV, Lommel, Belgium	100.0
ZF WIND POWER COIMBATORE LIMITED, Coimbatore, India	100.0
ZF YTO (Luoyang) Axle Co., Ltd., Luoyang, China	51.0

## Consolidated companies accounted for using the equity method

Domestic	Share in capital in %
doubleSlash Net-Business GmbH, Friedrichshafen, Germany	40.0
Ibeo Automotive Systems GmbH, Hamburg, Germany	40.0
<b>Foreign</b>	
	<b>Share in capital in %</b>
ABC Sistemas e Modulos Ltda., São Bernardo do Campo, Brazil	33.3
Brakes India Private Limited, Chennai, India	49.0
CSG TRW Chassis Systems Co., Ltd., Chongqing, China	50.0
Evercast, S.A. de C.V., Saltillo, Mexico	30.0
Exponentia S.A.S., Paris La Défense, France	50.0
Rane TRW Steering Systems Private Limited, Chennai, India	50.0
S.M. Sistemas Modulares Ltda., Taubate, Brazil	50.0
Shanghai Sachs Powertrain Components Systems Co., Ltd., Shanghai, China	50.0
Shanghai TRW Automotive Safety Systems Company Ltd., Shanghai, China	50.0
SOMIC ZF Components Limited, New Delhi, India	50.0
TH Braking Company S.A.S., Puteaux, France	50.0
TRW Sun Steering Wheels Private Limited, New Delhi, India	49.0
ZF Fonderie Lorraine S.A.S., Grosbliederstroff, France	49.0
ZF Liuzhou Axle Co., Ltd., Liuzhou, China	50.0
ZF PWK Mécacentre S.A.S., Saint-Étienne, France	50.0

<sup>1)</sup> The company lays claim to exemption in part or in full according to § 264, Section 3, HGB (German Commercial Code).

<sup>2)</sup> There is a profit and loss transfer agreement.

<sup>3)</sup> Exemption claimed in accordance with § 286, Section 3, HGB.

<sup>4)</sup> 100% voting rights

<sup>5)</sup> Dormant company

**40 COMPANY BODIES**

The members of the Supervisory Board and the Board of Management are listed on page 22.

Friedrichshafen, February 27, 2017

ZF Friedrichshafen AG  
The Board of Management



Dr. Stefan Sommer



Michael Hankel



Jürgen Holeksa



Dr. Franz Kleiner



Peter Lake



Wilhelm Rehm



Dr. Konstantin Sauer

# AUDIT OPINION <sup>1)</sup>

We have issued the following opinion on the consolidated financial statements and the group management report:

“We have audited the consolidated financial statements prepared by ZF Friedrichshafen AG, Friedrichshafen, comprising the income statement, the statement of comprehensive income, the statement of financial position, the statement of cash flows, the statement of changes in equity and the notes to the consolidated financial statements, together with the group management report for the fiscal year from January 1 to December 31, 2016. The preparation of the consolidated financial statements and the group management report in accordance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB [“Handelsgesetzbuch”: “German Commercial Code”] are the responsibility of the parent company’s management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Sec. 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements, complies with legal requirements and as a whole provides a suitable view of the Group’s position and suitably presents the opportunities and risks of future development.”

Stuttgart, March 3, 2017

Ernst & Young GmbH  
Wirtschaftsprüfungsgesellschaft

Meyer  
Wirtschaftsprüfer

Bürkle  
Wirtschaftsprüfer

<sup>1)</sup> Translation of Audit Opinion issued on the consolidated financial statements in German language.



The Annual Report is available in English and German;  
both versions can also be downloaded from the ZF Group website:  
[www.zf.com](http://www.zf.com).

Published by:  
© ZF Friedrichshafen AG  
88038 Friedrichshafen  
Germany

Editorial:  
Corporate Communications

Concept, layout and text:  
HGB Hamburger Geschäftsberichte GmbH & Co. KG, Hamburg  
Die Wortwerkstatt GmbH, Tübingen

Icons:  
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The Noun Project (p. 5, 11)

Print:  
Eberl Print GmbH, Immenstadt

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