

COMBINED MANAGEMENT REPORT

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DEUTSCHE TELEKOM AT A GLANCE

NET REVENUE

- We continued our growth trend as planned: Net revenue grew by 2.5 percent to EUR 74.9 billion.
- Our United States operating segment contributed revenue growth of 5.9 percent to this trend. In our Europe and Germany operating segments revenue also increased slightly by 1.2 percent and 0.7 percent respectively.
- In our Systems Solutions and Group Development operating segments we recorded declines in revenue of 1.1 percent and 3.6 percent respectively.
- On a comparable basis, i.e., excluding exchange rate effects and effects from changes in the composition of the Group, net revenue increased by as much as 3.6 percent.

ADJUSTED EBITDA

- Adjusted EBITDA grew by 3.8 percent to EUR 22.2 billion. Adjusted for exchange rate effects and changes in the composition of the Group, we ended the year exactly within the target corridor of EUR 22.4 billion to EUR 22.5 billion, communicated most recently.
- Due to the ongoing success of T-Mobile US, we generated an increase in adjusted EBITDA of 8.8 percent in the United States operating segment. Adjusted EBITDA in our Germany operating segment also grew, whereas our Europe, Systems Solutions, and Group Development operating segments recorded declines.
- At 29.7 percent, the Group's adjusted EBITDA margin increased slightly against the prior-year level of 29.3 percent. The EBITDA margin was 38.6 percent in Germany, 32.3 percent in Europe, and 26.1 percent in the United States.

EBIT

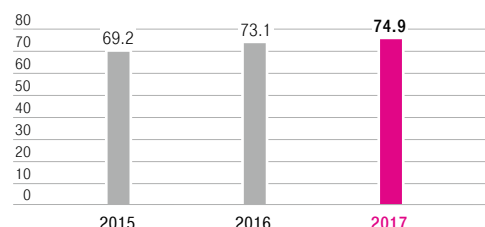
- EBIT increased by 2.4 percent to EUR 9.4 billion.
- EBITDA included positive net special factors of EUR 1.7 billion, mainly attributable to the reversal of impairment losses previously recognized for spectrum licenses at T-Mobile US (EUR 1.7 billion), to the sale of Strato (EUR 0.5 billion) and of further shares in Scout24 AG (EUR 0.2 billion), and to a settlement agreement concluded with BT (EUR 0.2 billion). The prior year had profited from generally higher net positive special factors of EUR 1.1 billion, primarily from the sale of our stake in the EE joint venture (EUR 2.5 billion) and from transactions for the exchange of spectrum licenses in the United States (EUR 0.5 billion). Special factors in connection with staff-related measures (EUR 0.6 billion) were down EUR 1.1 billion compared with the prior year.
- At EUR 14.6 billion, depreciation, amortization and impairment losses were up EUR 1.2 billion year-on-year, primarily due to the impairment of goodwill and property, plant and equipment in the Systems Solutions and Europe operating segments of EUR 2.2 billion in total (prior year: EUR 0.7 billion).

NET PROFIT

- Net profit increased by EUR 0.8 billion to EUR 3.5 billion.
- Loss from financial activities decreased by EUR 0.2 billion, mainly in connection with the EUR 1.5 billion (prior year: EUR 2.2 billion) impairments of our financial stake in BT recognized in profit and loss; negative remeasurement effects from the exercise and measurement of embedded derivatives at T-Mobile US had an increasing effect on loss from financial activities.
- The tax benefit which was mainly attributable to the remeasurement of deferred taxes at T-Mobile US as a result of the U.S. tax reform amounted to EUR 0.6 billion, while in the prior year there had been a tax expense of EUR 1.4 billion.
- Profit attributable to non-controlling interests increased by EUR 1.7 billion, primarily due to the reversal of impairment losses previously recognized for spectrum licenses and the remeasurement of deferred taxes at T-Mobile US.

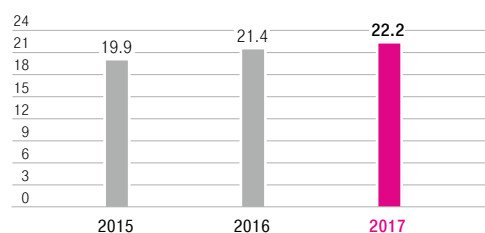
Net revenue

billions of €



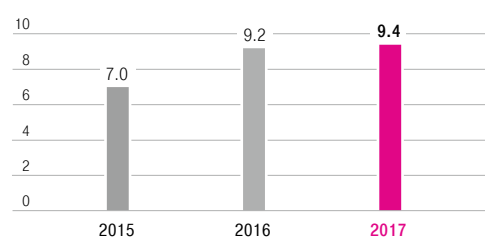
Adjusted EBITDA

billions of €



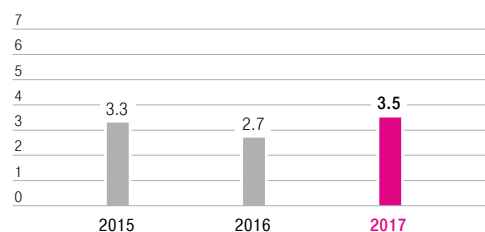
EBIT

billions of €



Net profit

billions of €

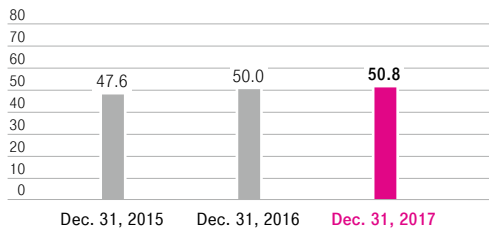


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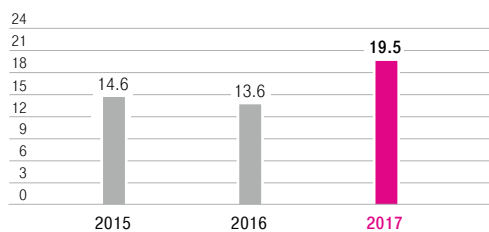
Net debt

billions of €



Cash capex

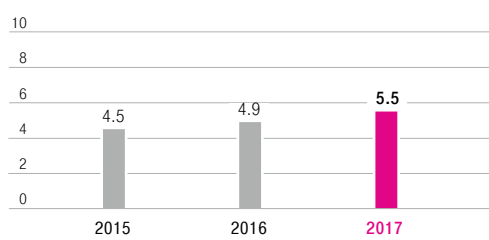
billions of €



Free cash flow

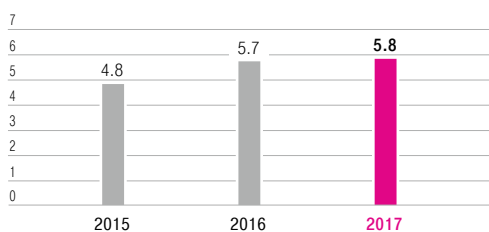
(before dividend payments and spectrum investment)

billions of €



ROCE

%



NET DEBT

- Net debt increased by EUR 0.8 billion to EUR 50.8 billion compared with the end of 2016.
- The increase was attributable to spectrum acquisition (EUR 7.4 billion), dividend payments – including to non-controlling interests – (EUR 1.6 billion), and the increase in liabilities from finance leases (EUR 1.0 billion). This increase was only partially offset by the positive effects from free cash flow (EUR 5.5 billion) and the sale of Strato (EUR 0.6 billion) and further shares in Scout24 AG (EUR 0.3 billion). Exchange rate effects of EUR 2.9 billion also had a positive effect.

CASH CAPEX

- Cash capex (including spectrum investment) increased from EUR 13.6 billion to EUR 19.5 billion.
- In the reporting period, mobile spectrum licenses were acquired for a total of EUR 7.4 billion, mainly in the United States and in Europe. EUR 7.2 billion of this total was attributable to the spectrum auction concluded in the United States in April 2017. In the prior-year period, mobile spectrum licenses were acquired for a total of EUR 2.7 billion, primarily in the United States and Europe operating segments.
- Excluding the effects of spectrum acquisitions, cash capex increased by EUR 1.1 billion, primarily in the United States, Germany, and Europe operating segments. In each case, this was due to investments we have made in the build-out and modernization of our networks.

FREE CASH FLOW (BEFORE DIVIDEND PAYMENTS AND SPECTRUM INVESTMENT)

- Free cash flow increased by EUR 0.6 billion to EUR 5.5 billion and was thus exactly on target despite a consistently high level of capital expenditure.
- The year-on-year increase of EUR 1.7 billion in net cash from operating activities, which profited mainly from the positive business development of the United States operating segment, had an increasing effect.
- The year-on-year increase of EUR 1.1 billion in cash capex (before spectrum investment) reduced free cash flow.

ROCE

- Our key performance indicator ROCE (return on capital employed) improved by 0.1 percentage points in the reporting period to reach 5.8 percent.
- This was attributable to an increase in net operating profit after taxes (NOPAT) while the average amount of net operating assets (NOA) remained virtually stable over the year.
- NOPAT increased in 2017 on the back of significantly better adjusted EBITDA and the positive special factors. Impairment losses recognized in the reporting year on goodwill and property, plant and equipment had a negative effect on NOPAT.
- Despite the acquisition of spectrum in the United States and a consistently high level of investment in connection with our integrated network strategy, average NOA remained virtually unchanged in 2017, due to lower cash and cash equivalents on average and lower goodwill, among other effects.



For a more detailed explanation, please refer to the section "Development of business in the Group," page 49 et seq.

HIGHLIGHTS IN THE 2017 FINANCIAL YEAR

BOARD OF MANAGEMENT

As of January 1, 2017, the Deutsche Telekom AG Group Board of Management was extended to include an additional Board department. The new Technology and Innovation department is headed by Claudia Nemat. Srinivasan (Srini) Gopalan also joined the Board of Management as of January 1, 2017 to head up the Europe Board department. The number of Board of Management members has thus been increased from seven to eight. Dr. Dirk Wössner was appointed as the new Board member responsible for Germany effective January 1, 2018. He succeeds Niek Jan van Damme, whose position as a Board member ended on December 31, 2017. In addition, Adel Al-Saleh was appointed as the new Board member responsible for T-Systems and as CEO of T-Systems International GmbH, both effective January 1, 2018. Adel Al-Saleh succeeds Reinhard Clemens, whose position on the Board of Management also ended effective December 31, 2017.

CORPORATE TRANSACTIONS

Following approval by the Bundeskartellamt, we completed the sale of our hosting service provider Strato to United Internet for a purchase price of EUR 0.6 billion effective midnight March 31, 2017.

The sale of **DeTeMedien** to a consortium of medium-sized publishers was completed on June 14, 2017. The purchase price, which is not to be disclosed pursuant to the agreement, comprises a cash component along with additional elements that included a settlement of the dispute with the buyers, who for several years have pursued legal proceedings concerning the level of charges for subscriber data. In addition, the publishers have assumed the obligation to publish subscriber directories.

In an accelerated book-building process, effective June 23, 2017 we placed the remainder of our direct stake of 9.26 percent in **Scout24 AG** on the market at a price of EUR 32.20 per share; until that point, it had been accounted for in the consolidated financial statements using the equity method. The proceeds from the sale amounted to EUR 319 million.

On November 9, 2017, T-Mobile US signed an agreement to acquire 100 percent of the shares in online TV provider **Layer3 TV**. The agreement includes a cash purchase price of around USD 325 million. The transaction was completed on January 22, 2018. T-Mobile US expects the acquisition to further strengthen its TV and video portfolio and its plans include rolling out its own TV service in 2018.

On December 15, 2017, we signed an agreement with the Tele2 Group on the acquisition of telecommunications provider **Tele2 Netherlands** by T-Mobile Netherlands. This transaction is part of our long-term strategy and will establish a stronger, more sustainable provider of convergent fixed-network and mobile services on the Dutch market. Tele2 Group receives a purchase price in the form of a 25.0 percent stake in T-Mobile Netherlands and a cash component of EUR 190 million. We expect the transaction to close in the second half of 2018, following approval by the responsible antitrust authority.

On December 22, 2017, T-Mobile Austria agreed to acquire Austria's leading cable operator, **UPC Austria**, from Liberty Global. The agreed purchase price is around EUR 1.9 billion in cash less net debt. In line with our strategy, this acquisition will allow us to offer convergent product bundles to our customers on the European market. We expect the transaction to close in the second half of 2018, following approval by the antitrust authority and the City of Vienna.

SIGNIFICANT IMPAIRMENT LOSSES AND REVERSAL OF IMPAIRMENT LOSSES

In our Systems Solutions operating segment, the unexpected decline in order entry prompted **intra-year impairment testing** of the assets assigned to this unit. As a result, we have recognized an impairment loss on goodwill of EUR 1.2 billion. In the course of the **annual impairment tests** for our Europe operating segment, we recognized an impairment loss on goodwill and property, plant and equipment of EUR 0.9 billion – mainly relating to Poland. In our Group Development operating segment, we reduced the fair value of our **financial stake in BT** by around EUR 1.5 billion in 2017 due to the share price performance and the exchange rate effect. Impairment losses on spectrum licenses previously acquired by T-Mobile US were **partially reversed**, increasing the carrying amount by EUR 1.7 billion. This reversal of impairment losses is attributable to the fact that the grounds for the impairment loss recognized for the United States cash-generating unit in 2012 no longer apply thanks to the performance of T-Mobile US' share price. The increase in the value of the licenses was indicated by the results of the spectrum auction held by the U.S. regulatory authority, the Federal Communications Commission (FCC), which was completed in 2017. Of the EUR 1.7 billion after accounting for deferred taxes, income of EUR 0.6 billion is attributable to the owners of the parent (net profit (loss)).

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FINANCING

In the first quarter of 2017, T-Mobile US prematurely canceled senior notes held by external investors with a total volume of USD 8.25 billion. In addition, in December 2017, T-Mobile US prematurely canceled senior notes originally due in 2022 with a nominal volume of USD 1 billion. Repayment was made in January 2018.

In 2017, Deutsche Telekom International Finance B. V. issued euro bonds with a total volume of EUR 5.0 billion and U.S. dollar bonds with a total value of USD 3.5 billion. In addition, Deutsche Telekom International Finance B. V. issued foreign-currency bonds with a total equivalent value of EUR 0.6 billion at particularly favorable terms. In 2017, T-Mobile US issued senior bonds with a total volume of USD 1.5 billion with external investors.

INTRA-GROUP FINANCING

In order to optimize the financing situation at T-Mobile US and the Group as a whole, in 2017 T-Mobile US was largely financed on an intra-Group basis. T-Mobile US received internal term loans and bonds in the volume of USD 11.5 billion.

SHARE BUY-BACK PROGRAM AT T-MOBILE US

In early December 2017, T-Mobile US announced a share buy-back program. Under the program, T-Mobile US may, until the end of 2018, buy back ordinary shares of the company in the capital markets for a total amount of up to USD 1.5 billion. By December 31, 2017, the company had already bought back ordinary shares valued at USD 0.4 billion (approx. EUR 0.4 billion).

TAX REFORM IN THE UNITED STATES

The reduction in the applicable federal tax rate (from 35 percent to 21 percent) as of the 2018 financial year resulted in a non-cash deferred tax benefit of EUR 2.7 billion for T-Mobile US due to the remeasurement of the surplus amount of deferred tax liabilities. EUR 1.7 billion of this benefit is attributable to the owners of the parent (net profit (loss)).

INVESTMENTS IN NETWORKS AND NEW SPECTRUM

The spectrum auction at which T-Mobile US acquired 1,525 licenses for 600 MHz spectrum – 31 MHz on average nationwide – for a purchase price of USD 7.99 billion ended in April 2017. In addition, swap arrangements were also consummated at T-Mobile US in the reporting year, giving rise to a total non-cash gain of EUR 0.1 billion.

Clear commitment to building out broadband. We are working hard to build out fiber-optic infrastructure and laid 40,000 kilometers of fiber-optic cable in the reporting year, far more than the 30,000 kilometers originally planned. For 2018, the planned figure rises to as much as 60,000 kilometers. Our fiber-optic network, which is extending over 455,000 kilometers, is already the largest in Germany and has grown by some 25,000 kilometers per year on average since 2010. The majority of the Group’s investment volume in Germany, which currently amounts to over EUR 5 billion a year, is for the build-out of broadband networks. A main focus of our FTTH activities is providing coverage to business parks and we launched a special campaign to put the infrastructure in place for 100 business parks, the majority of which will be covered by the end of 2018. This is in addition to subsidized build-out activities and partnerships with competitors. At the same time, our program to supply 80 percent of households with a download bandwidth of at least 50 Mbit/s continued, with 3 million new households connected to our high-speed network in 2017. We are also working non-stop in our European companies to upgrade our networks with optical fiber. [SDG](#)

Project launch of “LTE everywhere.” In March 2017, we launched a further step in the network build-out with the large-scale roll-out of LTE 900 in Germany. This will get our network ready for 5G, the communications standard of the future. The 900 MHz spectrum range is especially suited to carrying the mobile signal deeper into buildings and homes. This frequency will enable us to offer LTE by the end of 2019 everywhere where mobile telephony is already possible today. In addition, we are fitting out every cell site in Germany with the RAN (Single Radio Access Network) technology. The conversion of the technology and the use of LTE 900 are additional elements with which we are preparing our network for 5G.

Network build-out for Narrowband IoT in eight countries. We are clearing the way for the Internet of Things with NarrowBand IoT (NB IoT), which will not only be used for 4G but also for 5G. We are upgrading the network to support sensors that, for instance, display vacant parking spaces or indicate how full the local trash cans are. At the start of 2017, we began building out the network infrastructure for these applications in Germany and the Netherlands. We will make the existing NarrowBand IoT network coverage available in additional cities in Greece, Poland, Hungary, Austria, Slovakia, and the Czech Republic. [SDG](#)

Mobile campaign in Bavaria. We plan to install 1,000 additional cell sites in Bavaria and cover 135 previously unserved areas by the end of 2020. This will help the Bavarian state government roll out mobile coverage to areas considered difficult to develop due to their topography and economic circumstances. [SDG](#)



INNOVATION

"Feel connected all over Europe" was our motto at the 2017 Mobile World Congress in Barcelona. At the trade fair, we focused on the communications standard of the future, 5G. We used augmented reality and robotics to demonstrate that 5G is much more than just high-speed Internet, looked to the future of a connected Europe, and brought exciting developments to visitors' fingertips: augmented reality and position tracking on a slot-car track, smart parking, and predictive maintenance solutions using the Internet of Things, and the secure, Europe-wide Pan-Net. [SDG](#)

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Europe's first 5G antennas and new 5G applications. 5G technology is expected to launch worldwide in 2020. Four radio cells in the Deutsche Telekom network are demonstrating the future of communication right now. We have launched low-latency programs at our hub:raum sites in Berlin and Krakow to drive the development of new applications for 5G. These programs are aimed specifically at innovative developers who want to develop products and services using edge computing and enhance the performance of the 5G network at an early stage. We are also planning to pilot 5G for industry, for example, with the Port of Hamburg, which needs a network tailored specifically to its needs. In 2017, we showcased the potential of 5G technology in live demonstrations in Romania and Greece.

11 SUSTAINABLE CITIES AND COMMUNITIES



Our motto for CeBIT was: "Digitization. Simply. Make it happen."

At our trade fair booth, we demonstrated specific success stories and solutions for new digital business models and secure networks centering around the key trends, i.e., the Internet of Things, drones, 5G, cloud services, virtual reality, smart city, and artificial intelligence. In addition, we unveiled new IoT starter kits for companies and demonstrated the opportunities of Narrowband IoT, the new network for IoT mass applications.

10 REDUCED INEQUALITIES



New Mobility at IAA 2017. At the International Motor Show (IAA), we showcased the digital mobility of the future at the International Motor Show (IAA). Like the smart parking app, Park and Joy, which makes it easy to find a parking space: find, book, and pay – it's all done using the mobile app. The app displays and guides drivers to vacant parking spaces. The Digital Drive retrofit option transmits information on a vehicle's condition, location, and driving behavior direct to the user's smartphone. In addition, at **eMove 360°**, the first international trade fair for Mobility 4.0, we presented an end-to-end electro mobility service chain, from the installation, maintenance, service, and logistics of electric charging points, IT software and operation, to billing between consumers and the operators of charging points. [SDG](#)

3 GOOD HEALTH AND WELL-BEING



For further information on our innovations, please refer to the section "Innovation and product development," page 89 et seq.

13 CLIMATE ACTION



Smart city progress in Europe. Our goal is to be a leading provider of smart city solutions in Europe and a trustworthy, reliable, and long-term partner for the digitalization of cities. We have already equipped 18 European cities in 10 countries with digital solutions, and the Bonn Smart City project was officially launched at the UN Climate Change Conference in November 2017. The Budapest-based European Smart Solutions Center (ESC) plays a key role in the project, providing centralized functions such as marketing, partnering, pre-sales, and delivery services and working closely with local experts. At the Smart City World Congress in Barcelona in November 2017, we showcased a host of smart city solutions along with live data from existing projects: smart transport solutions including smart parking, smart electric vehicle charging, traffic and passenger management systems, smart waste management, smart lighting, smart metering, and smart public safety. We also featured NarrowBand IoT-based solutions and the Mayor's Dashboard – a web application that enables city administrators to monitor, control, and optimize their city infrastructure and applications conveniently from any device. Together with Cisco, we developed a package for cities to implement tailor-made, secure, and user-friendly WiFi4EU solutions with ease. In the mySmartLife project, we are testing other innovative solutions for energy supplies, mobility and communications with the City of Hamburg and other partners. [SDG](#)

With Smart Speaker, your home listens to your every word. We collaborated with internationally renowned research and development partners to create voice control technology for our services. The Smart Speaker is an intelligent assistant that makes life easier by allowing users to control our services with a simple call of "Hello Magenta." The voice-activated assistant learns continually and can be used to operate connected devices in the user's home, like our EntertainTV service. The Smart Speaker will be available in Germany in the first half of 2018. [SDG](#)

Sea Hero Quest VR – using modern virtual reality capabilities for dementia research. In the #gameforgood initiative, we are working in partnership with academics and game developers to collect data about the spatial orientation of healthy people. A further development of the mobile games app Sea Hero Quest uses modern virtual reality capabilities to refine the existing standard data for spatial orientation. To date, anonymous data from over three million players has been analyzed and used as the basis for defining the first ever standard data on human spatial orientation. This is an important step towards developing new ways of diagnosing dementia at an early stage. [SDG](#)

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PARTNERSHIPS

Partnerships are key to the success of our Group. We have successfully partnered with key players for many years, including Apple, Samsung, and Microsoft. We again entered into and expanded a large number of partnerships in the reporting year. We would like to present some of them in detail:

International partnership with Netflix. Our international partnership with streaming service Netflix will benefit all of our international subsidiaries by bringing hit shows exclusive to Netflix to our customers' screens. EntertainTV customers in Germany have been able to access Netflix shows in ultra-HD directly via their EntertainTV set-top box since October 2017, while T-Mobile Polska has been offering the Netflix service to customers in Poland since 2016. A new offer just launched by T-Mobile Netherlands combines its extremely popular Unlimited rate plan with the option to try Netflix for six months at no cost. In addition, our customers in Germany, Poland, Croatia, Greece, and Romania can stream unlimited Netflix titles via the mobile network using the free add-on option StreamOn, which includes Netflix. At T-Mobile US, Netflix is part of the Un-carrier campaign launched in September 2017.

Partnerships to drive the fiber-optic build-out. Together with EWE, we are planning to build out the fiber-optic network and directly connect one million private households. Specifically, we plan to jointly build out fiber-optic infrastructure in the regions of Lower Saxony, North Rhine-Westphalia, and Bremen, with a main focus on rural areas, over the next ten years. EWE and Deutsche Telekom intend to invest a total of EUR 2 billion in this initiative, which is scheduled to begin in mid-2018. The partnership still has to be approved by the Bundeskartellamt. Going forward, we will utilize the infrastructure of five city network operators in Bavaria and Baden-Württemberg. The partnerships cover some 125 thousand households, roughly half connected through municipal fiber-optic lines to the home (FTTH and FTTB) and through VDSL via fiber-optic lines to the street cabinets (FTTC). Previously, we agreed similar partnerships with EWE Tel, NetCologne, and innogy TelNet.

Partnership between BT and T-Systems improves global reach for international customers. At the beginning of March 2017, BT and T-Systems signed an agreement giving T-Systems access to numerous BT network services in future. T-Systems and BT will link up their networks in specific cases in the future to even better meet the needs of individual customers. This will not only increase T-Systems' international reach, but also allow it to offer its customers global network services such as MPLS (Multiprotocol Label Switching) with seamless connectivity. [SDG](#)

Toll4Europe GmbH commences business activities. In April 2017, T-Systems together with Daimler AG and DKV Euro Service GmbH & Co. KG established Toll4Europe GmbH to develop and implement a European Electronic Toll System (EETS) for vehicles over 3.5 metric tons. With a 55 percent stake, T-Systems controls the company. A toll box that can be used across Europe is scheduled to be available from 2018. Belgium and Germany will be connected to the system from its launch, with France, Austria, Spain, Portugal, Italy, and Hungary expected to either join at the same time or at a later date.

Telekom Open IoT Labs: Opening of an enterprise lab with Fraunhofer IML. We have added an industrial IoT component to our existing network of research and development organizations in the form of the Telekom Open IoT Labs, which were established in November 2017 together with the Fraunhofer Institute for Material Flow and Logistics in Dortmund. Up to six experts from the Fraunhofer Institute and three of our IoT experts are jointly developing, testing, and readying Internet of Things solutions for market launch with the aim of optimizing processes in the manufacturing, logistics, and aerospace industries. The Labs are open to working with further companies interested in developing application-specific IoT prototypes. [SDG](#)

Membership in the Industrial Data Space Association (IDSA). In February 2017, we became a member of the Industrial Data Space Association e.V. (IDSA), a non-profit organization that has set itself the task of advancing the general conditions for a digitally connected economy and to establish secure exchange of data. We contribute in particular our expertise in the area of data security to this alliance of research and industry partners. [SDG](#)

Together with Huawei, we are connecting the Internet of Things for KONE. Over the next few years, industrial company KONE will be working with T-Systems and hardware and technology vendor Huawei to connect over a million elevators, escalators, and doors to the cloud. As KONE's longstanding IT service partner, T-Systems helped to develop the 24/7 connected service and used its expertise to help with the integration into the existing system landscape. KONE's goal is to optimize maintenance processes, establish "predictive" remote diagnostics systems, and ensure that service technicians are better prepared for site visits.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE





For more information, please go to www.telekom.com/media

NEW PRODUCTS AND RATE PLANS

Of course, we again launched new products, services and rate plans on the market in the reporting year, some of which are presented below:

StreamOn: We are revolutionizing the mobile market. StreamOn was launched in April 2017 and is a revolutionary new rate option that enables Magenta customers to stream music and videos over the mobile network to their smartphones without using up the high-speed data volume included in their rate plans. We also offer similar options, for example, in Croatia, Poland, Romania, Greece, and at T-Mobile US.

StartTV: The simple way to switch to digital TV. In May 2017, we added StartTV to our portfolio. It is a simple, cost-effective way to switch to digital television. From just EUR 2 a month, StartTV includes around 100 channels (22 in HD), a program guide, and a smart search function. Customers can additionally purchase further HD channels and the "EntertainTV mobil" option for on the go.

Telekom Sport: The world of sport in one offer. In August 2017, we expanded our live sport offering. One highlight is the option of watching the original Sky conferences of the soccer Bundesliga, the UEFA Champions League, and the games of the DKB Handball Bundesliga (HBL) live via Sky Sport Kompakt. The program package also contains all the games of the 3rd soccer league, top games of the women's Bundesliga, content from FC Bayern.tv live, and all games of the Basketball Bundesliga and the German ice hockey league. We also added combat sports events to the service at the end of the year.

MagentaEINS 12.0: More for families and young people. MagentaEINS 12.0 is full of great benefits for families. Since September 2017, customers can add up to four low-cost Family SIM Cards for partners and family members to their mobile contracts. For all customers under the age of 27, MagentaEINS Young offers an exclusive benefit: MagentaZuhause Surf allows a flexible combination of mobile communications and Internet at home. This offer is targeted at all young people who need a mobile contract and a high-performance DSL connection without telephony.

In January 2017, T-Mobile US introduced Un-carrier Next, where monthly wireless service fees and sales taxes are included in the monthly recurring charge for T-Mobile ONE. T-Mobile US also unveiled Kickback on T-Mobile ONE, where participating customers who use 2 GB or less of data in a month, will get up to a USD 10

credit on their next month's bill per qualifying line. In addition, the Un-contract for T-Mobile ONE with the first-ever price guarantee on an unlimited 4G LTE plan was introduced which allows current T-Mobile ONE customers to keep their price for service until they decide to change it. In September 2017, T-Mobile US introduced **Un-carrier Next: Netflix On Us** through an exclusive new partnership with Netflix where a standard monthly Netflix service plan is included at no charge to qualifying T-Mobile ONE customers on family plans.

Global network service for business. In September 2017, T-Systems began offering corporate customers international network connections and services with high-speed availability. This service is based on the ngena network – the Next Generation Enterprise Network Alliance – a global alliance established by us and several other partners. The resulting business model remains unique so far in the industry: All ngena partners connect up their networks to create one global, highly standardized network. Thanks to state-of-the-art technology and software-based management, corporate networks and data connections as virtual private networks (VPN) can be set up for multinational corporate customers much faster than before. T-Systems is the first partner in the alliance to launch a network service based on the ngena platform. The service is called Smart SD-WAN powered by ngena (software-managed wide area network) and is available in various access formats.

Digital revolution for small companies: MagentaBusiness POS. Offering small companies digital solutions that have previously been reserved for large corporations, thereby making them fit for the digital age: That is the central idea behind the partnership we signed with IT startup enfore. enfore has developed an integrated point-of-sale/service (POS) system, we make our network available, and our POS specialists provide service and support. We have been marketing the product since September 2017 as a complete solution under the name MagentaBusiness POS.

AWARDS

We received a large number of awards again in the reporting year – among other things for our outstanding networks, our excellent service, our innovative marketing concepts, and for our extremely valuable Telekom brand. The following graphic summarizes the main awards received in 2017.

8 DECENT WORK AND ECONOMIC GROWTH



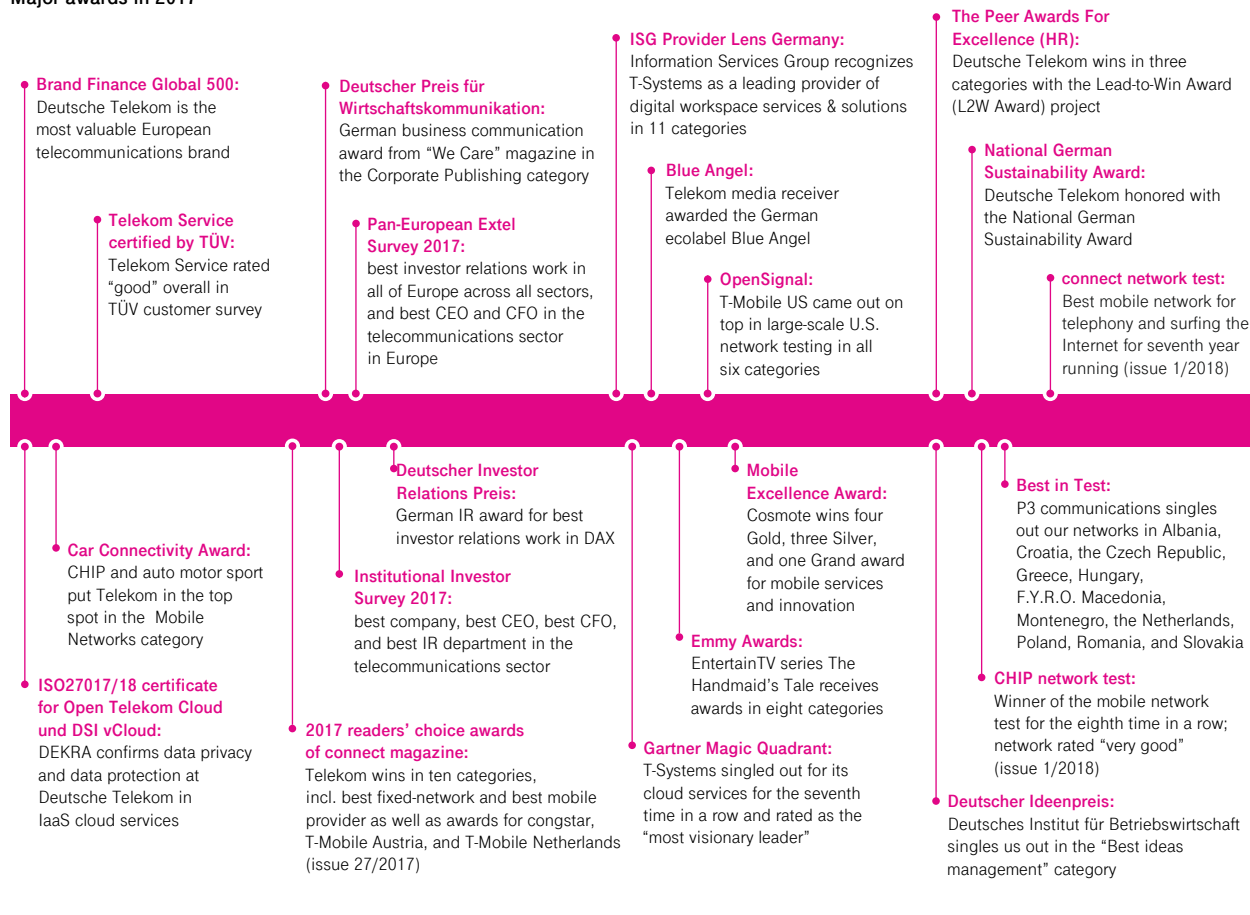
For details on more awards, please go to www.telekom.com/media



For information on awards received for our HR activities, please refer to the section "Employees," page 96 et seq.

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Major awards in 2017



GROUP ORGANIZATION

BUSINESS ACTIVITIES AND ORGANIZATION

Business activities. With 168 million mobile customers, around 28 million fixed-network and around 19 million broadband lines, we are one of the leading integrated telecommunications companies worldwide. We offer our consumers fixed-network/broadband, mobile, Internet, and Internet-based TV products and services, as well as ICT solutions for our business and corporate customers. We have an international focus and are represented in more than 50 countries. □ In the 2017 financial year, we generated around 67.2 percent of net revenue, i.e., EUR 50.4 billion, outside Germany. Overall, we employ some 217,300 people (December 31, 2017).

Fixed-network business includes all voice and data communications activities based on fixed-network and broadband technology. This includes the sale of terminal equipment and other hardware, as well as the sale of services to resellers. Our mobile communications business offers mobile voice and data services to consumers

and business customers; in addition, we sell mobile devices and other hardware. We also sell mobile services to resellers and to companies that buy network services and market them to third parties (mobile virtual network operator, or MVNOs). Drawing on a global infrastructure of data centers and networks, our corporate customer arm, T-Systems, operates information and communication technology (ICT) systems for multinational corporations and public-sector institutions.

We believe that economic, social, and ecological aspects can be reconciled; sustainability is the guiding principle behind all our actions. A range of sector-specific and general conditions are crucial to the success of business activities. These include first-rate quality at reasonable costs – in data privacy and security, in customer service, in network build-out, and in materials procurement – as well as qualified staff and good working conditions within our own Group, but also at our suppliers. It is also important to consider the potential consequences of climate change for our business activities: for example, to construct our network infrastructure in

□
For information on our footprint, please visit www.telekom.com/worldwide



such a way that it is protected from severe weather conditions, changes in temperatures, and higher wind speeds. We also help our customers to reduce their carbon footprint with innovative products and services. Furthermore, we want to reduce the Group's CO₂ emissions despite rapid growth in data traffic and the network build-out that this requires. Also beyond our core business, we do everything we can to ensure that our actions are socially acceptable. For us, this means conducting ourselves in a way that is ethical and compliant with the law and informing and involving our stakeholders in a transparent way. [SDG](#)

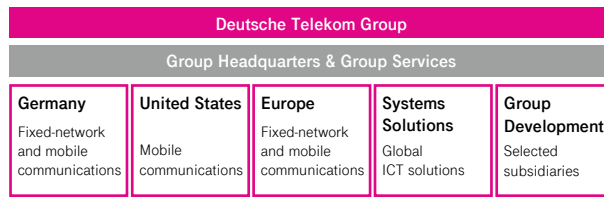
Our responsible corporate governance and business success are based on our shared corporate values and our Guiding Principles, which are as follows:

- Customer delight and simplicity drive our action
- Respect and integrity guide our behavior
- Team together – Team apart
- Best place to perform and grow
- I am T – count on me

We want to be a sustainably growing company that delights its customers, creates value for its investors, and in which employees enjoy their work.

Organization. Our financial reporting conforms with our Group strategy and is based on the following organizational structure.

Organizational structure



Our Group is divided into five operating segments, which we describe in detail below.

Our **Germany** operating segment comprises all fixed-network and mobile activities for consumers and business customers in Germany. In addition, it provides wholesale telecommunications services for our Group's other operating segments. The organization for consumers and business customers and for customer services were restructured as part of a reorganization as of July 1, 2017 with the aim of enabling a customer-centric sales approach for consumers and business customers with separate sales companies for each. Since then, network build-out has been managed entirely by the Technology business unit in the Germany operating segment. In addition to consumer and business customer business, the segment focuses on wholesale business. As a pioneer of digitalization, the Germany operating segment offers its customers an individual service and product portfolio that is innovative while at the same time secure and simple.

Our **United States** operating segment combines all mobile activities in the U.S. market. T-Mobile US is the third largest provider in the United States and its mobile network offers the highest transmission speeds as well as high network coverage. T-Mobile's success on the U.S. mobile market has been built on the back of the various Un-carrier initiatives launched in the last few years. The company continues to build out its network with the 600 MHz spectrum acquired in April 2017 and the previously acquired A-block spectrum, thereby substantially further increasing capacity and quality. In addition to the network build-out, the company has also significantly expanded its sales network.

Our **Europe** operating segment comprises all fixed-network and mobile operations of the national companies in Greece, Romania, Hungary, Poland, the Czech Republic, Croatia, Slovakia, Austria, Albania, the F.Y.R.O. Macedonia, and Montenegro. The agreed acquisition of cable network operator UPC Austria will help us transform our subsidiary in Austria into a fully integrated provider. In addition to consumer business, most of our national companies also offer ICT solutions for business customers. On January 1, 2017, management of the Netherlands subsidiary was transferred to our Group Development operating segment. The new Technology and Innovation Board department is now responsible for the GNF (Global Network Factory) and Group Technology units as well as the Pan-Net companies; this new Board department is part of the Group Headquarters & Group Services segment. The International Carrier Sales & Solutions unit (ICSS) – the main part of our international wholesale business – remains within our Europe operating segment. As part of our international wholesale business, we sell wholesale telecommunications services to our operating segments as well as to third parties.

As a leading ICT service provider, our **Systems Solutions** operating segment offers business customers integrated solutions for fixed and mobile networks, highly secure data centers, and a comprehensive cloud ecosystem made up of standardized platforms and global partnerships. The offering primarily includes services from the cloud, M2M, and security solutions, complementary, standardized mobile and fixed-network products, as well as solutions for virtual collaboration and IT platforms. They form the basis for the digital business models of our corporate customers. The business of T-Systems is mapped by four business areas: the IT Division, the TC Division (Telecommunications), the Digital Division, and Telekom Security.


Since January 1, 2017, we have reported on the new **Group Development** operating segment: This includes T-Mobile Netherlands (previously part of our Europe operating segment), Deutsche Funkturm (DFMG, previously part of our Germany operating segment), Deutsche Telekom Capital Partners (DTCP), and our equity investments in BT and Ströer SE & Co. KGaA, as well as Strato AG, which was sold in March 2017, and the stake in Scout24 AG, which was sold in June 2017 (all previously part of our Group Headquarters & Group Services segment). We want to actively manage these units and subsidiaries and increase their value, with the aim of giving them the level of entrepreneurial freedom they need and thus promoting their strategic further development. The management teams maintain an intensive dialog with the segment


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management and the relevant supervisory and advisory boards. The Group functions of Mergers & Acquisitions and Strategic Portfolio Management have also been assigned to Group Development.

Group Headquarters & Group Services comprises all Group units that cannot be allocated directly to one of the operating segments. Since January 1, 2017, the segment also reports on our new Technology and Innovation Board department. As the organization that sets the direction and provides momentum, it defines strategic aims for the Group, ensures they are met, and becomes directly involved in selected Group projects. Group Services provides services to the entire Group; in addition to typical services such as financial accounting, human resources services, and operational procurement, Group Services also includes agency services, which are provided by our personnel service provider, Vivento. On the one hand, it is in charge of securing external employment opportunities for employees, mainly civil servants, predominantly in the public sector. On the other, Vivento also seeks to strategically place them internally, with the aim of retaining professional expertise within the Group, so as to reduce the use of external staff. Further units are Group Supply Services (GSUS) for our real estate management and our strategic procurement, and MobilitySolutions, which is a full-service provider for fleet management and mobility services.

Our Technology and Innovation Board department unites the cross-segment network, innovation and IT activities of our Germany, Europe and Systems Solutions operating segments. These include Deutsche Telekom IT, which focuses on the Group's internal national IT projects, and our central innovation unit, Product Innovation, which works closely with our operating segments to develop new business areas and create products. Furthermore, there are the units Global Network Factory (GNF), Group Technology and Pan-Net: GNF manages and operates a global network for providing wholesale customers with voice and data communication. Group Technology ensures efficient and customized provision of technologies, platforms, and services for mobile and fixed-network communications. Pan-Net is responsible for the shared pan-European network and for developing and providing services for our European national companies.

The prior-year comparative figures for the organizational measures in connection with the new Technology and Innovation Board department and the Group Development operating segment have been adjusted retrospectively. 

Changes in the organizational structure from January 1, 2018. We integrated Vivento Customer Services GmbH, a provider of call center services, into our Germany operating segment as of January 1, 2018; previously it was part of our Group Headquarters & Group Services segment. 

MANAGEMENT AND SUPERVISION

As of December 31, 2017, Board of Management responsibilities were distributed across eight Board departments. Five of these are the central management areas:

- Chairman of the Board of Management

and the Board departments

- Finance
- Human Resources
- Data Privacy, Legal Affairs and Compliance
- Technology and Innovation

In addition, there are three segment-based Board departments:

- Germany
- Europe
- T-Systems.

Changes in the composition of the Board of Management. At its meeting on June 30, 2016, the Supervisory Board of Deutsche Telekom AG resolved to extend the Group Board of Management by setting up a new Board department Technology and Innovation. The new department is headed by Claudia Nemat effective January 1, 2017, who was previously responsible for the Europe and Technology department. At its meeting on June 30, 2016, the Supervisory Board of Deutsche Telekom AG also appointed Srini Gopalan as the new Board member responsible for Europe effective January 1, 2017.

In a resolution reached on July 18, 2017, the Supervisory Board of Deutsche Telekom AG complied with the request of Niek Jan van Damme, the Board of Management member responsible for Germany at Deutsche Telekom AG, to terminate his appointment as a Board member effective midnight, December 31, 2017. At its meeting on July 18, 2017, the Supervisory Board of Deutsche Telekom AG also appointed Dr. Dirk Wössner as the new Board member responsible for Germany effective January 1, 2018.

The Supervisory Board of Deutsche Telekom AG resolved in its meeting on September 13, 2017, in agreement with Reinhard Clemens, the Board of Management member responsible for T-Systems at Deutsche Telekom AG, to terminate his appointment as a Board member effective midnight, December 31, 2017. At its meeting on September 13, 2017, the Supervisory Board of Deutsche Telekom AG also appointed Adel Al-Saleh as the new Board member responsible for T-Systems effective January 1, 2018.

Dr. Thomas Kremer was reappointed as member of the Board of Management responsible for Data Privacy, Legal Affairs and Compliance effective June 1, 2017 as per a resolution of August 30, 2016. Dr. Christian P. Illek was reappointed as member of the Board of Management responsible for Human Resources effective April 1, 2018 as per a resolution of May 30, 2017.




For more information, please refer to the Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.



For more information, please refer to the section "Forecast," page 101 et seq.

Changes in the composition of the Supervisory Board (shareholders' representatives). The shareholders' meeting on May 31, 2017 elected Dagmar P. Kollmann to the Supervisory Board for another term of office. Dr. Wulf H. Bernotat died on August 27, 2017. He had been a member of the Supervisory Board of Deutsche Telekom AG since January 1, 2010. Marget Suckale was court-appointed to the Supervisory Board of Deutsche Telekom AG effective September 28, 2017.

Changes in the composition of the Supervisory Board (employees' representatives). Sylvia Hauke resigned from her position as a member of the Supervisory Board of Deutsche Telekom AG effective midnight, June 30, 2017. Karin Topel was court-appointed to the Supervisory Board of Deutsche Telekom AG effective July 1, 2017. Hans-Jürgen Kallmeier resigned from his position as a member of the Supervisory Board of Deutsche Telekom AG effective midnight, December 31, 2017. Odysseus Chatzidis was court-appointed to the Supervisory Board of Deutsche Telekom AG effective January 3, 2018.

The Supervisory Board of Deutsche Telekom AG advises the Board of Management and oversees its management of business. It is composed of 20 members: Ten represent the shareholders and ten the employees. 




For details on the activities of the Supervisory Board in the reporting year, please refer to page 7 et seq.

The members of the Board of Management are appointed and discharged in accordance with § 84 and § 85 of the German Stock Corporation Act (Aktiengesetz – AktG) and § 31 of the German Codetermination Act (Mitbestimmungsgesetz – MitbestG).

Amendments to the Articles of Incorporation are made pursuant to § 179 and § 133 AktG and § 18 and § 21 of the Articles of Incorporation. According to § 21 of the Articles of Incorporation, the Supervisory Board is authorized, without a resolution by the shareholders' meeting, to adjust the Articles of Incorporation to comply with new legal provisions that become binding for the Company and to amend the wording of the Articles of Incorporation.

Composition of the Board of Management

Members of the Board of Management	Department
Timotheus Höttges	Chairman of the Board of Management (CEO)
Reinhard Clemens (until Dec. 31, 2017) Adel Al-Saleh (from Jan. 1, 2018)	T-Systems
Niek Jan van Damme (until Dec. 31, 2017) Dr. Dirk Wössner (from Jan. 1, 2018)	Germany
Thomas Dannenfeldt	Finance (CFO)
Srini Gopalan	Europe
Dr. Christian P. Illek	Human Resources
Dr. Thomas Kremer	Data Privacy, Legal Affairs and Compliance
Claudia Nemat	Technology and Innovation

The compensation system for our Board of Management is oriented towards the long-term performance of our Group. Since 2013, the compensation for our Supervisory Board has no longer included any long-term remuneration components. The recommendations of the German Corporate Governance Code are complied with. 



For a description of the compensation systems for the Board of Management and the Supervisory Board, please refer to the section "Other disclosures," page 128 et seq.

GROUP STRATEGY

- Deutsche Telekom aims to be the leading telecommunications provider in Europe
- Group strategy successfully implemented again in 2017
- Strategic action areas re-emphasized and refined

OUR CORPORATE STRATEGY: LEADING EUROPEAN TELCO

Since 2014, we have been aligning all of our corporate activities with our Leading European Telco strategy – with the aim of becoming Europe's leading telecommunications provider.

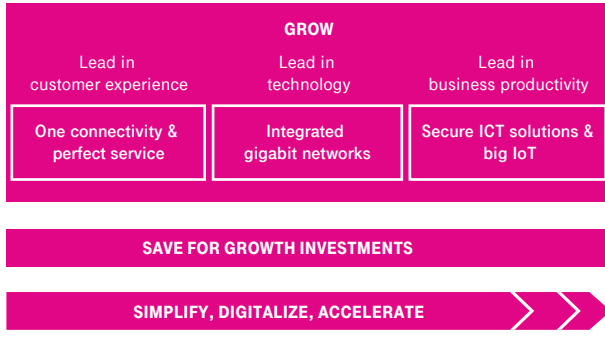
This strategy has proved very successful: In terms of market capitalization, we are currently one of Europe's highest value telecommunications companies (as of December 31, 2017). In the past financial year, we increased revenue, adjusted EBITDA and free cash flow once again. At the same time, we see our Group as facing new challenges:

- New technologies, such as virtual, voice-activated assistants from Google, Amazon and Apple are creating entirely new usage scenarios and permanently changing the way our customers use the Internet.
- Our direct competitors from the telecommunications industry are also increasingly digitizing their core business, setting new benchmarks in terms of customer experience and efficiency in the process.
- New business models such as the Internet of Things not only require new network technologies for ever more connected devices, but also corresponding software to manage and control these devices.
- On top of this in Germany comes ongoing public and political pressure with regard to our broadband strategy and the role we play in the provision of fast Internet.

We are tackling these challenges head on. That is why we have **further developed** our **Leading European Telco strategy**, re-emphasizing and refining certain aspects. As the graphic on the next page shows, our claim to leadership ranges over three dimensions: customer experience, technology, and business customer productivity. From this we derive three specific action areas with which we are creating the foundation for future organic growth. Because only if we grow can we sustainably secure our earnings performance and continue to reliably meet the high demands of our investors. This growth target is supported by two areas of operation which provide the framework for our internal activities.

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Leading European Telco corporate strategy



STRATEGIC AREAS OF OPERATION

One connectivity & perfect service

We want to offer our customers a seamless and technology-neutral telecommunications experience. Hence, we market fixed-network and mobile communications in one **convergent product** (fixed-mobile convergence or FMC). By the end of the reporting year, some 3.6 million customers in Germany had opted for MagentaEins; that is more than 0.6 million more than in the prior year. The integrated national companies of our Europe operating segment won some 0.8 million new customers for MagentaOne and similar FMC offerings in 2017. Because we want to continue on this path of growth, we work continuously to improve and expand our convergent offer.

Our offer also includes attractive **TV content** across all screens – on any device. In Germany, for example, with Entertain TV, we aggregate linear television and the best streaming offers of our partners like Netflix or Maxdome on one platform; what’s more, since 2017, the offer has included exclusive TV series such as The Handmaid’s Tale, Valkyrien, and Cardinal, and our unique Telekom Sport offering. In the reporting year, we won 0.3 million new TV customers in Germany. In our Europe operating segment, we increased the number of TV customers by 0.2 million in the same period. Over the coming years we will continue to expand our content portfolio – for instance as part of our international partnership with Netflix – and implement new operating concepts such as voice control through smart speakers.

As a premium provider, we set ourselves apart from our competitors with perfect **customer service**: T-Mobile US leads the competition in numerous surveys. This is one of the reasons why we won 5.7 million new mobile customers in the United States in 2017. We also introduced a number of initiatives to improve customer service in Germany in the reporting year, including callback services, a service for optimizing home Wi-Fi, and installation packages for the home network. In 2018, for example, we are working on noticeably increasing our first-call resolution rate for customer queries. At our national companies in Europe, we are currently focusing on increasing the level of digitalization in customer interaction; for example, using our integrated sales and service app. In the

coming years, the expansion of our online channel and a seamless transition between different channels will remain a major priority.

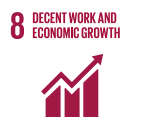
We measure **customer satisfaction** using the globally recognized TRI*M method. Based on this performance indicator, we improve our customer contact processes, and our products and services. At the same time, we determine the loyalty of our customers towards the Company. The results are presented as a performance indicator, the TRI*M index, which ranges between minus 66 and plus 134 points. At the end of the reporting year, the indicator came in at 68.6 points versus 69.6 points at the start of the year (measured on a comparable basis). This slight decline is due in part to the trend in the Systems Solutions operating segment, which was not able to fully match its high prior-year level. Our goal for the coming years is to achieve a steady overall improvement in customer satisfaction.

Integrated gigabit networks

Convergent products require **integrated networks**. So we are systematically building out and interlinking our fixed and mobile networks so that we can offer our customers the fastest possible connection at top quality, wherever they are at all times. Integrated management also improves the capacity utilization of our infrastructure and increases efficiency in operations and maintenance. SDG

Fiber optic-based **fixed networks** are the basis for an integrated network experience. We already operate the largest fiber-optic network in Germany with more than 455,000 kilometers of fiber-optic cable. In 2018, we will add nearly 60,000 more kilometers. Overall, the Germany operating segment currently invests around EUR 4 billion per year primarily in building out and operating networks – more than any of our competitors. In 2017, for example, we gave some 2,200 municipalities fast Internet access through vectoring technology; by the end of 2019, we want to be able to offer approximately 80 percent of households a download bandwidth of at least 50 Mbit/s. At the same time, we are again stepping up the pace of the fiber-optic roll-out to offices and homes: In the next five years, for example, we plan to supply up to 3,000 business parks with FTTH and thus offer optical fiber to around 80 percent of companies in business parks. Across Europe, we are migrating our entire fixed network to the Internet protocol (IP) step by step. We have already completed this migration in five national companies, most recently also in Hungary. In Germany, the transformation is already well advanced. Existing customers are gradually being migrated to IP-based solutions and in consultation with the customers themselves. SDG

In **mobile communications**, we set ourselves apart from our competitors with the outstanding quality of our network. We have regularly come out on top in independent network tests. At the end of 2017, we won the mobile network tests conducted in Germany by the magazines Chip and connect for the seventh and eighth times in succession. In our Europe operating segment, eight national companies were rated as “best in test” by the P3 communications network experts, as was T-Mobile Netherlands.



Furthermore, T-Mobile US came out on top in all six categories of the OpenSignal tests in August 2017. We intend to remain a quality leader and hence are further rolling out our LTE networks: In Germany, we plan to cover approximately 95 percent of the population with LTE by the end of 2018; in our European national companies, coverage is to reach between 89 and 99 percent. Thanks to the successful conclusion of the spectrum auction in April, T-Mobile US will also further improve its national LTE coverage.

We will continue to drive forward seamless integration of fixed and mobile networks with the **fifth-generation mobile communications standard (5G)**. To this end, network functions will be decoupled from the access medium (e.g., glass, copper or air). By distributing computing power in the network (mobile edge computing) and creating dedicated network layers for individual applications (network slicing), 5G also creates the basis for future technologies such as virtual reality, autonomous driving, and the Internet of Things. Europe's first 5G antennas have already been transmitting in Berlin with transmission rates of 2 Gbit/s since October 2017. We anticipate that 5G will be ready from 2020.



Secure ICT solutions & big IoT

We are the leading provider of international **connectivity solutions** for German business customers. In 2017, our revenues from telecommunications services for corporate customers in the Systems Solutions operating segment, for example, grew by 2.5 percent. Since we want to consolidate and build on this position of strength, we have co-founded the network alliance ngena (Next Generation Enterprise Network Alliance), which comprised 12 partner companies as of the end of 2017. This alliance, which is primarily aimed at international business customers, uses Cisco cloud and virtualization technology to link up the individual partners' local networks into a global network and offers this to the partners as a platform. We launched the first product in this area – Smart SD-WAN powered by ngena – on the market in the reporting year. Step by step, we plan to establish ngena as a global platform for software-defined telecommunications networks (SD-WAN).



Our business with “traditional” IT outsourcing services for international corporate customers has been in decline for a number of years now, mainly due to persistent intense competition. For this reason, we will manage our Systems Solutions operating segment on a portfolio basis going forward and set up an integrated sales organization. We will also tailor our **IT and cloud offers** even more closely to the needs of our SME customers in the future. In 2017, we generated revenue of some EUR 560 million in this area in our Germany operating segment, up by around 20 percent against 2016. As we expect this business to grow significantly over the coming years, we are expanding our IT and cloud ecosystem for SMEs together with market leading technology partners such as Huawei, Microsoft and Salesforce.

For us, the biggest growth driver in the business customer environment is the **Internet of Things**. Over the next few years, we expect many millions of new devices – means of production such as machines or tools, everyday objects like cars or fridges, but also public infrastructure like street lights or park benches – to be connected to the Internet. Narrowband-IoT networks, which we have already begun to build out in eight European countries, and machine-to-machine (M2M) connectivity create the basis for cost-effective and energy-efficient networking. **SDG** For example, since July 2016, BMW has fitted all its vehicles in 65 countries with 4G connectivity from Deutsche Telekom. In addition, we will provide our customers – e.g., in the automotive, healthcare and public sectors – with the platforms to manage these devices and use the data collected for their business. **SDG**

We supplement these offers with our comprehensive **cyber security portfolio**. Telekom Security, which was established in early 2017, is already Germany's leading provider of cyber security solutions. Looking ahead at the medium term, our goal is to become a leading provider in Europe in this market. Since cyber attacks pose a growing threat to companies and our customers' need for data privacy and security is increasing, we expect growth rates at Telekom Security to remain high over the next few years.

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SUPPORTING AREAS OF OPERATION

Save for growth investments

Future growth requires adequate investment. Thanks to our strict **cost discipline**, we generate the funds we need to finance this investment and safeguard our competitiveness. We will therefore systematically continue on this path of cost transformation. In the long term, we also want to be Europe's leading telecommunications provider in terms of efficiency.

We manage our **portfolio of shareholdings** with the aim of enhancing value. Business areas that cannot be adequately developed within the Group are disposed of, while our growth ambitions are bolstered by means of equity investments and acquisitions. In order to be able to offer convergent products from a single source in Austria and the Netherlands in the future, our subsidiaries in those countries, T-Mobile Austria and T-Mobile Netherlands, signed agreements in December 2017 to acquire the fixed-network providers UPC Austria and Tele2 Netherlands, respectively. Both of these transactions are awaiting approval from the responsible authorities, which is expected in the course of 2018. Also in December of the reporting year, T-Mobile US announced the acquisition of online TV provider Layer3 TV, which was closed on January 22, 2018.


We carefully consider all options in terms of their **added value** for our Group. No transaction is better than a bad one, both for our shareholders and ourselves. Hence we and the management of T-Mobile US decided against a merger of our subsidiary with its competitor Sprint. We do not believe the successful continuation of our growth course is jeopardized by this decision.

Simplify, digitalize, accelerate

Simplicity in our offers and in our organization makes the digital transformation of our core business easier. In this way, we increase our **implementation speed** – both in the interaction with customers and in the implementation of new, strategic initiatives. This is why we want to become simpler, more digital, and ultimately more agile.


There are two main thrusts to our pursuit of **simplicity**. First, we want to offer our customers intuitive products and easy to understand rates: Our convergent products such as MagentaEins are a first step in this direction. Going forward, we want to significantly further reduce product complexity. Second, we want our internal operation to be as efficient as possible, i.e., in terms of time and costs. Hence we will scrutinize our organization, processes, and decision-making procedures and further optimize them wherever possible.

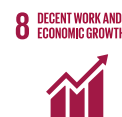
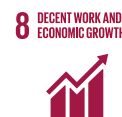
With the **digitalization** of our core business, we want to improve customer experience and increase our efficiency. In Germany, more than 1,500 front-end assistants provide fully-automated support in up to 2.9 million transactions per month. This frees up our employees from technical service to provide more detailed consultations and deal with complex customer issues. Another application is the use of chatbots in direct dialog with customers: At T-Mobile Austria, Tinka currently answers the queries of around 50,000 customers per month. Our long-term aim is to completely digitalize all stages of the value chain: including a standardized app landscape, predictive maintenance of customer hardware, use of standardized data structures, and analysis models and artificial intelligence based on this.

Simplicity and digitalization require new **skills**, incentive models, and a culture of change. In 2017, therefore, we created levelUP!, an innovative development program for executives, and further developed our "Lead to win" leadership model, adapting it to changes in the world of work. Future Work offers our employees modern, open office environments that enable flexibility and new ways of working together. One of our focuses for the future will be on skills management. Ultimately, we want to identify and further develop the skills of our employees at an early stage. 

In summary, our Leading European Telco strategy is reflected in our goal:

To be the leading European telecommunications provider.

- We want to be a **leader** in terms of customer experience, technology, and the implementation of advances in productivity for our business customers. Because only when we lead can we grow and meet the demands of our investors in the long term.
- This growth will be made possible by carefully managing our **financial resources** and **systematically transforming** the Company to be simple, digital, and agile in every sense.
- We play a responsible and active role in **society**. We are a partner, not just at a social level, but also at a political one, and we work in the interests of ensuring the open, forward-looking development of all countries in which we are active. 



MANAGEMENT OF THE GROUP

- Finance strategy implemented consistently
- Group-wide value management

We continue to be committed to the concept of value-oriented corporate governance. We want to strike a balance between the contrasting expectations of our stakeholders so that sufficient funding is available for an attractive dividend, debt repayment, responsible staff restructuring, and new investment for a positive customer experience.

- **Shareholders** expect an appropriate, reliable return on their capital employed.
- **Providers of debt capital** expect an appropriate return and that Deutsche Telekom is able to repay its debts.
- **Employees** expect jobs that are secure, prospects for the future, and that any necessary staff restructuring will be done in a responsible manner.
- **"Entrepreneurs within the enterprise"** expect sufficient investment funding to be able to shape Deutsche Telekom's future business and develop products, innovations, and services for the customer.

FINANCE STRATEGY

In 2017, we continued to systematically execute the finance strategy that we announced at the Capital Markets Days in February 2015. Part of our finance strategy was to achieve our target financial ratios – relative debt (ratio of net debt to adjusted EBITDA) and equity ratio – along with a liquidity reserve that covers our maturities of the coming 24 months at least. With these clear statements we intend to maintain our rating in a corridor from A- to BBB and safeguard undisputed access to the capital market.

There is a reliable dividend policy for shareholders, which is subject to approval by the relevant bodies and the fulfillment of other legal requirements. We intend to pay a dividend of at least EUR 0.50 per dividend-bearing share for the financial years 2015 to 2018. Relative growth in free cash flow is also to be taken into account when measuring the amount of the dividend for the specified financial years. Thus we offer our shareholders both an attractive return and planning reliability.

Total capital expenditure is also to remain high in the next few years. The scope for investment is to be used to further roll out our broadband infrastructure and to drive forward the transformation of the Company to an IP-based production model. In mobile communications, the infrastructure build-out will focus on the LTE standard, and in the fixed network, on optical fiber and vectoring.

The finance strategy supports the transformation of our Group into the Leading European Telco. In order to generate a sustainable increase in value, we intend to earn our cost of capital in the medium term. We aim to achieve this goal in part by optimizing the utilization of our non-current assets. We also intend to achieve our target of earning our cost of capital through strict cost discipline and improved cross-functional collaboration. A good example of this is the pooling of Telekom Deutschland's service activities within the Service business unit. The aim is to establish end-to-end customer process responsibility to serve our customers with an even greater service focus. Improvements like this will ensure our viability. We also focus our performance management on unadjusted EBIT. Taking capital expenditure into consideration brings EBIT closer to the ROCE concept and supports our rigorous focus on the efficient allocation of capital at the Deutsche Telekom Group. ☒



For more information about the ROCE performance indicator, please refer to the section "Value management and performance management system," page 39 et seq.

Our finance strategy until 2018

Equity	Equity Leading European Telco strategy			Debt
Reliable shareholder remuneration policy	One connectivity & perfect service	Integrated gigabit networks	Secure ICT solutions & big IoT	Undisputed access to debt capital markets
Value creation: ROCE > WACC				
Dividend^a Following free cash flow growth Floor at EUR 0.50 per share and year	<ol style="list-style-type: none"> 1 Infrastructure transformation Support fast IP migration and transform network infrastructure 2 Cost transformation Reduce indirect cost 3 Portfolio management Deliver on preferred business model (integrated + B2C/B2B) and value generation 4 Risk management Maintain a low-risk country portfolio 			Rating: A-/BBB Net debt/adj. EBITDA: 2 to 2.5x Equity ratio: 25 to 35% Liquidity reserve: covers maturities of coming 24 months

^a Subject to approval by the relevant bodies and the fulfillment of other legal requirements.

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We will inform you about the further development of our finance strategy for the years following 2018 at our Capital Markets Day, which is planned for the end of May 2018.

VALUE MANAGEMENT AND PERFORMANCE MANAGEMENT SYSTEM

In order to set and achieve our strategic goals more effectively, we are pursuing a Group-wide value management approach. Ultimately, specific performance indicators are required to measure success. The basis for this is a reliable and understandable performance management system. The following tables and information provide an overview of our key financial and non-financial performance indicators.

Financial performance indicators

		2017	2016	2015	2014	2013
ROCE	%	5.8	5.7	4.8	5.5	3.8
Net revenue	billions of €	74.9	73.1	69.2	62.7	60.1
Profit (loss) from operations (EBIT)	billions of €	9.4	9.2	7.0	7.2	4.9
EBITDA (adjusted for special factors)	billions of €	22.2	21.4	19.9	17.6	17.4
Free cash flow (before dividend payments, spectrum investment) ^a	billions of €	5.5	4.9	4.5	4.1	4.6
Cash capex ^b	billions of €	(12.1)	(11.0)	(10.8)	(9.5)	(8.9)
Rating (Standard & Poor's, Fitch)		BBB+	BBB+	BBB+	BBB+	BBB+
Rating (Moody's)		Baa1	Baa1	Baa1	Baa1	Baa1

^a And before AT&T transaction and compensation payments for MetroPCS employees.

^b Before spectrum investment.

PROFITABILITY

In order to underline the importance of the successful long-term development of our Group, we have incorporated sustainable growth in enterprise value into our medium-term aims and implemented it as a separate KPI (key performance indicator) for the entire Group. **Return on capital employed (ROCE)** is our central performance indicator. ROCE is the ratio of operating result after depreciation, amortization and impairment losses plus imputed taxes (net operating profit after taxes (NOPAT)) to the average value of the assets tied up for this purpose in the course of the year (net operating assets, NOA).

ROCE is the performance indicator that helps us to embed our aim of sustainably increasing the value of our Group across all operational activities. Additional value accrues when the return on capital employed exceeds the cost of capital. Our goal, therefore, is to achieve or exceed the return targets imposed on us by providers of debt capital and equity on the basis of capital market requirements. We measure return targets using the weighted average cost of capital (WACC).

Calculation of the ROCE financial performance indicator

millions of €

	2017	2016	2015
ROCE %	5.8	5.7	4.8
Profit from operations (EBIT)	9,383	9,164	7,028
Share of profit (loss) of associates and joint ventures accounted for using the equity method	76	(53)	24
Interest component of unrecognized rental and lease obligations	525	573	725
Other NOPAT adjustments	0	0	0
NET OPERATING PROFIT (NOP)	9,984	9,684	7,777
Tax (imputed tax rate 2017: 31.5%; 2016: 30.3%; 2015: 30.3%)	(3,145)	(2,934)	(2,356)
NET OPERATING PROFIT AFTER TAXES (NOPAT)	6,839	6,750	5,421
Cash and cash equivalents	3,312	7,747	6,897
Operating working capital	(3,555)	(5,056)	(5,311)
Intangible assets	62,865	60,599	57,025
Property, plant and equipment	46,878	46,758	44,637
Non-current assets and disposal groups held for sale ^a	161	372	849
Investments accounted for using the equity method	651	725	822
Other assets	410	279	532
Present value of unrecognized rental and lease obligations	13,127	14,320	18,137
Other provisions	(6,527)	(6,388)	(6,345)
Other NOA adjustments	0	0	0
NET OPERATING ASSETS (NOA)	117,322	119,356	117,243
AVERAGE NET OPERATING ASSETS (Ø NOA)	118,927	119,101	112,441

^a Excluding the carrying amounts of companies accounted for using the equity method.

NOPAT is an earnings indicator derived from the income statement. As it does not take cost of capital into account, it also includes the interest component of unrecognized rental and lease obligations.

NOA include all assets that make a direct contribution to revenue generation. These include all elements on the asset side of the consolidated statement of financial position that are essential to the rendering of services. Operating working capital is calculated from trade and other receivables, inventories, trade and other payables, as well as additional current and non-current assets and liabilities selected in line with the internal steering logic. NOA also include rental and operating lease obligations recognized by the lessor where required for operations. The figure for other provisions is deducted as no return target exists for this.

We believe that ROCE best reflects the expectations of the four aforementioned stakeholders. The indicator measures how efficiently we generate revenues with the capital employed. ROCE is especially informative when taking a long-term view, because it takes into account both the immense value of the assets that are tied up in our capital-intensive infrastructure, and their utilization. This reveals the crucial advantage of this KPI. It does not focus


on the absolute amount of the earnings generated, but rather how much earnings the capital employed generates. ROCE has given us a holistic perspective from which to consider our investments with fresh insight.

REVENUE AND EARNINGS

Revenue corresponds to the value of our operating activities. Absolute revenue depends on how well we are able to sell our products and services on the market. The development of our revenue is an essential indicator for measuring the Company's success. New products and services as well as additional sales activities are only successful if they increase revenue.

EBITDA corresponds to EBIT (profit/loss from operations) before depreciation, amortization and impairment losses. EBIT and EBITDA measure the short-term operational performance and the success of individual business areas. We also use the EBIT and EBITDA margins to show how these indicators develop in relation to revenue. This makes it possible to compare the earnings performance of profit-oriented units of different sizes. Taking unadjusted EBIT/EBITDA as performance indicators means special factors are also taken into account. This promotes a holistic view of our

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costs. However, special factors have an impact on the presentation of operations, making it more difficult to compare performance indicators with corresponding figures for prior periods. For this reason, we additionally adjust our performance indicators to provide transparency. Without this adjustment, statements about the future development of earnings are only possible to a limited extent. The adjusted values are calculated on the basis of the unadjusted performance indicators. 

FINANCIAL FLEXIBILITY

We define **free cash flow** as net cash from operating activities less net cash outflows for investments in intangible assets (excluding goodwill) and property, plant and equipment. This indicator is the main yardstick for providers of debt capital and equity. It measures the potential for further developing our Company, for generating organic growth, and for the ability to pay dividends and repay debt.

Central free cash flow management is responsible for transparency, steering, forecasts, and performance measurement in relation to free cash flow and especially in relation to working capital. As part of our measures to optimize working capital over the long term, in the reporting year the focus was on further extending the period of payment for our payables in Germany and Europe, expanding

inventories management there, and further optimizing receivables management in all our operating segments, which also involved factoring measures. We plan to continue down this route in the coming years by focusing on the following areas: extending the period of payment for payables and improving receivables and inventories management in the United States, Germany, and Europe.

Cash capex (before spectrum investment) relates to cash outflows for investments in intangible assets (excluding goodwill) and property, plant and equipment, which are relevant for cash outflows as a component of free cash flow.

A **rating** is an assessment or classification of the creditworthiness of debt securities and its issuer according to uniform criteria. Assessment of creditworthiness by rating agencies influences interest rates on debt securities and thus also our borrowing costs. As part of our finance policy, we have defined a target range for our ratings. We are convinced that with a rating between A- and BBB (Standard & Poor's, Fitch) or between A3 and Baa2 (Moody's) we essentially have the necessary entry to the capital markets to generate the required financing.



For the reconciliation of EBITDA, EBIT, and net profit/loss to the respective figures adjusted for special factors, please refer to the table on page 54.

NON-FINANCIAL PERFORMANCE INDICATORS

Non-financial performance indicators

	2017	2016	2015	2014	2013	
Customer satisfaction (TRI*M index)	68.6	70.2	67.4	65.9	64.9	
Employee satisfaction (commitment index) ^a	4.1	4.1	4.1	4.0	4.0	
FIXED-NETWORK AND MOBILE CUSTOMERS						
Mobile customers	millions	168.4	165.0	156.4	150.5	142.5
Fixed-network lines	millions	27.9	28.5	29.0	29.8	30.8
Broadband lines ^b	millions	19.0	18.5	17.8	17.4	17.1
SYSTEMS SOLUTIONS						
Order entry ^c	millions of €	5,241	6,851	5,608	7,107	7,792

^a Commitment index according to the most recent employee surveys in 2017 and 2015.

^b Excluding wholesale.


^c The prior-year comparative for 2016 was adjusted retrospectively due to the change in the structure of the Group implemented as of January 1, 2017.

As one of the leading providers of telecommunications and information technology worldwide, the development of our Group – and thus also our financial performance indicators – is closely linked to the development of **customer figures**. Acquiring and retaining customers are thus essential to the success of our Company. We have different ways of measuring the development of our customer figures according to the business activity in our operating segments: Depending on the activities of each segment, we measure the number of mobile customers and/or the number of broadband and fixed-network lines.

We want our customers to be satisfied – or even delighted – as satisfied customers act as multipliers for our Company's success. As a responsible, service-oriented company, the needs and opinions of our customers are of great importance to us, and we want them to stay with our Company in the long term. For this reason we measure **customer retention/satisfaction** in our companies using the globally recognized TRI*M method. The results of systematic surveys are expressed by an indicator known as the TRI*M index. To underscore the major significance of customer retention/satisfaction for our operations, since 2010 we have made this key indicator one of four parameters for the long-term variable remuneration (Variable II) for our Board of Management members. It is also used as a parameter in the long-term incentive plan, which was launched in 2015 and is offered to our managers (with the




For more information, please refer to Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

exception of Board of Management members). We take the TRI*M indexes calculated for the operating entities as an approximation of the respective entities' percentage of total revenue to create an aggregate TRI*M Group value. Over a period of four years, the eligible managers can benefit from the development of customer retention/satisfaction across the Group. 



For more information on customer satisfaction, please refer to the section "Group strategy," page 34 et seq.

Our employees want to contribute to the further development of the Company and identify with it. We want to establish an open dialog and a productive exchange with our employees: New ways of working and modern means of communication help us achieve this, as do regular surveys. The most important feedback instruments across the Group (excluding T-Mobile US) for assessing **employee satisfaction** include regular employee surveys and the pulse survey carried out twice a year. In our Company, we measure the employee satisfaction performance indicator using the **commitment index** – derived from the results of the last employee survey and updated with the results of the last pulse survey. 

8 DECENT WORK AND ECONOMIC GROWTH



For more information on employee satisfaction, please refer to the section "Employees," page 96 et seq.

In view of the major significance of employee satisfaction for the success of the Company, Board members are now also being managed and incentivized by means of the long-term variable performance-based remuneration (Variable II). Employee feedback as one of four parameters has been relevant for Variable II since 2010, and for the long-term incentive plan which was relaunched in 2015 for our managers (excluding Board members). This allows Board members and eligible managers to benefit from the development of employee satisfaction across the Group.

In our Systems Solutions operating segment, we use **order entry** as a non-financial performance indicator. We define and calculate order entry as the total of all amounts resulting from customer orders that are yet to be processed. Order entry in the form of long-term contracts is of great significance to the Group in order to estimate revenue potential. In other words, order entry is an indicator that provides a high degree of planning reliability.

THE ECONOMIC ENVIRONMENT

- Economic development in our markets positive
- Regulatory intervention continues to impact negatively on the telecommunications market

MACROECONOMIC DEVELOPMENT

The global economy continued to gain momentum over the course of the reporting year. This was driven on the hand by strong private consumption and thriving global trade, and, on the hand, by highly dynamic investment growth in most industrial and emerging economies. In its January 2018 forecast, the International Monetary Fund (IMF) estimates that in 2017 gross domestic product (GDP) increased by 4.7 percent in the emerging and developing countries and by 2.3 percent in the industrialized countries.

In our core markets, economic growth rates largely recorded positive trends in 2017. GDP in Germany increased by 2.2 percent year-on-year, again driven in particular by growth in exports and private consumption. Averaging 5.7 percent, the unemployment rate in 2017 was at its lowest level since German reunification. The U.S. economy grew by 2.3 percent in the reporting year, with unemployment falling to 4.1 percent as of the end of the year, its lowest level in 17 years. GDP growth rates continued to develop very positively in 2017 in virtually all countries in our Europe operating segment. The economies continued to profit from rising domestic consumption and stable demand, primarily from the eurozone. Even the Greek economy has stabilized.

The situation in the national labor markets in our Europe operating segment continued to improve in most countries thanks to positive economic growth. The deep recession of the last few years means that Greece continues to suffer from high structural unemployment. High structural unemployment rates lead to reduced purchasing power among those affected and impact on their willingness to spend. Some customers have adapted their demand behavior. In addition to long-term unemployment, austerity measures in the public sector and the low willingness to invest also had a detrimental effect on demand for telecommunications and ICT services. In some countries, the intense pressure to shore up state finances led to special taxes being maintained for telecommunications companies.

The following table shows the GDP growth rate trends and the unemployment rates in our most important markets.

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Development of GDP and the unemployment rate in our core markets from 2015 to 2017

	GDP for 2015 compared with 2014	GDP for 2016 compared with 2015	GDP estimate for 2017 compared with 2016	Unemployment rate in 2015	Unemployment rate in 2016	Estimated unemployment rate for 2017
Germany	1.7	1.9	2.2	6.4	6.1	5.7
United States	2.9	1.5	2.3	5.3	4.9	4.4
Greece	(0.2)	(0.1)	1.3	25.0	23.6	21.4
Romania	3.9	4.9	6.5	6.8	5.9	5.2
Hungary	3.2	1.9	3.8	6.2	4.3	4.2
Poland	3.8	2.7	4.3	7.5	6.2	6.1
Czech Republic	5.3	2.6	4.4	5.1	4.0	3.7
Croatia	2.2	3.0	2.9	17.4	14.8	12.1
Netherlands	2.3	2.2	3.1	6.9	6.0	5.0
Slovakia	3.8	3.3	3.3	11.5	9.7	8.1
Austria	1.1	1.5	2.7	5.7	6.0	5.4
United Kingdom	2.3	1.8	1.6	5.4	4.9	4.4

Sources: National authorities, Bloomberg Consensus, January 2018.

TELECOMMUNICATIONS MARKET

Worldwide, the market for information and communications technologies (ICT) grew by 4.0 percent in the reporting year to EUR 3.2 trillion. This increase was due in part to strong demand for telecommunications equipment and services, especially in India, China, and the United States. The high-tech association Bitkom (Federal Association for Information Technology, Telecommunications and New Media) and the EITO (European Information Technology Observatory) expect the telecommunications market segment (services and equipment) to record an increase of 4.0 percent worldwide to EUR 1.82 trillion and the information technology (IT) market segment to record an increase of 3.9 percent for 2017. In the European Union, revenue in the telecommunications market segment rose by 1.0 percent, primarily due to the capex-driven 5.0 percent increase in equipment. The European Telecommunications Network Operators' Association (ETNO) expects service revenues in the EU telecommunications market to have grown slightly by 0.1 percent compared with 2016 to EUR 223 billion in the reporting year. Radical regulatory interventions, such as the reduction in the European roaming and national termination rates as well as substitution by OTT (over-the-top) players, continue to have a negative impact on traditional voice and messaging services, which declined as a result. In 2017, these declines were offset by growth in data revenues.

The digitalization of the economy and society continues to advance steadily. This changes on the one hand the existing market structures, and on the other, the market realities of many industries that have previously been exclusively analog. Use of data services is growing exponentially. Demand is also rising for more speed, both download and upload, in fixed and mobile networks. New technological developments, like the Internet of Things (IoT), Industry 4.0, big data, or cloud computing place high demands on network infrastructure: Ubiquitous connectivity and high per-

formance standards and security are critical to success for many applications. In a market environment in which the network infrastructure needs to be substantially upgraded and a broad ecosystem of rival market players has developed, investment incentives must be created – for the good of consumers, the industry, and a digitally sovereign economy.

Consolidation pressure remains high in the telecommunications industry, partly due to declining revenues in many markets as a result of regulatory interventions, increasing competition, and technological change. In addition, high investments are needed for the network build-out, for innovation, and for the acquisition of spectrum. In Germany, the Bundeskartellamt approved the merger of United Internet and Drillisch without conditions; Drillisch profited from conditions imposed by the European Commission on the merger of E-Plus and O₂. In March 2017, the European Commission approved our procurement joint venture with Orange, deeming it not to result in any restriction of competition. The European Commission conditionally approved Vivendi's de-facto control over Telecom Italia: In order to avoid restrictions to competition, Vivendi must sell its 70 percent stake in Telecom Italia to the TV service provider Persiderain. In order to ensure the continued provision of high-quality telecommunications services to European consumers in the long term, the European competition authorities should take care that short-term price effects are not the only focus of their competition analyses.

European General Data Protection Regulation. The European General Data Protection Regulation will enter into force on May 25, 2018. The new data protection law closes a major gap in the regulation of service providers outside of the EU by imposing the same rules for all market players operating in the EU. The Regulation assures Europe of a high level of data protection and, at the same time, will pave the way for new digital business models.

The General Data Protection Regulation applies directly in the member states and does not need to be transposed into national law. Contrary or redundant German law must be repealed by way of a specific act (Rechtsbereinigungsgesetz).

IT Security Act. In the course of implementing the EU Network and Information Security Directive, a number of provisions were added to the German IT Security Act (IT-Sicherheitsgesetz), requiring online marketplaces, search engine operators, and cloud service providers to comply with minimum requirements designed to safeguard the security of their infrastructures and to report incidents. On a positive note, the legislator included additional powers for telecommunications providers to enable the detection and clearing of network outages and security incidents – a significant step forward in view of the necessary inclusion of all parties involved in the value chain. It remains to be seen whether the new German government will make any further attempt to address the remaining deficits in the IT Security Act (lack of systematic involvement of hardware and software manufacturers). [SDG](#)



EU subsidies for Croatia. On June 6, 2017, the EU Commission granted its approval for EU subsidies for Croatia. The Croatian government plans to use this money to fund a new state-owned network operator. The development increases the risk of a massive distortion of competition and of other countries following suit.



Payment Services Directive 2, which replaces Payment Services Directive 1 from 2007, must be implemented in the EU member states by the start of 2018. In Germany, this is being done by the German Payment Service Oversight Act (Zahlungsdienstesaufsichtsgesetz – ZAG), under which providers of telecommunications services must limit billing models for voice and non-voice services for invoicing third-party services via the telephone bill to a maximum of EUR 300 per month and EUR 50 per transaction – unless they have a payment services license. In addition, it will impose additional reporting obligations on the Federal Financial Supervisory Authority (BaFin). At the start of December, the Federal Financial Supervisory Authority published an information sheet on the practical implementation of the ZAG provisions.

GERMANY

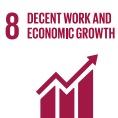
According to EITO, revenue from IT products and services, telecommunications, and consumer electronics increased by 2.3 percent to around EUR 135.6 billion in Germany in the reporting year. Information technology recorded growth of 4.3 percent. Telecommunications revenues (telecommunications services, hardware, and infrastructure systems) decreased slightly by 0.3 percent to around EUR 57.7 billion. The positive development in data services could not completely offset weakening business with terminal equipment – caused in part by a further decline in smartphone revenues

in 2017 – and steadily declining revenues from fixed-network and mobile services. Regulatory effects such as the reduction in EU roaming charges and interconnection rates were the main reason for slightly lower revenues from telecommunications services.

The German broadband market grew by 3.5 percent in 2017. As of the end of year, there were some 33 million broadband lines in Germany. Companies with their own infrastructure benefited the most from this market growth, along with resellers and regional providers. High-bandwidth lines are increasingly marketed in cable and VDSL/vectoring networks. The offerings in this area are supported by innovative hybrid connection technologies. The availability of high bandwidths in Germany and the large choice of HD content and video-on-demand services are stimulating customer growth in IPTV business. Integrated offers comprising fixed-network and mobile communications offer customers many advantages and help increase customer retention. The trend towards integrated offerings continued in the reporting year, with more and more providers expanding their portfolios. We launched our first integrated offering, MagentaEins, on the market in fall 2014. Since then, we have been gradually enhancing the service both in the area of traditional communication and add-on services such as smart home, cloud services, and security applications. Vodafone and O₂ made up ground in terms of integrated offers. [SDG](#)

In the German mobile market, service revenues decreased slightly by around 0.7 percent against 2016 to approximately EUR 18.1 billion, driven largely by the aforementioned regulatory effects and ongoing price pressure. The use of mobile data is growing exponentially, the percentage of voice and data rate plans is rising steadily. Traditional voice and text messaging services are increasingly being replaced by free IP messaging services like WhatsApp and social networks like Facebook. Connected products such as smartphones and tablets, as well as watches, shoes, bicycles, and much more, are growing ever more popular, pushing up demand for mobile broadband speeds and for large data volumes in the rate plan portfolios.

Digitalization is continuing apace, and as a result there is also growing demand by the industry for even more connectivity to allow machines and production sites to be networked and to tap efficiencies in value chains. Extensive IT and cloud solutions, as well as intelligent approaches to M2M communication (machine-to-machine) are needed in order to meet these demands. We believe that the M2M sector alone grew by around 30 percent in the reporting year, and this growth is unlikely to slow in the coming years. In the IT sector, we expect market growth to be around 5 percent, driven primarily by the substantial increase in cloud services of around 17 percent. [SDG](#)



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UNITED STATES

The mobile communications market in the United States continues to be divided between four major nationwide providers – AT&T, Verizon Wireless, T-Mobile US, and Sprint – and various regional network operators. In addition there are a number of mobile virtual network operators, which rely on the networks of one or more of the four national carriers to transport their mobile and data traffic. The two largest national network operators are AT&T and Verizon Wireless, followed by T-Mobile US and Sprint.

The market continues to be very dynamic. For example, the cable companies Comcast and Charter have activated their respective MVNO agreements with Verizon, and Comcast has already begun offering mobile services to its customers. Additionally, in May 2017, Comcast and Charter agreed to explore cooperation in the development of wireless products and services, and also agreed that each party must attain approval from the other before acquiring control of a full mobile network operator. Altice, whose 2016 acquisitions of Cablevision and Suddenlink created the nation's fourth largest cable operator, announced its own MVNO partnership with Sprint. AT&T is still planning to acquire media giant Time Warner Inc. for USD 85.4 billion, pending a legal challenge by the U.S. antitrust authorities. The consolidation and convergence of the U.S. telecommunications market is expected to continue, as fixed and wireless become more integrated and wireless companies acquire content providers.

After three quarters of decline due to high market penetration, the U.S. wireless market has grown slightly since the third quarter of 2017, although down on a year-on-year basis. Although revenues were down overall, profit improved due to expenditure cuts, with operators also prepping for 5G strategies in 2018-19. Smartphone penetration continues to rise steadily, sitting now at 92 percent. Accordingly, mobile data consumption continues to rise and average usage surpassed 6 GB/month by the end of 2017.

Since 2013, T-Mobile US has brought about a significant operational turnaround and intensified competition in the U.S. mobile market. This is mainly due to improvements in their network, as well as successful implementation of the Un-carrier initiatives, which contributed very successfully to customer satisfaction.

The FCC has noted the fierce competition in the market and has embarked on a deregulatory agenda. It has eased wireless infrastructure deployment by removing administrative obstacles; it has adopted new sharing tools in the 3.5 GHz band to free up 150 MHz of spectrum for broadband services; and it is working to free up spectrum above 24 GHz to enable deployment of 5G services. The Broadcast Incentive Auction (600 MHz) ended in

April 2017. T-Mobile US purchased an average of 31 MHz of 600 MHz low-band spectrum covering 100 percent of the United States. In addition, the FCC adopted new rules on December 14, 2017, that pare down net neutrality regulation to just a transparency requirement. Bright line rules (no blocking, no throttling) will be eliminated and paid priority will be permitted. The rules are expected to be challenged in court.

EUROPE

Following a period of steady recovery, the traditional telecommunications markets in our Europe operating segment saw a return to moderate revenue growth for the first time in 2017 on a full-year basis. Steady growth in broadband and TV business offset some of the ongoing decline in voice business. Mobile data usage grew rapidly, especially due to video services. Overall, mobile business recorded growth and more than offset the decline in fixed-network business. The continued levying of special taxes on telecommunications services in some countries had a negative impact, for example in Greece and Hungary. The acquisition of new spectrum and extension of existing mobile licenses had a relatively low impact in 2017 (e.g., in Greece). There was only limited consolidation activity in the countries of our Europe operating segment in the reporting year (e.g., T-Mobile Austria, UPC Austria, Digi/Invitel in Hungary, and UPC/Mulimedia Polska in Poland; both transactions are awaiting approval from the responsible authorities).

The trend towards convergent product bundles combining fixed-network and mobile communications (FMC) continues, for example with *Kombinieren & Sparen* (combine & save) in Austria, *Love in Poland*, and *MagentaOne* and *CosmoteOne* in our subsidiaries with integrated telecommunications infrastructure. These offers are enjoying strong growth and for some providers, already address the majority of consumers. New providers pursuing aggressive pricing policies (e.g., in Hungary and Slovakia), whose market shares are still small, are intensifying competitive pressure. Services from OTT (over-the-top) players, like WhatsApp and Facebook, are increasingly replacing traditional voice and messaging services. Video streaming services like Netflix and Amazon Prime have so far had limited significance in our Europe operating segment (with the exception of Austria).

In the business customer segment, the advance of digitalization has prompted massive growth in M2M/IoT applications; we participate in this with our Smart City projects, for instance in Hungary, Romania and Greece. [SDG](#) [SDG](#)

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SYSTEMS SOLUTIONS

In the information and communications technology (ICT) industry in our core market of Western Europe, the volume addressed by our Systems Solutions operating segment and the T-Systems brand increased by 4.1 percent in the reporting year to EUR 192 billion. However, this trend impacted the business areas of the market in very different ways.

11 SUSTAINABLE CITIES AND COMMUNITIES



In the telecommunications (TC) segment, the market was dominated by continued price erosion in telecommunications services and by intense competition, while the economic recovery had relatively little impact. The focus in this segment continues to be on the substitution of elements of the portfolio and demand for stable, intelligent and secure network solutions with increasingly large bandwidths. Growth in ICT security (cyber security), Internet of Things (IoT), cloud computing, and unified communications is leading to a long-term stabilization of the markets served by our operating segment. Substitution effects between fixed-network and mobile operations continue to intensify. The migration to all-IP solutions, e.g., the combination of Internet access, Voice over IP, IP VPN, and Unified Communications, continues to increase.

In terms of IT services, demand has grown further for cloud services and cyber security services, as has the importance of digitalization, intelligent networks, the Internet of Things (including Industry 4.0), and communication between machines (M2M). The advance of digitalization and the shift towards cloud solutions also transformed demand in the systems integration business. Traditional project business – application development and the associated integration – declined by 0.9 percent. By contrast, the

market for consultation and integration services for cloud solutions grew by 28 percent.

The market for outsourcing computing and desktop services (CDS) shrank by 0.6 percent in the reporting year to EUR 58 billion. Two contrasting trends played a role in this context: Business from long-term, rather traditional outsourcing contracts declined by 4 percent, while the market for cloud computing grew by 10 percent.

Competitive and price pressure persisted in all submarkets of our Systems Solutions operating segment. This was caused in part by competitors such as BT Global Services, Orange Business Services, and NTT Communication in the telecommunications market, and IBM, Atos, and Capgemini in the IT segment; in addition, the IT segment in particular came under price pressure from cloud providers such as Amazon Web Services, Google, and Salesforce. This effect is further intensified by providers of services rendered primarily offshore. We are positioning ourselves in this environment as a digital enabler, a cloud transformer, and an ICT operator, with a focus on quality, data security, and end-to-end responsibility for the transformation, integration, and operation of ICT services. Furthermore, we are increasingly entering into strategic partnerships with our competitors with the aim of offering our customers innovative solutions.

GROUP DEVELOPMENT

The environment of our Group Development operating segment is largely dominated by the markets served by our companies T-Mobile Netherlands and Deutsche Funkturm (DFMG).

The mobile communications market in the Netherlands has been marked by high price and competitive pressure for quite some time, and this situation intensified again in 2017. One of the trends contributing toward this is the growing bundling of fixed-network and mobile products into convergent offers (FMC). The merger of Vodafone and Ziggo, for instance, has created a second strong nationwide FMC provider alongside market leader KPN. As in the past, the trend towards bundled offers brings pressure to bear on prices for mobile products. The strong discount segment, comprising mobile providers' secondary brands and MVNOs, has further intensified competition. In December 2017, we signed an agreement with the Tele2 Group on the acquisition of telecommunications provider Tele2 Netherlands by T-Mobile Netherlands.

DFMG is the biggest provider of passive wireless infrastructure for mobile communications and broadcasting in Germany. The market also saw increased demand for cell sites in financial year 2017, due on the one hand to the fact that network operators plan to close gaps in coverage, and on the other to the fact that demand for

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mobile data services is growing, which calls for a further increase in the density of mobile networks.

MAJOR REGULATORY DECISIONS

Our business activities are largely subject to national and European regulation, which is associated with extensive powers to intervene in our product design and pricing. We were again subject to extensive regulation in our mobile and fixed-network businesses in 2017. The focus was primarily on the regulation of services for wholesale customers and the corresponding charges as well as the award of mobile frequencies.

REGULATION

Federal Network Agency consultation on the FTTH/B roll-out. The Federal Network Agency held a public consultation process from March 14, 2017 to April 26, 2017 on proposals for how regulatory support could be provided to accelerate the roll-out of fiber-optic networks (FTTH/B) with a view to rates regulation. All market players were asked to respond to the consultation paper. The 17 responses received were published on May 17, 2017. The Federal Network Agency said it will first analyze these responses, some of which are extensive, before announcing any conclusions.

Further vectoring roll-out agreed. The Federal Network Agency reviewed the specific conditions required for nearshore vectoring by way of a reference offer procedure. It announced its ruling in its official journal on August 9, 2017. The deadlines for the three planned nearshore build-out tranches have thus now been set. A parallel rate approval procedure was also carried out at the Federal Network Agency from the end of March 2017 to set the rates for a nearshore ULL substitute product. The ruling for this process was also announced on August 9, 2017, finally giving the green light for our nearshore vectoring roll-out.

Regulation of termination rates. The Federal Network Agency issued final approval for fixed-network and mobile termination rates in the reporting year, with retroactive effect from January 1, 2017 (fixed-network termination rates) and December 1, 2016 (mobile termination rates), with no changes to the rates provisionally approved back in 2016. In these rate rulings, the Federal Network Agency followed for the first time the recommendation of the European Commission to set charges based on the "pure LRIC cost standard." In the approval period, the charges declined by 30 percent overall for mobile termination and by as much as around 58 percent for fixed-network termination.


International roaming. The new EU Regulation to abolish roaming surcharges (commonly referred to as Roam Like at Home) within the European Union as well as in Iceland, Liechtenstein and Norway entered into force on June 15, 2017. In addition, on

May 17, 2017, the European Council and European Parliament adopted amended regulations for wholesale roaming charges, significantly reducing regulated price caps at wholesale level. We had already launched customer-friendly Roam Like at Home offers on the market before this date.

Federal Network Agency decision on StreamOn. On December 15, 2017, the Federal Network Agency prohibited elements of the MagentaMobil StreamOn add-on option. According to the Federal Network Agency, two aspects of this option breach the EU Regulation on net neutrality and roaming. The ruling stipulates that, from April 1, 2018, we must transmit all StreamOn data traffic at the maximum available bandwidth and that this also cannot be deducted from the included data volume contingent when roaming within the EU. We remain of the opinion that our offer complies with EU law and will appeal against the ruling.

Federal Network Agency decision on bitstream charges. On November 30, 2017, the Federal Network Agency provisionally approved as of December 1, 2017 the rates we can charge to wholesale customers for access to our broadband lines for "layer 2 bitstream access." We had requested an increase in the monthly rate as part of contingent models, but this was not approved. The Federal Network Agency will only set the final charges with retroactive effect once the national and EU-wide consultation processes are complete.

AWARDING OF SPECTRUM

The table below provides an overview of the main spectrum awards through auctions as well as license extensions in Germany and at our international subsidiaries. It also indicates spectrum to be awarded in the near future in various countries. 



For further information on the spectrum awards, please refer to the section "Risk and opportunity management," page 111 et seq.

Main spectrum awards

	Start of award procedure	End of award procedure	Frequency ranges (MHz)	Award process	Acquired spectrum (MHz)	Spectrum investment
Albania	Q3 2018	Q4 2018	800	Sealed bid ^a or auction	tbd	tbd
Germany	Q2 2018	Q4 2018	2,000/3,400 – 3,700	Auction (SMRA ^b) expected	tbd	tbd
Greece	Q4 2017	Q4 2017	1,800	Sealed bid ^a	25 MHz	€ 83.2 million
Macedonia	Q1 2018	Q4 2018	900/2,100	Extension of licenses (expected)	tbd	tbd
Netherlands	Q1 2019	Q2 2019	700/1,500/2,100	Auction, details tbd	tbd	tbd
Austria	Q3 2018	Q4 2018	3,400 – 3,800	Auction (CCA ^c) (expected)	tbd	tbd
Austria	Q3 2019	Q4 2019	700/1,500/2,100	Auction, details tbd	tbd	tbd
Poland	Q2 2017	Q2 2017	3,700	Sealed bid	No spectrum acquired	-
Poland	Q2 2018	Q3 2018	1,500	tbd	tbd	tbd
Romania	Q2 2018	Q4 2018	700/800/1,500/2,600/3,500	Auction, details tbd	tbd	tbd
Slovakia	Q2 2017	Q2 2017	3,700	Auction (SMRA ^b)	40 MHz for Bratislava	€ 200 thousand
Czech Republic	Q2 2017	Q3 2017	3,700	Auction (SMRA ^b)	No spectrum acquired	-
Czech Republic	Q3 2017	Q4 2017	900/1,800	Extension of licenses (expected)	No spectrum acquired	-
Czech Republic	Q4 2018	Q2 2019	700/3,500	Auction, details tbd	tbd	tbd
Hungary	Q3 2018	Q4 2018	700/1,500/2,100/2,300/2,600 and 26,000	Details tbd	tbd	tbd
United States	Q3 2016	Q2 2017	600	Incentive Auction ^d	Regional licenses; mostly 2x20 MHz	\$ 7.99 billion

^a Submission of an individual bid in a sealed envelope, in some cases sequential, in several awards.

^b Simultaneous electronic multi-round auction with ascending, parallel bids for all ranges.

^c Combinatorial Clock Auction, three-stage, multi-round auction for spectrum from all frequency ranges.

^d Quantity and prices of spectrum to be traded depends on spectrum surrendered by radio broadcasters.

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DEVELOPMENT OF BUSINESS IN THE GROUP

- Adjusted EBITDA of EUR 22.2 billion
- Free cash flow of EUR 5.5 billion

STATEMENT OF THE BOARD OF MANAGEMENT ON BUSINESS DEVELOPMENT IN 2017

Bonn, February 13, 2018

2017 was another successful financial year. In 2017, we once again met our key company targets. Net revenue increased by 2.5 percent to EUR 74.9 billion. We grew year-on-year in our domestic market, Germany, and in the Europe operating segment, and continued to record strong growth in the United States. The revenue trend was driven by strong customer additions both in mobile and broadband business. While we continued to win mobile market shares with our Un-carrier strategy in the United States, the success in Germany and Europe was primarily attributable to the marketing of convergent products. To further strengthen our competitiveness in Europe, we also want to transform our subsidiaries in Austria as well as in the Netherlands into convergent providers. To this end, at the end of 2017, we signed agreements to acquire the fixed-network providers UPC Austria and Tele2 Netherlands.

Adjusted EBITDA grew by 3.8 percent to EUR 22.2 billion. Free cash flow (before dividend payments and spectrum investments) totaled EUR 5.5 billion as forecast; this represents year-on-year growth of around 11.3 percent.

In the reporting year, profit/loss from operations (EBIT) increased to EUR 9.4 billion, which was higher than expected. The main reason for this increase is a sound operational development, driven by revenue growth and further enhanced cost efficiency. In addition, profit/loss from operations was positively affected by some special factors in the reporting year, including the reversal of the impairment loss on spectrum licenses at T-Mobile US and the sale of Strato and Scout24 AG. This trend was partially offset by higher amortization of intangible assets (including goodwill) and higher depreciation of property, plant and equipment compared with 2016 as a result of the high level of investment in building and expanding our mobile networks and fixed-network infrastructure, as well as for the forward-looking migration to IP as part of our integrated network strategy. Net profit increased by just under 30 percent to EUR 3.5 billion, mainly due to the improved development of operations and the reduction in the U.S. federal tax rate, which resulted in a non-cash deferred tax benefit at T-Mobile US. Developments in the share price and exchange rate prompted us to also recognize an impairment on our financial stake in BT in 2017. In addition, loss from financial activities was also impacted as a result of negative remeasurement effects from the exercise and measurement of embedded derivatives at T-Mobile US – mainly relating to the early repayment of financial liabilities to third parties outside of the Group. ROCE improved slightly year-on-year due largely to the positive special factors.

Net debt increased from EUR 50.0 billion to EUR 50.8 billion, primarily due to the acquisition of spectrum and a further year-on-year increase in capital expenditure for network build-out and modernization in the United States, Germany, and Europe.

Subject to approval by the relevant bodies and the fulfillment of other legal requirements, we continue to adhere to our shareholder remuneration strategy as planned and will propose to the shareholders' meeting a dividend of EUR 0.65 per dividend-bearing share. We thus once again kept the promise we made at our Capital Markets Days in February 2015, which was to include our shareholders in the relative growth of free cash flow.

The trends in the industry, in particular on the European telecommunications markets, remain challenging, e.g., rising competition and strict regulatory requirements. The market for information and communications technologies, however, continues to grow. In order to succeed in the future, we continue to invest heavily in the key to our success: our network infrastructure. In 2017, we made investments (before spectrum) of EUR 12.1 billion, a substantially higher amount than in the prior year. In the fixed network, our focus was on investments in fiber-optic roll-out, IPTV, and the continued migration to an IP-based network. In mobile communications, we invested in LTE, increased network coverage, and upgraded capacity to meet increasing demand for high-speed data transmission rates. Including the spectrum payments, this figure was as much as EUR 19.5 billion, of which EUR 7.2 billion was attributable to the acquisition of valuable spectrum at the auction in the United States, where T-Mobile US was particularly successful. Despite this high level of investment, our rating remained solid through 2017, and we had unrestricted access to the capital market at all times.

Against this backdrop, we are reasserting our commitment to the strategic goal we set ourselves in 2014 of being the leading European telecommunications provider. With this goal in mind, in 2017 we continued to focus intently on delivering state-of-the-art networks, products, and services that give our customers simple, convenient access to the digital world. This keeps us in a good position to remain the driving force behind the creation of a modern and competitive digital Europe.

COMPARISON OF THE GROUP'S EXPECTATIONS WITH ACTUAL FIGURES

In the 2016 Annual Report, we outlined expectations for the 2017 financial year for our financial and non-financial key performance indicators anchored in our management system. The following tables summarize the pro-forma figures for 2016, the results expected for the reporting year, and the actual results achieved in 2017. The performance indicators that we also forecast in the 2016 Annual Report and their development are presented in the individual sections.

Comparison of the expected financial key performance indicators with actual figures

		Pro-forma figures for 2016	Expectations for 2017	Results in 2017
ROCE	%	5.7	strong decrease	5.8
Net revenue	billions of €	73.2	increase	74.9
Profit (loss) from operations (EBIT)	billions of €	9.2	decrease	9.4
EBITDA (adjusted for special factors)	billions of €	21.4	22.4 to 22.5 ^c	22.2
Free cash flow (before dividend payments and spectrum investment)	billions of €	4.9	5.5	5.5
Cash capex ^a	billions of €	11.0	12.0	12.1
Rating (Standard & Poor's, Fitch)		BBB+	from A- to BBB	BBB+
Rating (Moody's)		Baa1	from A3 to Baa2	Baa1

Comparison of the expected non-financial key performance indicators with actual figures

		Pro-forma figures for 2016	Expectations for 2017	Results in 2017
Customer satisfaction (TRI*M index)		70.2	slight increase	68.6
Employment satisfaction (commitment index) ^b		4.1	stable trend	4.1
FIXED-NETWORK AND MOBILE CUSTOMERS				
GERMANY				
Mobile customers	millions	41.8	increase	43.1
Fixed-network lines	millions	19.8	slight decrease	19.2
Broadband lines	millions	12.9	increase	13.2
UNITED STATES				
Branded postpaid	millions	34.4	strong increase	38.0
Branded prepaid	millions	19.8	increase	20.7
EUROPE				
Mobile customers	millions	48.0	slight decrease	48.8
Fixed-network lines	millions	8.5	stable trend	8.4
Retail broadband lines	millions	5.4	increase	5.6
SYSTEMS SOLUTIONS				
Order entry	billions of €	7.1	decrease ^c	5.2

^a Before spectrum investment.

^b Commitment index according to the most recent employee surveys in 2017 and 2015.

^c Contrary to the forecasts published in the 2016 combined management report (2016 Annual Report, page 87 et seq.), we adjusted the forecast figures for 2017 during the course of the year (Interim Group Report as of June 30, 2017, page 27, and Interim Group Report as of September 30, 2017, page 27).

We once again look back on a successful financial year. Our performance in 2017 was dominated by substantial growth in revenue and adjusted EBITDA. Net revenue grew in line with expectations to total EUR 74.9 billion at the year-end. We also met expectations with regard to adjusted EBITDA, which amounted to EUR 22.2 billion. Adjusted for exchange rate effects and changes to the composition of the Group, this put us exactly within the target corridor of EUR 22.4 to EUR 22.5 billion communicated most recently. Free cash flow of EUR 5.5 billion was also right on target. At EUR 12.1 billion, cash capex (before spectrum investments) was slightly higher than the communicated figure of around EUR 12.0 billion, representing yet another substantial increase to the already extremely high level of investment in the prior year.


Our key performance indicator ROCE (return on capital employed) improved by 0.1 percentage points in the reporting period to reach 5.8 percent. This moderately positive trend was due to an increase in net operating profit after taxes (NOPAT) while the

average amount of net operating assets (NOA) remained virtually stable over the year. NOPAT increased in 2017 as a result of a substantial improvement in adjusted EBITDA, as well as positive special factors – mainly attributable to the partial reversal of impairment losses recognized on spectrum licenses at T-Mobile US (EUR 1.7 billion), to the sale of Strato (EUR 0.5 billion) and of further shares in Scout24 AG (EUR 0.2 billion), and to a settlement agreement concluded with BT (EUR 0.2 billion). NOPAT was negatively affected by impairment losses totaling EUR 2.2 billion recognized in the reporting year on goodwill and property, plant and equipment, in particular in the Systems Solutions and Europe operating segments (prior year: EUR 0.7 billion in the Europe operating segment). In the prior year, proceeds from the sale of our stake in the EE joint venture (EUR 2.5 billion) and proceeds from the exchange of mobile spectrum licenses at T-Mobile US (EUR 0.5 billion) had a positive effect on NOPAT. Despite the acquisition of spectrum in the United States and a consistently high level of investment in connection with our integrated network

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strategy, average NOA remained virtually unchanged in 2017 due to lower cash and cash equivalents on average and lower carrying amounts of goodwill, among other effects.

EBIT defied expectations of a decline and increased by EUR 0.2 billion to EUR 9.4 billion, primarily as a result of the same special factors that also had a positive effect on net operating profit after taxes (NOPAT).


We are also very well on track with our non-financial key performance indicators, especially with regard to the development of **fixed-network and mobile customer numbers**. In our United States operating segment, in particular, we again recorded continued strong mobile customer additions, both in the postpaid and prepaid segments. At the end of the reporting year, **customer satisfaction** came in at 68.6 points versus 69.6 points at the start of the year (measured on a comparable basis). This slight decline is due in part to the trend in the Systems Solutions operating segment, which was not able to fully match its high prior-year level. Our goal for the coming years is to achieve a steady overall improvement in customer satisfaction. **Order entry** at our Systems Solutions operating segment declined markedly year-on-year and was well below our expectations for the reporting year. Although we concluded new deals in 2017, the level achieved was lower than expected. One reason for the decline in order entry was the market trend away from traditional IT business and toward cloud computing and digitalization, which resulted in shorter terms of contract. 

RESULTS OF OPERATIONS OF THE GROUP

NET REVENUE

In 2017, we generated net revenue of EUR 74.9 billion, which was 2.5 percent or EUR 1.9 billion up on the prior-year level. Our United States operating segment contributed to this positive trend with revenue growth of 5.9 percent: T-Mobile US' successful Un-carrier initiatives and the success of the MetroPCS brand gave a strong boost to the number of new customers and thus also to service


revenues. Terminal equipment revenues continued to rise, in part due to the stronger focus on offering terminal equipment under installment plans. In our German home market, there was a slight positive trend in revenue, with an increase of 0.7 percent compared with the prior year. This was partly due to a rise in mobile revenues and, primarily, growth in non-contract handset revenues. Increased IT and broadband revenues also had a positive impact on fixed-network revenue, although it was not sufficient to offset the overall decline in revenue in the fixed-network business. In the Europe operating segment, revenue also increased slightly by 1.2 percent compared with the prior year. Revenue development in our growth areas and an increase in terminal equipment revenue had a positive effect. By contrast, lower roaming charges in many countries and ongoing intense competition in the telecommunications footprint markets put further pressure on revenue. In the Systems Solutions operating segment, revenue decreased by 1.1 percent against the prior year. This decline was primarily attributable to the completion in 2016 of the set-up phase for the toll collection system in Belgium. Excluding this toll collection effect from the prior year, however, our telecommunications business posted revenue growth. By contrast, revenue from our traditional IT business continued to decrease due to the general downward trend in market prices and to a decline in order entry, especially at international level. Our strategic growth areas cloud, Internet of Things, and our new Telekom Security unit made a positive contribution. Revenue generated in our Group Development operating segment decreased by 3.6 percent in 2017 compared with the prior year, which was largely attributable to the revenue lost as a result of the sale of Strato as of March 31, 2017. By contrast, revenue growth at T-Mobile Netherlands had a positive impact.

Excluding the negative net exchange rate effects of EUR 0.6 billion – in particular from the translation of U.S. dollars into euros – and slightly negative effects of changes in the composition of the Group of EUR 0.1 billion – mainly from the sale of Strato – revenue even increased by EUR 2.6 billion or 3.6 percent. 

Contribution of the segments to net revenue

millions of €

	2017	2016	Change	Change %	2015
NET REVENUE	74,947	73,095	1,852	2.5	69,228
Germany ^a	21,931	21,774	157	0.7	22,185
United States	35,736	33,738	1,998	5.9	28,925
Europe ^a	11,589	11,454	135	1.2	11,674
Systems Solutions ^a	6,918	6,993	(75)	(1.1)	6,837
Group Development ^a	2,263	2,347	(84)	(3.6)	2,428
Group Headquarters & Group Services ^a	2,943	3,467	(524)	(15.1)	3,355
Intersegment revenue	(6,433)	(6,678)	245	3.7	(6,176)

^a Since January 1, 2017, we have reported on the Group Development operating segment and within the Group Headquarters & Group Services segment on the Board of Management department Technology and Innovation. Comparative figures have been adjusted retrospectively. 



Details on the trends in our financial and non-financial key performance indicators can be found in this section as well as in the section "Development of business in the operating segments," page 61 et seq.



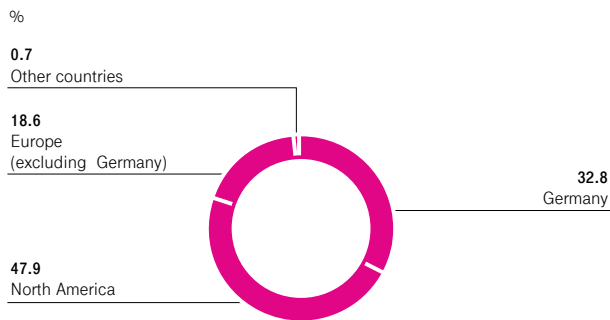
For detailed information on revenue development, please refer to the section "Development of business in the operating segments," page 61 et seq.



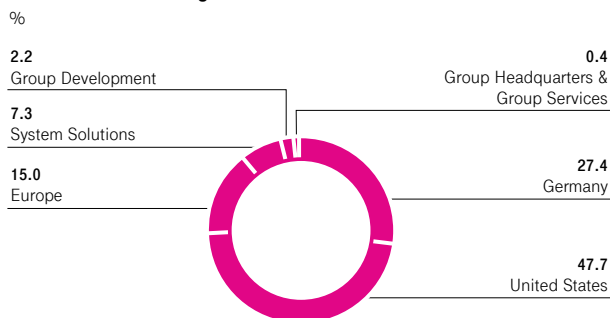
For more information on changes in the organizational structure, please refer to the section "Group organization," page 31 et seq., and Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

At 47.7 percent, our United States operating segment again provided the largest contribution to net revenue of the Group. This was an increase of 1.5 percentage points compared with the prior year, due in particular to ongoing strong customer additions. By contrast, the contributions by our other operating segments and the Group Headquarters & Group Services segment decreased. The proportion of net revenue generated internationally continued to increase, from 66.3 percent to 67.2 percent.

Breakdown of revenue by region



Contribution of the segments to net revenue



For more information on net revenue, please refer to Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.



For detailed information on the development of EBITDA/adjusted EBITDA in our segments, please refer to the section "Development of business in the operating segments," page 61 et seq. For an overview of the development of special factors, please refer to the table on page 54.

EBITDA, ADJUSTED EBITDA


Excluding special factors, **adjusted EBITDA** increased year-on-year by EUR 0.8 billion or 3.8 percent to EUR 22.2 billion in 2017. This development was primarily driven by our United States operating segment, which recorded an increase in its adjusted EBITDA contribution of 8.8 percent, mainly as a result of the continued success of the Un-carrier initiatives. EBITDA adjusted for special factors also grew in our Germany operating segment by 2.8 percent compared with 2016, driven by efficiency enhancement measures while revenue increased slightly. Adjusted EBITDA declined due to higher market investments and revenue-driven cost increases at the B2B/ICT business customer unit in our Europe operating segment. Slight revenue growth and increased cost efficiency had an offsetting effect. Adjusted EBITDA in our Systems Solutions operating segment also recorded a downward trend; however, this was largely due to the non-recurring effect already mentioned from the prior year and the tense situation in the ICT market. In the Group Development operating segment, adjusted EBITDA declined mainly due to the forgone earnings following the sale of Strato. A positive trend at T-Mobile Netherlands had a contrasting effect. Adjusted for negative net exchange rate effects and slightly negative effects of changes in the composition of the Group of EUR 0.2 billion, adjusted EBITDA even increased by EUR 1.0 billion or 4.9 percent.

EBITDA increased by EUR 1.4 billion or 6.3 percent year-on-year to EUR 24.0 billion. Special factors were positive on balance, increasing by EUR 0.6 billion compared with 2016 to EUR 1.7 billion. These factors included a partial reversal of impairment losses on spectrum licenses at T-Mobile US, increasing the carrying amount by EUR 1.7 billion as of September 30, 2017. Other positive factors were income from divestitures in connection with the sale of Strato completed as of midnight, March 31, 2017 (EUR 0.5 billion), income from the sale of the remaining shares in Scout24 AG (EUR 0.2 billion), and income from a settlement agreement concluded with BT in July 2017 (EUR 0.2 billion). Special factors in connection with staff-related measures and non-staff-related restructuring expenses amounted to EUR 0.6 billion, EUR 1.1 billion lower than the expenses reported in the prior-year period. Special factors in the prior year included income of EUR 2.5 billion from the sale in early 2016 of our stake in the EE joint venture and income in the amount of EUR 0.5 billion from transactions for the exchange of spectrum licenses between T-Mobile US and two telecommunications companies.

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Contribution of the segments to adjusted Group EBITDA


	2017		2016		Change millions of €	Change %	2015 millions of €
	millions of €	Proportion of adjusted Group EBITDA %	millions of €	Proportion of adjusted Group EBITDA %			
EBITDA (ADJUSTED FOR SPECIAL FACTORS) IN THE GROUP	22,230	100.0	21,420	100.0	810	3.8	19,908
Germany ^a	8,468	38.1	8,237	38.5	231	2.8	8,273
United States	9,316	41.9	8,561	40.0	755	8.8	6,654
Europe ^a	3,749	16.9	3,866	18.0	(117)	(3.0)	3,944
Systems Solutions ^a	509	2.3	530	2.5	(21)	(4.0)	581
Group Development ^a	915	4.1	943	4.4	(28)	(3.0)	1,050
Group Headquarters & Group Services ^a	(716)	(3.2)	(670)	(3.1)	(46)	(6.9)	(554)
Reconciliation	(11)	(0.1)	(47)	(0.3)	36	76.6	(40)

^a Since January 1, 2017, we have reported on the Group Development operating segment and within the Group Headquarters & Group Services segment on the Board of Management department Technology and Innovation. Comparative figures have been adjusted retrospectively. 

MARKETING EXPENSES

Marketing communication in our Group mainly takes the form of product and brand campaigns, such as Family Card, Stream On, Entertain, SmartHome, or of corporate campaigns such as our network build-out campaign. In 2017, marketing expenses amounted to EUR 2.4 billion, up slightly on the prior-year level of EUR 2.3 billion. The marketing expenses comprise expenses incurred through market research, market analysis, target market studies, determining marketing strategies, designing the marketing mix, and carrying out and managing marketing initiatives. They also include expenses arising from customer retention programs, market planning and segmentation, and product forecasts.

EBIT



Group EBIT stood at EUR 9.4 billion, up EUR 0.2 billion or 2.4 percent against the prior year. This increase is partly due to the effects described under EBITDA. A year-on-year increase in depreciation, amortization and impairment losses of EUR 1.2 billion reduced EBIT. EBIT was negatively impacted by the impairment losses recognized on goodwill in the Systems Solutions operating segment of EUR 1.2 billion and in the Europe operating segment in our national companies in Poland, Romania, and Albania of EUR 0.8 billion in total. Goodwill impairment losses of EUR 0.5 billion had been recognized in the prior year, mainly in the Netherlands cash-generating unit. In addition, impairment losses on property, plant, and equipment totaling EUR 0.1 billion were recognized (prior year: EUR 0.2 billion). Depreciation of property, plant and equipment and amortization of intangible assets were slightly lower than in the prior year. 

PROFIT BEFORE INCOME TAXES

Profit before income taxes increased from EUR 4.5 billion in the prior year to EUR 5.0 billion. This is due to the positive trend in

EBIT, as well as to a year-on-year decrease in the loss from financial activities by EUR 0.2 billion to EUR 4.4 billion. As in the prior year, impairments of our financial stake in BT, which in 2017 totaled EUR 1.5 billion recognized in profit and loss, were one of the main factors affecting profit/loss from financial activities. These impairments comprise both the share price effect and the exchange rate effect. In 2016, the impairment amounted to EUR 2.2 billion. Negative remeasurement effects from the exercise and measurement of embedded derivatives at T-Mobile US – mainly relating to the early repayment of financial liabilities to third parties outside of the Group – increased the loss from financial activities. As in 2016, we received dividend payments amounting to EUR 0.2 billion from our financial stake in BT in the reporting year. The prior-year figure included a final dividend of EUR 0.2 billion received in connection with the sale of our stake in the former EE joint venture. Finance costs decreased by EUR 0.3 billion to EUR 2.2 billion.

NET PROFIT/LOSS

Net profit increased year-on-year by EUR 0.8 billion to EUR 3.5 billion. After recording a tax expense of EUR 1.4 billion in the prior year, in 2017 we recorded a tax benefit of EUR 0.6 billion, mainly attributable to the reduction in the U.S. federal tax rate from 35 percent to 21 percent, which resulted in a non-cash deferred tax benefit of EUR 2.7 billion at T-Mobile US.  Profit attributable to non-controlling interests increased compared with 2016 by EUR 1.7 billion to EUR 2.1 billion. Alongside positive business performance and the partial reversal of impairment losses on spectrum licenses acquired previously in the United States operating segment, the increase in profit attributable to non-controlling interests was driven in particular by the deferred tax benefit recognized. 

The following table presents a reconciliation of EBITDA, EBIT, and net profit/loss to the respective figures adjusted for special factors.



For more information on changes in the organizational structure, please refer to the section "Group organization," page 31 et seq., and Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.



For further information, please refer to Note 26 "Income taxes" in the notes to the consolidated financial statements, page 212 et seq.



For further details, please refer to Note 22 "Depreciation, amortization and impairment losses" in the notes to the consolidated financial statements, page 210.



For further information on the development of our results of operations, please refer to the disclosures under "Notes to the consolidated income statement" in the notes to the consolidated financial statements, page 209 et seq.

Consolidated income statement and effects of special factors

millions of €

	EBITDA 2017	EBIT 2017	EBITDA 2016	EBIT 2016	EBITDA 2015	EBIT 2015
EBITDA/EBIT	23,969	9,383	22,544	9,164	18,388	7,028
GERMANY	(306)	(306)	(910)	(910)	(545)	(545)
Staff-related measures	(219)	(219)	(854)	(854)	(402)	(402)
Non-staff-related restructuring	(26)	(26)	(38)	(38)	(112)	(112)
Effects of deconsolidations, disposals and acquisitions	0	0	0	0	0	0
Other	(61)	(61)	(18)	(18)	(31)	(31)
UNITED STATES	1,633	1,633	406	406	(425)	(425)
Staff-related measures	(7)	(7)	(11)	(11)	(50)	(50)
Non-staff-related restructuring	0	0	0	0	0	0
Effects of deconsolidations, disposals and acquisitions	(11)	(11)	417	417	(382)	(382)
Reversal of impairment losses on non-current assets	1,651	1,651	-	-	-	-
Impairment losses	-	-	-	0	-	0
Other	0	0	0	0	7	7
EUROPE	(130)	(995)	(93)	(277)	(207)	(250)
Staff-related measures	(92)	(92)	(100)	(100)	(166)	(166)
Non-staff-related restructuring	(3)	(3)	(4)	(4)	(12)	(12)
Effects of deconsolidations, disposals and acquisitions	18	18	25	25	33	33
Impairment losses	-	(866)	-	(184)	-	(43)
Other	(53)	(52)	(14)	(14)	(62)	(62)
SYSTEMS SOLUTIONS	(229)	(1,477)	(252)	(276)	(481)	(548)
Staff-related measures	(132)	(132)	(136)	(136)	(233)	(233)
Non-staff-related restructuring	(2)	(2)	(5)	(5)	(229)	(229)
Effects of deconsolidations, disposals and acquisitions	0	0	0	0	(4)	(4)
Impairment losses	-	(1,242)	-	0	-	0
Other	(94)	(100)	(111)	(135)	(15)	(82)
GROUP DEVELOPMENT	893	893	2,547	2,132	556	556
Staff-related measures	1	1	(35)	(35)	(6)	(6)
Non-staff-related restructuring	(5)	(5)	(3)	(3)	(2)	(2)
Effects of deconsolidations, disposals and acquisitions	708	708	2,585	2,585	580	580
Impairment losses	-	-	-	(415)	-	0
Other	189	189	0	0	(16)	(16)
GROUP HEADQUARTERS & GROUP SERVICES	(121)	(121)	(574)	(574)	(416)	(432)
Staff-related measures	(109)	(109)	(502)	(502)	(353)	(353)
Non-staff-related restructuring	(49)	(49)	(31)	(31)	(78)	(78)
Effects of deconsolidations, disposals and acquisitions	63	63	(11)	(11)	(8)	(8)
Impairment losses	-	0	-	0	-	0
Other	(26)	(26)	(29)	(29)	23	7
GROUP RECONCILIATION	0	(1)	(1)	(1)	(2)	(1)
Staff-related measures	0	(1)	0	0	(1)	(1)
Non-staff-related restructuring	0	0	0	0	0	1
Effects of deconsolidations, disposals and acquisitions	0	0	(1)	(1)	1	1
Other	0	0	0	0	(2)	(2)
TOTAL SPECIAL FACTORS	1,740	(374)	1,124	501	(1,520)	(1,645)
EBITDA/EBIT (ADJUSTED FOR SPECIAL FACTORS)	22,230	9,757	21,420	8,663	19,908	8,673
Profit (loss) from financial activities (adjusted for special factors)		(2,895)		(2,323)		(2,233)
PROFIT (LOSS) BEFORE INCOME TAXES (ADJUSTED FOR SPECIAL FACTORS)		6,863		6,340		6,440
Income taxes (adjusted for special factors)		949		(1,858)		(1,927)
PROFIT (LOSS) (ADJUSTED FOR SPECIAL FACTORS)		7,812		4,482		4,513
PROFIT (LOSS) (ADJUSTED FOR SPECIAL FACTORS) ATTRIBUTABLE TO						
Owners of the parent (net profit (loss)) (adjusted for special factors)		6,039		4,114		4,113
Non-controlling interests (adjusted for special factors)		1,773		368		400

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FINANCIAL POSITION OF THE GROUP

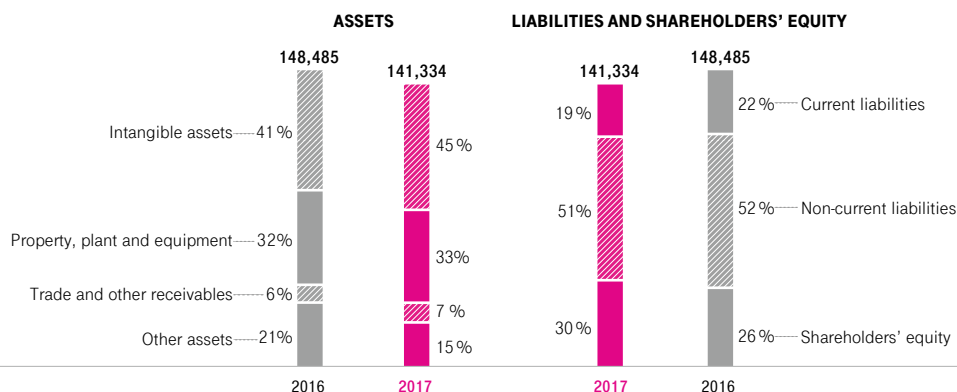
Condensed consolidated statement of financial position

millions of €

	Dec. 31, 2017	Change	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2013
ASSETS						
CURRENT ASSETS	20,392	(6,246)	26,638	32,184	29,798	21,963
Cash and cash equivalents	3,312	(4,435)	7,747	6,897	7,523	7,970
Trade and other receivables	9,723	361	9,362	9,238	10,454	7,712
Non-current assets and disposal groups held for sale	161	(211)	372	6,922	5,878	1,033
Other current assets	7,196	(1,961)	9,157	9,127	5,943	5,248
NON-CURRENT ASSETS	120,943	(904)	121,847	111,736	99,562	96,185
Intangible assets	62,865	2,266	60,599	57,025	51,565	45,967
Property, plant and equipment	46,878	120	46,758	44,637	39,616	37,427
Investments accounted for using the equity method	651	(74)	725	822	617	6,167
Other non-current assets	10,548	(3,217)	13,765	9,252	7,764	6,624
TOTAL ASSETS	141,334	(7,151)	148,485	143,920	129,360	118,148
LIABILITIES AND SHAREHOLDERS' EQUITY						
CURRENT LIABILITIES	27,366	(5,760)	33,126	33,548	28,198	22,496
Financial liabilities	8,358	(6,064)	14,422	14,439	10,558	7,891
Trade and other payables	10,971	530	10,441	11,090	9,681	7,259
Current provisions	3,372	304	3,068	3,367	3,517	3,120
Liabilities directly associated with non-current assets and disposal groups held for sale	–	(194)	194	4	6	113
Other current liabilities	4,664	(337)	5,001	4,648	4,436	4,113
NON-CURRENT LIABILITIES	71,498	(5,016)	76,514	72,222	67,096	63,589
Financial liabilities	49,171	(1,057)	50,228	47,941	44,669	43,708
Non-current provisions	11,530	(241)	11,771	11,006	10,838	9,077
Other non-current liabilities	10,798	(3,717)	14,515	13,275	11,589	10,804
SHAREHOLDERS' EQUITY	42,470	3,625	38,845	38,150	34,066	32,063
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	141,334	(7,151)	148,485	143,920	129,360	118,148

Structure of the consolidated statement of financial position

millions of €



Total assets amounted to EUR 141.3 billion, down by EUR 7.2 billion against December 31, 2016. This decrease is largely attributable to the repayment of financial liabilities. Exchange rate effects, in particular from the translation of U.S. dollars into euros, also contributed to the decline.



For detailed information on the change in cash and cash equivalents, please refer to the consolidated statement of cash flows, page 152, and Note 30 "Notes to the consolidated statement of cash flows" in the notes to the consolidated financial statements, page 217 et seq.

Cash and cash equivalents decreased by EUR 4.4 billion year-on-year due in part to the outflows for the spectrum license purchased in the United States amounting to EUR 5.2 billion. ☞

Trade and other receivables increased by EUR 0.4 billion to EUR 9.7 billion. Receivables increased slightly as of year-end in each of the Europe, Group Development, and Germany operating segments. In the United States operating segment, receivables remained more or less unchanged from the prior-year level. The higher volume of receivables for terminal equipment sold under installment plans in connection with the market launch of higher-priced smartphones had an increasing effect. This increase was offset in particular by exchange rate effects from the conversion of U.S. dollars into euros and factoring agreements concluded in the reporting period on revolving monthly sales of trade receivables due.

Non-current assets and disposal groups held for sale decreased by EUR 0.2 billion to EUR 0.2 billion. The sale of Strato completed in March 2017 had a decreasing effect of EUR 0.1 billion. In addition, the transaction completed by T-Mobile US in March 2017 on the exchange of spectrum licenses also reduced this item by EUR 0.1 billion. Further transactions on the exchange of spectrum licenses were agreed and completed in the United States operating segment in the course of the year.

Other current assets developed as follows until December 31, 2017: **Other current financial assets** decreased by EUR 2.4 billion to EUR 3.3 billion. This decline was mainly attributable to the utilization of a cash deposit of EUR 2.0 billion placed with the FCC in June 2016 in connection with the spectrum auction concluded in April 2017 in the United States operating segment. Exchange rate effects from the translation of U.S. dollars into euros also contributed to the decline. **Inventories** increased by EUR 0.4 billion to EUR 2.0 billion, primarily due to higher inventories of terminal equipment (in particular new, higher-priced smartphone models) as of the reporting date in our United States and Germany operating segments. Exchange rate effects from the translation of U.S. dollars into euros decreased the carrying amount here again.

Intangible assets and property, plant and equipment increased by EUR 2.4 billion compared with the end of 2016 to EUR 109.7 billion in total.

Intangible assets grew by EUR 2.3 billion to EUR 62.9 billion, mainly due to additions totaling EUR 11.6 billion. In particular, investments in new mobile spectrum licenses by the United States operating segment at the spectrum auction that ended in April 2017 had an increasing effect of EUR 7.2 billion. In addition, the partial reversal recognized as of September 30, 2017 of impairment losses on spectrum licenses previously acquired by T-Mobile US

increased the carrying amount by EUR 1.7 billion. By contrast, in the Systems Solutions operating segment, the unexpected decline in order entry prompted intra-year impairment testing of the assets assigned to this unit. An impairment loss on goodwill of EUR 1.2 billion was recognized as of September 30, 2017 as a result. In the Europe operating segment, the annual impairment test resulted in impairment losses on goodwill of EUR 0.8 billion in total in our national companies in Poland, Romania, and Albania. Negative exchange rate effects of EUR 4.5 billion, primarily from the translation of U.S. dollars into euros, and amortization of EUR 4.1 billion, decreased the carrying amount. The reclassification of intangible assets worth EUR 0.3 billion to non-current assets and disposal groups held for sale also reduced the carrying amount.

Property, plant and equipment increased by EUR 0.1 billion compared to December 31, 2016 to EUR 46.9 billion. Additions of EUR 11.5 billion resulted from investments in intensifying the network build-out in the United States operating segment and investments in the Germany and Europe operating segments in the broadband and fiber-optic roll-out, the IP transformation, and mobile infrastructure. This also included EUR 1.0 billion for capitalized higher-priced mobile handsets in connection with the JUMP! On Demand business model introduced at T-Mobile US under which customers do not purchase the device but lease it. Of the additions, 69 percent related to investments intended to increase operating capacities. Exchange rate effects of EUR 1.9 billion, primarily from the translation of U.S. dollars into euros, reduced the carrying amount, as did depreciation of EUR 8.3 billion, impairment losses of EUR 0.1 billion, and disposals of EUR 1.0 billion. Of these disposals, EUR 0.7 billion was attributable to terminal equipment returned by customers under the JUMP! On Demand model.

As of December 31, 2017, **other non-current assets** included the following significant effects compared with the end of 2016: The carrying amount of **other non-current financial assets** decreased by EUR 2.2 billion to EUR 5.7 billion. This was largely attributable to the impairment losses of EUR 1.5 billion recognized in profit and loss in 2017 on the exchange-traded shares in BT, and to the exercise and remeasurement of early repayment options embedded in bonds issued by T-Mobile US. **Deferred tax assets** decreased by EUR 1.2 billion compared with the prior year, due in part to the remeasurement of deferred taxes undertaken as a result of the reduction in the applicable U.S. federal tax rate as of the 2018 financial year.

Current and non-current **financial liabilities** decreased by EUR 7.1 billion compared with the end of 2016 to EUR 57.5 billion. This is primarily the result of the early repayment of T-Mobile US' debt instruments in the amount of EUR 9.5 billion (translated into

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euros) and regular repayments of bond liabilities of EUR 3.3 billion. New bonds of EUR 10.2 billion (translated into euros) were issued. In our United States operating segment, the Mandatory Convertible Preferred Stock issued by T-Mobile US in December 2014 was converted into T-Mobile US ordinary shares in December 2017. In connection with this conversion, EUR 0.8 billion were reclassified from financial liabilities to capital reserves, and associated conversion rights of a further EUR 0.9 billion embedded in these preferred shares were reclassified from financial liabilities to capital reserves. 

Trade and other payables increased by EUR 0.5 billion compared with the end of 2016 to EUR 11.0 billion, mainly due to higher inventories of terminal equipment (in particular new higher-priced smartphone models) in our United States and Germany operating segments. Exchange rate effects from the translation from U.S. dollars into euros have an offsetting effect.

Current and non-current **provisions** increased slightly against the prior-year level by EUR 0.1 billion to EUR 14.9 billion, of which EUR 8.4 billion (December 31, 2016: EUR 8.5 billion) related to provisions for pensions and other employee benefits. The slight decrease in pension provisions is mainly due to the positive yield development from plan assets at fair value that resulted in an actuarial gain of EUR 0.1 billion recognized under other comprehensive income. At EUR 6.5 billion, other provisions were slightly higher than in the prior year.

Other non-current liabilities decreased by EUR 3.7 billion compared with the prior year to EUR 10.8 billion and included **deferred tax liabilities**, which decreased by EUR 3.0 billion compared with the end of 2016 to EUR 7.0 billion. The decrease was mainly

attributable to our United States operating segment, where the reduction in the applicable U.S. federal tax rate from 35 percent to 21 percent as of the 2018 financial year prompted a remeasurement of the surplus amount of deferred tax liabilities. Other liabilities also decreased due to the decline in liabilities to Bundesanstalt für Post- und Telekommunikation (Federal Posts and Telecommunications Agency) resulting from the early retirement model, and to exchange rate effects, in particular from the translation of U.S. dollars into euros.

Shareholders' equity increased from EUR 38.8 billion as of December 31, 2016 to EUR 42.5 billion, due to profit after taxes of EUR 5.6 billion. Shareholders' equity increased by EUR 1.7 billion overall in connection with the conversion of Mandatory Convertible Preferred Stock into ordinary shares of T-Mobile US in our United States operating segment in December 2017, including the transfer of the conversion rights embedded in these preferred shares. In addition, in connection with the option granted to our shareholders to have their dividend entitlements for 2016 converted into shares, a capital increase of EUR 1.4 billion was carried out involving the contribution of the dividend entitlements. Dividend payments for the 2016 financial year to Deutsche Telekom AG shareholders of EUR 2.8 billion and to non-controlling interests of EUR 0.1 billion had an offsetting effect. As of December 31, 2017, ordinary shares in the amount of USD 0.4 billion (around EUR 0.4 billion) had been purchased under the share buy-back program announced at T-Mobile US in early December 2017. Under the program, T-Mobile US may, until the end of 2018, buy back ordinary shares of the company for a total amount of up to USD 1.5 billion. Currency translation effects recognized directly in equity reduced shareholders' equity by EUR 2.2 million.



For further information on the development of financial liabilities, please refer to the explanations in Note 10 "Financial liabilities" in the notes to the consolidated financial statements, page 192 et seq.

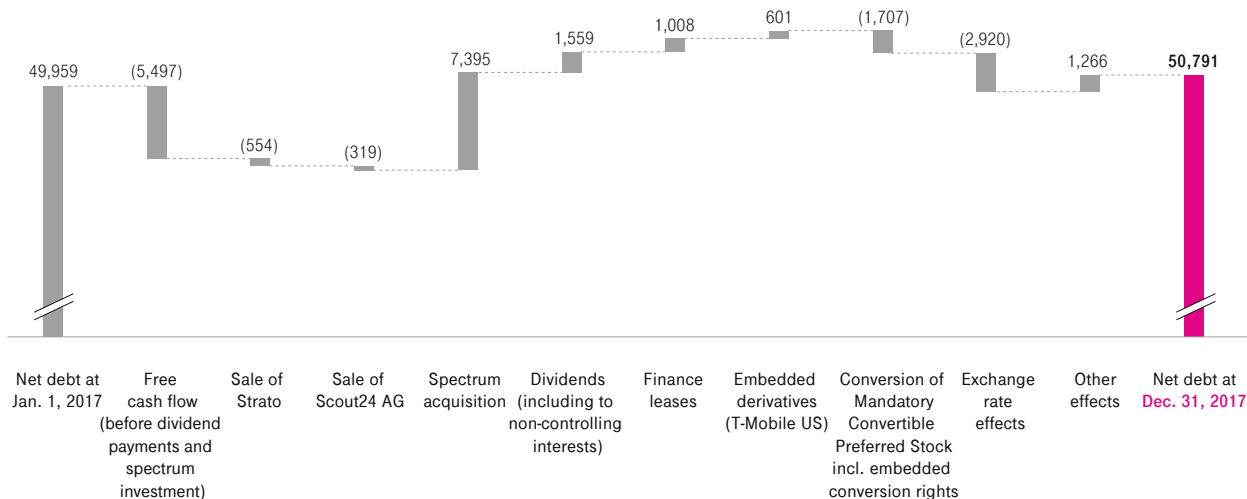
Net debt

millions of €


	Dec. 31, 2017	Change	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2013
Financial liabilities (current)	8,358	(6,064)	14,422	14,439	10,558	7,891
Financial liabilities (non-current)	49,171	(1,057)	50,228	47,941	44,669	43,708
FINANCIAL LIABILITIES	57,529	(7,121)	64,650	62,380	55,227	51,599
Accrued interest	(692)	263	(955)	(1,014)	(1,097)	(1,091)
Other	(781)	248	(1,029)	(857)	(1,038)	(881)
GROSS DEBT	56,056	(6,610)	62,666	60,509	53,092	49,627
Cash and cash equivalents	3,312	(4,435)	7,747	6,897	7,523	7,970
Available-for-sale financial assets/ financial assets held for trading	7	(3)	10	2,877	289	310
Derivative financial assets	1,317	(1,062)	2,379	2,686	1,343	771
Other financial assets	629	(1,942)	2,571	479	1,437	1,483
NET DEBT	50,791	832	49,959	47,570	42,500	39,093

Changes in net debt

millions of €



Our **net debt** increased by EUR 0.8 billion year-on-year to EUR 50.8 billion. The reasons for this are presented in the graphic above. Other effects of EUR 1.3 billion include, among other factors, liabilities for the acquisition of media broadcasting rights and financing options under which the payments for trade payables become due at a later point in time by involving banks in the process. This figure also includes the acquisition of ordinary shares in T-Mobile US under the aforementioned share buy-back program.

Off-balance sheet assets and other financing formats. In addition to the assets recognized in the statement of financial position, we use off-balance sheet assets. This primarily relates to leased property. 



For more information, please refer to the explanations in Note 33 "Leases," pages 226 and 227, and Note 34 "Other financial obligations," page 228, in the notes to the consolidated financial statements.

Off-balance-sheet financial instruments mainly relate to the sale of receivables by means of factoring. Total receivables sold as of December 31, 2017 amounted to EUR 4.7 billion (December 31, 2016: EUR 4.9 billion). This mainly relates to factoring agreements in the United States and Germany operating segments. The agreements are used in particular for active receivables management.

Furthermore, in the reporting year, we chose financing options totaling EUR 0.3 billion (2016: EUR 0.2 billion) which extended the period of payment for trade payables from operating and investing activities by involving banks in the process and which upon payment are shown under cash flows used in/from financing activities. As a result, we show these payables under financial liabilities in the statement of financial position.

In 2017, we leased network equipment for a total of EUR 1.0 billion (2016: EUR 0.9 billion), primarily in the United States operating segment, which is recognized as a finance lease. In the statement of financial position, we therefore also recognize this item under financial liabilities and the future repayments of the liabilities in net cash from/used in financing activities.

Finance management. Our finance management ensures our Group's ongoing solvency and hence its financial equilibrium. The fundamentals of Deutsche Telekom's finance policy are established each year by the Board of Management and overseen by the Supervisory Board. Group Treasury is responsible for implementing the finance policy and for ongoing risk management.

The rating of Deutsche Telekom AG

	Standard & Poor's	Moody's	Fitch
LONG-TERM RATING			
Dec. 31, 2013	BBB+	Baa1	BBB+
Dec. 31, 2014	BBB+	Baa1	BBB+
Dec. 31, 2015	BBB+	Baa1	BBB+
Dec. 31, 2016	BBB+	Baa1	BBB+
DEC. 31, 2017	BBB+	Baa1	BBB+
OUTLOOK	Stable	Stable	Stable
SHORT-TERM RATING			
	A-2	P-2	F2

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Financial flexibility

	2017	2016	2015	2014	2013
RELATIVE DEBT					
Net debt	2.3 x	2.3 x	2.4 x	2.4 x	2.2 x
EBITDA (adjusted for special factors)					
EQUITY RATIO %	30.0	26.2	26.5	26.3	27.1

To ensure financial flexibility, we primarily use the KPI **relative debt**. This is a core component of our finance strategy and an important performance indicator for investors, analysts, and rating agencies.

Condensed consolidated statement of cash flows


millions of €

	2017	2016	2015
NET CASH FROM OPERATING ACTIVITIES	17,196	15,533	14,997
Cash outflows for investments in intangible assets (excluding goodwill and before spectrum investment) and property, plant and equipment (CASH CAPEX)	(12,099)	(10,958)	(10,818)
Proceeds from disposal of intangible assets (excluding goodwill) and property, plant and equipment	400	364	367
FREE CASH FLOW (BEFORE DIVIDEND PAYMENTS AND SPECTRUM INVESTMENT)	5,497	4,939	4,546
NET CASH USED IN INVESTING ACTIVITIES	(16,814)	(13,608)	(15,015)
NET CASH USED IN FINANCING ACTIVITIES	(4,594)	(1,322)	(876)
Effect of exchange rate changes on cash and cash equivalents	(226)	250	267
Changes in cash and cash equivalents associated with non-current assets and disposal groups held for sale	3	(3)	1
Net increase (decrease) in cash and cash equivalents	(4,435)	850	(626)
CASH AND CASH EQUIVALENTS	3,312	7,747	6,897

Free cash flow. Free cash flow of the Group before dividend payments and spectrum investment grew from EUR 4.9 billion in the prior year to EUR 5.5 billion, with net cash from operating activities increasing by EUR 1.7 billion to EUR 17.2 billion. Cash outflows for investments in intangible assets (excluding goodwill and before spectrum investment) and property, plant and equipment increased by EUR 1.1 billion.

The increase in **net cash from operating activities** was mainly attributable to the positive business development of our United States operating segment. In the reporting period, factoring agreements were concluded for monthly revolving sales of trade receivables, mainly in the United States and Germany operating segments. Their effect on net cash from operating activities amounted to EUR 0.3 billion and was thus EUR 0.5 billion lower than in the prior year. In 2016, cash inflows from the cancellation of or chang-

es in the terms of interest rate derivatives had a negative effect of EUR 0.3 billion. A year-on-year increase of EUR 0.1 billion in cash outflows for income taxes also had a negative impact. The dividend payments received from BT amounted to EUR 0.2 billion compared with the prior year in which dividend payments comprised EUR 0.1 billion from BT and EUR 0.2 billion from the former joint venture EE. By contrast, net interest payments that were EUR 0.1 billion lower year-on-year had a positive impact on net cash from operating activities.

The EUR 1.1 billion increase in **cash capex** compared with 2016 primarily related to the United States, Germany, and Europe operating segments. Cash outflows relate to network modernization and the continued network build-out, including roll-out of the 4G/LTE network and the broadband/fiber-optic build-out. 



For further details, please refer to Note 30 "Notes to the consolidated statement of cash flows" in the notes to the consolidated financial statements, page 217 et seq.

Reconciliation for the change in disclosure of key figures for the prior-year comparative period in 2017

millions of €

	Total revenue	Profit (loss) from operations (EBIT)	EBITDA	Adjusted EBITDA	Depreciation and amortization	Impairment losses	Segment assets	Segment liabilities
FY 2016/DECEMBER 31, 2016								
PRESENTATION AS OF DECEMBER 31, 2016 – AS REPORTED								
Germany	22,041	4,081	7,890	8,800	(3,796)	(13)	33,353	26,423
United States	33,738	3,685	8,967	8,561	(5,282)	-	68,349	49,791
Europe	12,747	717	3,963	4,094	(2,594)	(652)	30,778	12,519
Systems Solutions	7,907	(330)	245	582	(575)	-	9,031	6,073
Group Headquarters & Group Services	2,212	1,001	1,522	(576)	(493)	(28)	42,628	50,502
TOTAL	78,645	9,154	22,587	21,461	(12,740)	(693)	184,139	145,308
Reconciliation	(5,550)	10	(43)	(41)	53	-	(35,654)	(35,668)
GROUP	73,095	9,164	22,544	21,420	(12,687)	(693)	148,485	109,640
FY 2016/DECEMBER 31, 2016								
+/- CHANGE IN DISCLOSURE: TECHNOLOGY AND INNOVATION BOARD DEPARTMENT AND GROUP DEVELOPMENT OPERATING SEGMENT								
Germany	(267)	(457)	(563)	(563)	106	-	(1,336)	(829)
United States	-	-	-	-	-	-	-	-
Europe	(1,293)	467	(190)	(228)	242	415	(4,178)	(1,528)
Systems Solutions	(914)	180	33	(52)	147	-	(1,569)	(830)
Group Development	2,347	2,730	3,490	943	(345)	(415)	11,221	2,417
Group Headquarters & Group Services	1,255	(2,920)	(2,765)	(94)	(155)	-	(4,926)	(19)
TOTAL	1,128	-	5	6	(5)	-	(788)	(789)
Reconciliation	(1,128)	-	(5)	(6)	5	-	788	789
GROUP	-	-	-	-	-	-	-	-
FY 2016/DECEMBER 31, 2016								
= PRESENTATION AS OF DECEMBER 31, 2017								
Germany	21,774	3,624	7,327	8,237	(3,690)	(13)	32,017	25,594
United States	33,738	3,685	8,967	8,561	(5,282)	-	68,349	49,791
Europe	11,454	1,184	3,773	3,866	(2,352)	(237)	26,600	10,991
Systems Solutions	6,993	(150)	278	530	(428)	-	7,462	5,243
Group Development	2,347	2,730	3,490	943	(345)	(415)	11,221	2,417
Group Headquarters & Group Services	3,467	(1,919)	(1,243)	(670)	(648)	(28)	37,702	50,483
TOTAL	79,773	9,154	22,592	21,467	(12,745)	(693)	183,351	144,519
Reconciliation	(6,678)	10	(48)	(47)	58	-	(34,866)	(34,879)
GROUP	73,095	9,164	22,544	21,420	(12,687)	(693)	148,485	109,640

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DEVELOPMENT OF BUSINESS IN THE OPERATING SEGMENTS

GERMANY

CUSTOMER DEVELOPMENT

thousands

	Dec. 31, 2017	Dec. 31, 2016	Change	Change %	Dec. 31, 2015
Mobile customers ^a	43,125	41,849	1,276	3.0	40,373
Contract customers	25,887	25,219	668	2.6	23,709
Prepay customers	17,238	16,630	608	3.7	16,665
Fixed-network lines	19,239	19,786	(547)	(2.8)	20,227
Of which: retail IP-based	11,996	9,042	2,954	32.7	6,887
Broadband lines	13,209	12,922	287	2.2	12,644
Of which: optical fiber	5,803	4,250	1,553	36.5	2,923
Television (IPTV, satellite)	3,139	2,879	260	9.0	2,683
Unbundled local loop lines (ULLs)	6,138	7,195	(1,057)	(14.7)	8,050
Wholesale unbundled lines	5,539	4,212	1,327	31.5	3,015
Of which: optical fiber	3,783	2,555	1,228	48.1	1,444
Wholesale bundled lines	100	165	(65)	(39.4)	227

^a As of January 1, 2017, reporting of contract customers in business customer operations excludes test cards (minus 41 thousand). In addition, there was a one-time effect in the Business Customers segment from a change in system reporting for prepay customers (plus 180 thousand). Prior-year figures have not been adjusted.



For information on changes in the organizational structure, please refer to the section "Group organization," page 31 et seq., and Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

Total

In Germany we continue to be market leader both in terms of fixed-network and mobile revenues. This success is attributable to our high-performance networks. We offer best customer experience with multi-award-winning network quality – in the fixed network and in mobile communications – and with a broad product portfolio. So far, we have won 3.6 million customers for our integrated product, MagentaEINS.

In mobile communications, we won another 1.1 million customers in 2017. Thanks to strong demand for mobile rate plans with integrated data volumes, the number of contract customers under our Telekom and congstar brands grew. We also recorded substantial growth in the number of prepay customers.

By the end of 2017, we had already migrated 17.3 million retail and wholesale lines to IP, which corresponds to a migration rate of 69 percent.

Strong demand for our fiber-optic products continued. The number of lines increased to 9.6 million overall by the end of 2017, which means we connected 2.8 million lines to our fiber-optic network in Germany over the reporting year. With the progress in fiber-optic roll-out and innovative vectoring technology, we also successfully drove forward the marketing of higher bandwidths. With our contingent model, we create incentives for the migration from traditional wholesale products – such as bundled wholesale lines or unbundled local loop lines (ULLs) – to higher-quality fiber-optic wholesale lines.

Mobile communications

In 2017, we won a total of 676 thousand contract customers under the Telekom and congstar brands and at Telekom Deutschland Multibrand GmbH. The contract customer business of resellers (service providers) remained at the prior-year level. The number of prepay customers increased by 428 thousand.

Fixed network

Due to the persistently challenging development in the fixed-network market, primarily owing to aggressive pricing offers of competitors, we are pursuing new paths in marketing, focusing on integrated offers and on TV and fiber-optic lines. As a result, the number of broadband lines increased by 287 thousand in 2017 compared with the prior year and the number of TV customers rose by 260 thousand. In the traditional fixed network, the number of lines decreased by 547 thousand.

Our MagentaZuhause rate plans offer a comprehensive product portfolio for the fixed network based on IP technology and rate plan-specific bandwidths. MagentaZuhause Hybrid bundles fixed-network and mobile technology in a single router. To date, 370 thousand customers, primarily based in rural areas, have selected this innovative product.

By the end of 2017, we had also connected a total of 218 thousand apartments to our network through our partnerships in the housing sector.

Wholesale

As of December 31, 2017, fiber-optic lines accounted for 32.1 percent of all lines – 10.0 percentage points higher than the prior-year figure. The strong growth in our wholesale unbundled lines by 1.3 million or 31.5 percent compared with 2016 was primarily attributable to the strong demand for our contingent model. By contrast, the number of bundled wholesale lines decreased by 65 thousand. This trend is likely to continue for the next few years due to the fact that our competitors are switching from bundled to unbundled wholesale

products with more bandwidth, or to their own infrastructure. The number of unbundled local loop lines decreased by 1.1 million or 14.7 percent compared with the end of the prior year. This is due first to the move to higher-quality fiber-optic wholesale lines, and second to retail customers switching to cable operators. In addition, wholesale customers are migrating their retail customers to their own fiber-optic lines. The total number of lines in the wholesale sector increased compared with 2016 to 11.8 million.

DEVELOPMENT OF OPERATIONS

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	21,931	21,774	157	0.7	22,185
Consumers	11,797	11,739	58	0.5	12,146
Business Customers ^a	6,017	5,923	94	1.6	5,943
Wholesale	3,747	3,742	5	0.1	3,677
Other ^a	370	370	0	0.0	419
Profit from operations (EBIT)	4,334	3,624	710	19.6	4,081
EBIT margin %	19.8	16.6			18.4
Depreciation, amortization and impairment losses	(3,828)	(3,703)	(125)	(3.4)	(3,646)
EBITDA	8,162	7,327	835	11.4	7,728
Special factors affecting EBITDA	(306)	(910)	604	66.4	(545)
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	8,468	8,237	231	2.8	8,273
EBITDA margin (adjusted for special factors) %	38.6	37.8			37.3
CASH CAPEX	(4,214)	(4,031)	(183)	(4.5)	(5,459)

^a As of July 1, 2017, a share of revenue previously recognized under "Other" was assigned to Business Customers on account of a reorganization. Prior-year figures have not been adjusted.

Total revenue

Total revenue increased by 0.7 percent year-on-year in 2017, due mainly to a 2.5 percent rise in mobile revenues and a 10.8 percent growth in non-contract handset revenues. Higher IT and broadband revenues also had a positive impact on fixed-network revenue. This was not quite sufficient to completely offset the decrease of 0.9 percent in fixed-network revenue compared with 2016.

Revenue from **Consumers** grew by 0.5 percent year-on-year. Volume-related revenue decreases continued to drive the traditional fixed-network business. By contrast, revenue from broadband business increased by 1.1 percent, while revenue from mobile business increased by 2.3 percent, primarily due to successful terminal equipment sales.

Revenue from **Business Customers** increased by 1.6 percent, with mobile revenues increasing by 2.7 percent and IT revenues by 19.5 percent compared with 2016. In the fixed network, by contrast,

a decline was recorded in traditional voice telephony, due largely to the increasing number of customers moving to flat-rate plans.

Wholesale revenue remained at the prior-year level in 2017. Adjusted for regulatory price effects (from December 1, 2016), there was a positive trend, thanks primarily to higher revenues with unbundled lines, in particular as part of our contingent model.

EBITDA, adjusted EBITDA

EBITDA amounted to EUR 8.2 billion in 2017, an increase of 11.4 percent against the prior year, due mainly to lower special factors for expenses in connection with our staff restructuring. EBITDA adjusted for special factors increased by 2.8 percent compared with 2016 in the reporting year to EUR 8.5 billion, driven mainly by efficiency enhancement measures in all functions while revenue increased slightly. Our adjusted EBITDA margin increased to 38.6 percent (prior-year figure: 37.8 percent).

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EBIT

Profit from operations increased by 19.6 percent year-on-year to EUR 4.3 billion. The increase in the level of EBITDA more than offset the slight increase in depreciation, amortization and impairment losses.

Cash capex

Cash capex increased year-on-year by 4.5 percent. As part of our integrated network strategy, we again made significant investments in the broadband and fiber-optic roll-out, our IP transformation, and our mobile infrastructure.

UNITED STATES

CUSTOMER DEVELOPMENT

thousands

	Dec. 31, 2017	Dec. 31, 2016	Change	Change %	Dec. 31, 2015
Mobile customers	72,585	71,455	1,130	1.6	63,282
Branded customers ^a	58,715	54,240	4,475	8.3	49,326
Branded postpaid ^a	38,047	34,427	3,620	10.5	31,695
Branded prepay ^a	20,668	19,813	855	4.3	17,631
Wholesale customers ^{a,b}	13,870	17,215	(3,345)	(19.4)	13,956

^a On September 1, 2016 T-Mobile US sold its marketing and distribution rights to certain of T-Mobile US' existing co-branded customers to a current wholesale partner for nominal consideration (the MVNO Transaction). Upon the sale, the transaction resulted in a transfer of 1,365 thousand branded postpaid customers and 326 thousand branded prepay customers to wholesale customers. Prospectively from September 1, 2016, net customer additions for these customers are included within wholesale customers.

^b T-Mobile US believes current and future regulatory changes have made the Lifeline program offered by T-Mobile US' wholesale partners uneconomical. T-Mobile US will continue to support its wholesale partners offering the Lifeline program, but has excluded the Lifeline customers from the reported wholesale subscriber base resulting in the removal of 4,528 thousand reported wholesale customers beginning in the second quarter of 2017. No further Lifeline adjustments are expected in future periods.

At December 31, 2017, the United States operating segment (T-Mobile US) had 72.6 million customers compared to 71.5 million customers at December 31, 2016. Net customer additions were 5.7 million for the year ended December 31, 2017 – excluding Lifeline customer activity beginning in the second quarter of 2017 – compared to 8.2 million net customer additions for the year ended December 31, 2016 due to the factors described below.

Branded customers. Branded postpaid net customer additions were 3,620 thousand for the year ended December 31, 2017, compared to 4,097 thousand branded postpaid net customer additions for the year ended December 31, 2016. Branded postpaid net customer additions for the year ended December 31, 2017 were lower compared to the year ended December 31, 2016, primarily due to higher deactivations from a growing customer base, a decrease in the number of qualified branded prepay customers migrating to branded postpaid plans, and lower gross customer additions from increased competitive activity in the marketplace.

Branded prepay net customer additions were 855 thousand for the year ended December 31, 2017, compared to 2,508 thousand branded prepay net customer additions for the year ended

December 31, 2016. The decrease was due primarily to higher MetroPCS brand deactivations from a growing customer base and increased competitive activity in the marketplace. Additional decreases resulted from the optimization of T-Mobile US' third-party distribution channels.

Wholesale customers. T-Mobile US believes current and future regulatory changes have made the Lifeline program offered by T-Mobile US wholesale partners uneconomical. T-Mobile US will continue to support its wholesale partners offering the Lifeline program, but has excluded the Lifeline customers from the reported wholesale subscriber base resulting in a removal of 4,528 thousand reported wholesale customers beginning in the second quarter of 2017. No further Lifeline adjustments are expected in future periods. Taking the aforementioned approach into consideration Wholesale net customer additions were 1,183 thousand for the year ended December, 2017, compared to wholesale net customer additions of 1,568 thousand for the year ended December 31, 2016. The decrease was due primarily to lower gross customer additions, partially offset by lower customer deactivations. Net customer activity for Lifeline was also excluded beginning in the second quarter of 2017.

DEVELOPMENT OF OPERATIONS

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	35,736	33,738	1,998	5.9	28,925
Profit from operations (EBIT)	5,930	3,685	2,245	60.9	2,454
EBIT margin %	16.6	10.9			8.5
Depreciation, amortization and impairment losses	(5,019)	(5,282)	263	5.0	(3,775)
EBITDA	10,949	8,967	1,982	22.1	6,229
Special factors affecting EBITDA	1,633	406	1,227	n. a.	(425)
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	9,316	8,561	755	8.8	6,654
EBITDA margin (adjusted for special factors) %	26.1	25.4			23.0
CASH CAPEX	(11,932)	(5,855)	(6,077)	n. a.	(6,381)

Total revenue

Total revenue for the United States operating segment of EUR 35.7 billion in 2017 increased by 5.9 percent compared to EUR 33.7 billion in 2016. In U.S. dollars, T-Mobile US' total revenues increased by 8.1 percent year-on-year due primarily to service revenue growth resulting from increases in T-Mobile US' average branded customer base from strong customer response to T-Mobile US' Un-carrier initiatives and success of the MetroPCS brand. Additionally, equipment revenues increased due primarily to a higher average revenue per device sold, an increase from the purchase of leased devices at the end of the lease term, and increased proceeds from liquidation of returned customer handsets, partially offset by a decrease in lease revenues due to T-Mobile US' continued focus on equipment installment plan sales.

EBITDA, adjusted EBITDA

Adjusted EBITDA increased by 8.8 percent to EUR 9.3 billion in 2017, compared to EUR 8.6 billion in 2016. In U.S. dollars, adjusted EBITDA increased by 10.7 percent in 2017, compared to 2016. Adjusted EBITDA increased due primarily to an increase in branded postpaid and prepay service revenues resulting from strong customer response to T-Mobile US' Un-carrier initiatives, the ongoing success of promotional activities, and the continued strength of the MetroPCS brand, partially offset by higher commissions, employee-related costs, promotional costs, higher costs associated with network expansion, and the negative impact from hurricanes in Texas, Florida and Puerto Rico. The negative impact in 2017 from lost revenue, assets damaged or destroyed and other hurricane-related costs incurred was approximately EUR 250 million. As of December 31, 2017, T-Mobile US expects additional expenses to be incurred and customer activity to be

impacted in the first quarter of 2018, primarily related to T-Mobile US' operations in Puerto Rico. T-Mobile US has not recognized any potential insurance recoveries related to those hurricane losses as it continues to assess the damage and hold discussions with its insurance carriers. Adjusted EBITDA margin increased to 26.1 percent in 2017, compared to 25.4 percent in 2016 due to the factors described above.

EBITDA in 2017 included special factors of EUR 1.6 billion compared to special factors of EUR 0.4 billion in 2016. The increase in special factors related primarily to a spectrum impairment reversal in 2017. Overall, EBITDA increased to EUR 10.9 billion in 2017, compared to EUR 9.0 billion in 2016 due to the factors described above, including the impact of special factors.

EBIT

EBIT increased to EUR 5.9 billion in 2017, compared to EUR 3.7 billion in 2016 driven by higher EBITDA and lower depreciation expense related to devices leased under T-Mobile US' JUMP! On Demand program, partially offset by an increase from the continued build-out of T-Mobile US' 4G/LTE network.

Cash capex

Cash capex increased to EUR 11.9 billion in 2017, compared to EUR 5.9 billion in 2016, due primarily to EUR 7.3 billion of spectrum licenses acquired in 2017, compared with EUR 1.7 billion of spectrum licenses acquired in 2016. Excluding the effects of spectrum acquisitions, cash capex increased by EUR 0.4 billion in 2017, compared to 2016, due primarily to growth in network build as T-Mobile US continues deployment of low band spectrum and begins deployment of 600 MHz spectrum.

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EUROPE

CUSTOMER DEVELOPMENT

thousands

		Dec. 31, 2017	Dec. 31, 2016	Change	Change %	Dec. 31, 2015
EUROPE, TOTAL	Mobile customers	48,842	47,952	890	1.9	49,060
	Contract customers	25,483	24,315	1,168	4.8	23,657
	Prepay customers	23,359	23,637	(278)	(1.2)	25,403
	Fixed-network lines	8,439	8,531	(92)	(1.1)	8,763
	Of which: IP-based	5,734	5,016	718	14.3	4,132
	Retail broadband lines	5,647	5,393	254	4.7	5,189
	Television (IPTV, satellite, cable)	4,244	4,049	195	4.8	3,905
	Unbundled local loop lines (ULLs)/wholesale PSTN	2,265	2,259	6	0.3	2,239
	Wholesale bundled lines	143	123	20	16.3	121
	Wholesale unbundled lines	246	247	(1)	(0.4)	199
GREECE	Mobile customers	7,981	7,725	256	3.3	7,399
	Fixed-network lines	2,547	2,564	(17)	(0.7)	2,586
	Broadband lines	1,843	1,682	161	9.6	1,531
ROMANIA	Mobile customers	5,258	5,722	(464)	(8.1)	5,992
	Fixed-network lines	1,865	1,969	(104)	(5.3)	2,091
	Broadband lines	1,182	1,194	(12)	(1.0)	1,186
HUNGARY	Mobile customers	5,293	5,332	(39)	(0.7)	5,504
	Fixed-network lines	1,632	1,629	3	0.2	1,674
	Broadband lines	1,105	1,040	65	6.3	1,023
POLAND	Mobile customers	10,454	10,634	(180)	(1.7)	12,056
	Fixed-network lines	32	20	12	60.0	18
	Broadband lines	15	16	(1)	(6.3)	15
CZECH REPUBLIC	Mobile customers	6,176	6,049	127	2.1	6,019
	Fixed-network lines	197	140	57	40.7	154
	Broadband lines	167	134	33	24.6	134
CROATIA	Mobile customers	2,244	2,234	10	0.4	2,233
	Fixed-network lines	967	1,001	(34)	(3.4)	1,004
	Broadband lines	783	783	0	0.0	741
SLOVAKIA	Mobile customers	2,243	2,225	18	0.8	2,235
	Fixed-network lines	858	850	8	0.9	855
	Broadband lines	669	638	31	4.9	599
AUSTRIA	Mobile customers	5,702	4,594	1,108	24.1	4,323
OTHER^a	Mobile customers	3,490	3,438	52	1.5	3,299
	Fixed-network lines	340	358	(18)	(5.0)	381
	Broadband lines	274	279	(5)	(1.8)	285

^a Other: national companies of Albania, the F.Y.R.O. Macedonia, and Montenegro, as well as the lines of the GTS Central Europe group in Romania.



For information on changes in the organizational structure, please refer to the section "Group organization," page 31 et seq., and Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

Total

The European market was again dominated by intense competition in the reporting year. We met this challenge successfully thanks to our convergent product portfolio MagentaOne, recording a strong increase of around 58.5 percent in our FMC customer base as of December 31, 2017. Our TV business has also established itself as a consistent revenue growth driver. In the mobile communications business, we recorded a year-on-year increase in the number of high-value contract customers of 4.8 percent to 25.5 million. We are systematically driving forward the roll-out of fast, fiber-optic lines (FTTH, FTTB, and FTTC) in the fixed network. As part of our pan-European network strategy, we also increased the number of IP lines – primarily thanks to the migration from traditional PSTN lines to IP technology.

Mobile communications

As of the end of December 2017, we had a total mobile customer base of 48.8 million – up by 1.9 percent compared with 2016. The rise was attributable to the positive trend in the high-value contract customer business, especially at our national companies in Poland, Hungary, and the Czech Republic. Overall, we recorded growth in the number of contract customers of 4.8 percent or some 1.2 million net contract additions; thus the growth trend continues. At the end of the reporting year, contract customers accounted for 52.2 percent of the total customer base. Thanks to our continued build-out of our mobile networks with 4G/LTE technology, our customers enjoy better network coverage with fast mobile broadband. As of December 31, 2017, we already covered 94 percent of the population in the countries of our operating segment with LTE, reaching around 106 million people in total. The high level of data volumes used as well as the sales figures for mobile devices prove that our customers actually use these high bandwidths: At the end of December 2017, smartphones accounted for 81 percent of all mobile terminal equipment sales, a further increase against the prior year. This enabled us to entirely offset customer losses in the prepay business. The effects of regulatory prepay registration requirements in Poland had a negative effect on customer development. We recorded a return to slight growth in prepay customers from the third quarter of 2017 compared with the prior quarter.

Fixed network

Our TV and Entertainment offers generated positive impetus again in the reporting year: The number of TV customers grew by 4.8 percent compared with the end of 2016 to 4.2 million, with the majority of the net customer additions – 195 thousand – at our national companies in Hungary, Slovakia and Greece.

Our convergence product portfolio, MagentaOne, is available to our customers in all of our integrated countries. By December 31, 2017, we had already gained 2.2 million FMC customers in total, with demand rising substantially in Greece in particular. We have been increasingly successful in marketing our MagentaOne Business product to business customers. A simplified and standardized network based on IP technology provides the technical underpinnings of FMC products. Overall, we have converted five of our national companies to IP technology. As of December 31, 2017, we recorded 5.7 million IP-based lines – up 14.3 percent compared with the prior year. IP lines accounted for around 67.9 percent of all fixed-network lines. The number of fixed-network lines in our Europe operating segment decreased slightly compared with 2016 to 8.4 million as of the end of the reporting year.

The number of retail broadband lines increased by 4.7 percent to 5.6 million overall, with fiber-optic-based lines accounting for the majority of net customer additions, once again growing considerably faster than DSL business. Romania, Hungary, and Slovakia were the main contributors to this growth. We continued to increase our overall fiber-optic coverage, with our national companies reaching around 32 percent of households as of December 31, 2017. This success bears out our continued investment in forward-looking, fiber optic-based technologies.

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DEVELOPMENT OF OPERATIONS

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	11,589	11,454	135	1.2	11,674
Greece	2,846	2,883	(37)	(1.3)	2,878
Romania	972	985	(13)	(1.3)	984
Hungary	1,808	1,673	135	8.1	1,848
Poland ^a	1,509	1,488	21	1.4	1,544
Czech Republic	1,011	959	52	5.4	958
Croatia	955	925	30	3.2	909
Slovakia	748	766	(18)	(2.3)	783
Austria	900	855	45	5.3	829
Other ^b	1,069	1,132	(63)	(5.6)	1,155
Profit from operations (EBIT)	462	1,184	(722)	(61.0)	1,342
EBIT margin %	4.0	10.3			11.5
Depreciation, amortization and impairment losses	(3,157)	(2,589)	(568)	(21.9)	(2,395)
EBITDA	3,619	3,773	(154)	(4.1)	3,737
Special factors affecting EBITDA	(130)	(93)	(37)	(39.8)	(207)
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	3,749	3,866	(117)	(3.0)	3,944
Greece	1,135	1,120	15	1.3	1,118
Romania	166	175	(9)	(5.1)	205
Hungary	545	539	6	1.1	526
Poland ^a	419	482	(63)	(13.1)	580
Czech Republic	406	400	6	1.5	390
Croatia	386	374	12	3.2	367
Slovakia	315	302	13	4.3	296
Austria	266	258	8	3.1	259
Other ^b	110	215	(105)	(48.8)	202
EBITDA margin (adjusted for special factors) %	32.3	33.8			33.8
CASH CAPEX	(1,874)	(2,600)	726	27.9	(1,469)

The contributions of the national companies correspond to their respective unconsolidated financial statements and do not take consolidation effects at operating segment level into account.

^a The business of T-Systems Polska Sp. z o.o., which was previously organizationally assigned to the Systems Solutions operating segment, is now disclosed under the Europe operating segment as of September 1, 2017. Figures for prior periods were not adjusted.

^b "Other": national companies of Albania, the F.Y.R.O. Macedonia, and Montenegro, as well as ICSS (International Carrier Sales & Solutions), the ICSS business of the local business units, GTS Central Europe group in Romania, and Europe Headquarters.

Total revenue

Our Europe operating segment generated total revenue of EUR 11.6 billion in the reporting year, a slight year-on-year increase of 1.2 percent. Revenue was 0.5 percent up on the prior-year figure in organic terms, i.e., assuming constant exchange rates and the same organizational structure.

Our national companies increased their revenues from growth areas by a substantial 11.0 percent in 2017, with growth areas accounting for around 33 percent of total segment revenue. Mobile data business made a key contribution to this, growing by 17.2 percent to EUR 1.6 billion. All of the countries in our operating segment contributed to this success, in particular Poland, Hungary, Greece, and Austria. Thanks to our innovative TV and program management, the uptrend continued in TV and broadband business, with TV

revenue rising by 6.9 percent to EUR 498 million and broadband revenue rising by 2.9 percent to EUR 711 million in the reporting year. Our B2B/ICT business customer operations also recorded a year-on-year increase in revenues in 2017, mainly thanks to the particularly strong results with ICT solutions in Europe, primarily in Hungary. Thanks to our innovative and future-oriented business solutions we also recorded double-digit growth rates in revenue from cloud business and from convergent solutions for the SMEs (MagentaOne Business). We laid important groundwork in the reporting year to firmly establish ourselves as a preferred digitalization partner for customers.

In addition, we recorded higher revenue from terminal equipment sales and visitors (revenues with third parties from roaming in our home networks). This offset the overall revenue decline at segment level, which was primarily attributable to voice telephony. From a country perspective, Hungary, Austria, the Czech Republic, and Croatia made the biggest contributions to the organic development of revenue in the reporting year, offsetting declining revenue from Greece, Slovakia, Poland, and Romania in particular, as well as from international wholesale business. Intense competition on the telecommunications markets as well as lower roaming charges in many countries of our operating segment had a negative impact on our organic revenue.

EBITDA, adjusted EBITDA

Our Europe operating segment generated adjusted EBITDA of EUR 3.7 billion in the reporting year, a year-on-year decrease of 3.0 percent. In organic terms, i.e., assuming constant exchange rates, and adjusted for the internal reallocation to the new Board of Management department Technology and Innovation, adjusted EBITDA declined only slightly by 1.0 percent.

The positive revenue effect was offset by higher market investments and revenue-related cost increases in B2B/ICT business customer operations, among other factors. By contrast, increased cost efficiency had a positive effect on adjusted EBITDA at segment level. From a country perspective, the slight decline in organic adjusted EBITDA is primarily attributable to developments at our national companies in Poland, Romania, and Albania. In Poland in particular, the decrease in revenue from the smaller customer base resulting from the prepay SIM registration requirement and intense competition had a negative effect on adjusted EBITDA. Regulatory effects, such as the reduction in EU roaming surcharges and interconnection rates, as well as higher market investment costs also reduced adjusted EBITDA. These developments were contrasted by increases in adjusted EBITDA in Greece, Slovakia, Croatia, and Austria in particular. Adjusted EBITDA was also impacted by decisions by regulatory authorities and the introduction of special taxes.

Our unadjusted EBITDA decreased by 4.1 percent year-on-year to EUR 3.6 billion, due in part to the decline in adjusted EBITDA, and in part to an increase in negative special factors. In organic terms, EBITDA decreased by 2.0 percent.

Development of operations in selected countries

Greece. At EUR 2.8 billion, revenue in Greece was only slightly down against 2016. We performed well in the fixed-network business, with increased revenues from broadband and TV business as well as with our exclusive TV content. Revenue in the B2B/ICT business also performed well. However, we were not able to entirely offset the negative effects from the wholesale business and voice telephony. Mobile revenues were slightly up year-on-year, with rising revenues from mobile data services and visitors more than offsetting the primarily price-driven decline in revenue from voice telephony.

In 2017, adjusted EBITDA in Greece increased slightly year-on-year by 1.3 percent to EUR 1.1 billion. Thanks to increased cost efficiency, we more than offset the decline in revenues.

Hungary. In Hungary, revenue grew by 8.1 percent compared with the prior year to EUR 1.8 billion. In organic terms, it increased by 7.4 percent. This growth was driven by the fixed-network business with clear revenue growth in the B2B/ICT business customer operations. TV business also made a positive contribution to total revenues, as did our FMC offering MagentaOne for consumers and business customers. In mobile business, revenue from mobile data services increased by 23.5 percent compared with the prior year. Revenue from terminal equipment sales also increased significantly, more than offsetting the decline in voice revenue. Our high-speed, high-reach mobile network also contributed to the positive trend in mobile business.

Adjusted EBITDA increased by 1.1 percent year-on-year to EUR 545 million. In organic terms, adjusted EBITDA remained almost unchanged.

Austria. In Austria, we generated revenue of EUR 900 million in the reporting year, up 5.3 percent compared with the prior year. This was mainly attributable to the mobile data business which saw a further rise in volume and accounted for a share of total revenue of around 33 percent. Higher voice and visitor revenues and a one-time effect from the first quarter of 2017 also positively influenced the revenue trend. Overall, these positive effects more than offset the decrease in revenue from text messaging services and from sales of mobile terminal equipment.

The revenue trend is also evident in the increase in adjusted EBITDA by 3.1 percent to EUR 266 million in 2017.

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EBIT

EBIT in our Europe operating segment decreased by 61.0 percent in 2017 to EUR 0.5 billion. In addition to the decline in EBITDA, this was primarily due to the EUR 0.6 billion increase in depreciation, amortization and impairment losses - in particular from the impairment of goodwill and property, plant and equipment amounting to EUR 0.9 billion resulting from the year-end impairment tests in Poland, Albania, and Romania. In the prior year, impairment losses on goodwill and on property, plant and equipment, primarily in Romania, reduced EBIT by EUR 0.2 billion overall.

Cash capex

In the reporting year, our Europe operating segment reported cash capex of EUR 1.9 billion. The decline of EUR 0.7 billion was primarily due to the acquisition of mobile licenses in Poland in the prior year. In 2017, we acquired a small amount of mobile spectrum in Greece. Excluding the effects from the acquisition of spectrum, cash capex increased by 11.8 percent compared with 2016 at segment level. As part of our integrated network strategy, we made significant investments in the broadband and fiber-optic roll-out, our IP transformation, and our mobile infrastructure.

SYSTEMS SOLUTIONS

ORDER ENTRY

millions of €

	Dec. 31, 2017	Dec. 31, 2016	Change	Change %	Dec. 31, 2015
ORDER ENTRY	5,241	6,851	(1,610)	(23.5)	5,608

The prior-year comparative for 2016 was adjusted retrospectively due to the change in the structure of the Group implemented as of January 1, 2017.

Development of business

Order entry at our Systems Solutions operating segment declined markedly year-on-year and was well below our expectations for the reporting year. Although we managed to conclude new contracts in 2017, the level achieved was lower than the prior year, which had included several major deals. One reason for the decline in order entry was the market trend away from traditional IT business and toward cloud computing and digitalization, which resulted in shorter terms of contract. Strategic partnerships remain a key component of our plan to expand strategic growth areas such as the cloud and the Internet of Things. It means that we offer our

partners' services from our data centers in Germany. In addition, we use our global partner alliance ngena (Next Generation Enterprise Network Alliance) to provide our customers with international network connections and services at short notice. In this context, security and high availability play a key role for our customers as well as for us. Launched at the start of the reporting year, our Telekom Security unit provides the key underpinnings for our strategy to grow in digital innovation areas. We continue to offer the main pillars of the digital transformation with our solutions for the Internet of Things and for the cloud - along with the corresponding security solutions.



For information on changes in the organizational structure, please refer to the section "Group organization," page 31 et seq., and Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

DEVELOPMENT OF OPERATIONS^a

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	6,918	6,993	(75)	(1.1)	6,837
External revenue	5,504	5,678	(174)	(3.1)	5,826
Loss from operations (EBIT)	(1,356)	(150)	(1,206)	n. a.	(373)
Special factors affecting EBIT	(1,477)	(276)	(1,201)	n. a.	(548)
EBIT (adjusted for special factors)	121	126	(5)	(4.0)	175
EBIT margin (adjusted for special factors) %	1.7	1.8			2.6
Depreciation, amortization and impairment losses	(1,636)	(428)	(1,208)	n. a.	(473)
EBITDA	280	278	2	0.7	100
Special factors affecting EBITDA	(229)	(252)	23	9.1	(481)
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	509	530	(21)	(4.0)	581
EBITDA margin (adjusted for special factors) %	7.4	7.6			8.5
CASH CAPEX	(383)	(402)	19	4.7	(432)

^a The business of T-Systems Polska Sp. z o.o., which was previously organizationally assigned to the Systems Solutions operating segment, is now disclosed under the Europe operating segment as of September 1, 2017. Figures for prior periods were not adjusted.

Total revenue

Total revenue in our Systems Solutions operating segment was down slightly year-on-year to EUR 6.9 billion. The revenue trend differed in the course of the year. It decreased in the first half compared with the prior-year period, due to completion of the set-up phase of the toll collection system in Belgium in 2016. By contrast, revenue rose in the second half. Adjusted for the non-recurring effect from 2016, our telecommunications business grew year-on-year. On the other hand, revenue from our traditional IT business continued to decline. This business is marked by generally lower prices and declining order entry, especially for international business. Our strategic growth areas made a positive contribution, with revenue from cloud computing rising 19.2 percent year-on-year and from the Internet of Things by 4.9 percent. Our new Telekom Security unit generated revenue as well.

EBITDA, adjusted EBITDA

In the 2017 reporting year, our Systems Solutions operating segment recorded adjusted EBITDA of EUR 509 million compared with EUR 530 million in the prior year. Excluding the aforementioned non-recurring effect from the prior year, we reported a positive trend in line with our expectations despite a difficult ICT market, the provisions we had to set aside for certain corporate customer contracts, and the all-IP migration for some customer contracts. EBITDA remained roughly stable at EUR 280 million in the reporting year, up 0.7 percent year-on-year.


EBIT, adjusted EBIT

Adjusted EBIT in our Systems Solutions operating segment decreased by EUR 5 million year-on-year. The decline in order entry prompted impairment testing of the assets in the third quarter. An impairment loss on goodwill of EUR 1.2 billion was recognized as a result. That is why EBIT decreased by a substantial EUR 1.2 billion to minus EUR 1.4 billion.

Cash capex

Cash capex in the Systems Solutions operating segment stood at EUR 383 million in the reporting period, down EUR 19 million compared to the prior year. Our consistently high level of capital expenditure is linked to our strategy of investing in the strategic growth areas of digital transformation, the Internet of Things, healthcare solutions, cloud computing, and cyber security. The continued expansion of the European toll collection system also increases the need for investment.

GROUP DEVELOPMENT

Since January 1, 2017, we have reported on the new Group Development operating segment. Group Development actively manages and increases the value of selected Group subsidiaries and equity investments. 



For further information on changes in the organizational structure, please refer to the notes in the section "Group organization," page 31 et seq., and the disclosures under Note 31 "Segment reporting" in the notes to consolidated financial statements, page 220 et seq.

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CUSTOMER DEVELOPMENT

thousands

		Dec. 31, 2017	Dec. 31, 2016	Change	Change %	Dec. 31, 2015
NETHERLANDS	Mobile customers	3,850	3,746	104	2.8	3,677
	Fixed-network lines	191	164	27	16.5	-
	Broadband lines	191	164	27	16.5	-

Thanks to its successful repositioning in the market, T-Mobile Netherlands' mobile business for both consumers and business customers grew 2.8 percent in the reporting year. This increase was mainly due to the new rate plan portfolio introduced in the first quarter of 2017 and to the enhanced market approach it enabled. The number of customers in the fixed-network consumer portfolio we acquired from Vodafone at the end of 2016 also increased in 2017, by 16.5 percent.

DEVELOPMENT OF OPERATIONS

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	2,263	2,347	(84)	(3.6)	2,428
Netherlands	1,355	1,331	24	1.8	1,394
Profit from operations (EBIT)	1,504	2,730	(1,226)	(44.9)	1,264
Depreciation, amortization and impairment losses	(304)	(760)	456	60.0	(342)
EBITDA	1,808	3,490	(1,682)	(48.2)	1,606
Special factors affecting EBITDA	893	2,547	(1,654)	(64.9)	556
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	915	943	(28)	(3.0)	1,050
Netherlands	421	358	63	17.6	500
EBITDA margin (adjusted for special factors) %	40.4	40.2			43.2
CASH CAPEX	(290)	(271)	(19)	(7.0)	(373)

Total revenue

Total revenue in our Group Development operating segment decreased by 3.6 percent year-on-year, with the revenue lost following the sale of Strato having a negative impact. Revenue at DFMG remained virtually unchanged compared with 2016. The main positive effect was the revenue trend at T-Mobile Netherlands.

EBITDA, adjusted EBITDA

EBITDA decreased by EUR 1.7 billion year-on-year to EUR 1.8 billion. We are constantly analyzing our portfolio of shareholdings with a focus on ensuring adequate corporate growth. A consequence of this policy was our sale of Strato effective March 31, 2017 and of the remaining shares in Scout24 AG effective June 23, 2017. The disposals resulted in income of around EUR 0.7 billion being recognized as special factors. Positive special factors of EUR 0.2 billion originating from a settlement agreement with BT concluded in July 2017 also had an impact. T-Mobile Netherlands


recognized provisions for new consumer credit regulations in its home market. The 2016 figure had included positive net special factors of EUR 2.5 billion, primarily from the sale of our stake in the EE joint venture.

Adjusted EBITDA in our Group Development operating segment was down by 3.0 percent year-on-year, with forgone earnings following the sale of Strato having a negative impact. In addition, there were non-recurring effects as well as effects from the assignment of DFMG to the Group Development operating segment at the beginning of the reporting year. Adjusted EBITDA at T-Mobile Netherlands increased by 17.6 percent year-on-year, mainly because of lower market investment expenditure due to a higher proportion of SIM-only contracts, and of a significant reduction in overheads brought about by the transformation program.

EBIT

EBIT decreased by EUR 1.2 billion year-on-year to EUR 1.5 billion, due to the same factors described under EBITDA. Depreciation, amortization and impairment losses were lower than in the prior year, both due to the impairment loss of EUR 0.4 billion on goodwill recognized in the Netherlands in the previous year, and to the deconsolidation of Strato.

Cash capex

Cash capex in our Group Development operating segment increased by 7.0 percent year-on-year, primarily due to the acquisition of Vodafone's fixed-network consumer portfolio by T-Mobile Netherlands and to the expansion of mobile network capacities. 



For information on the effects of our equity investments on profit/loss from financial activities, please refer to the section "Development of business in the Group," page 49 et seq.

GROUP HEADQUARTERS & GROUP SERVICES DEVELOPMENT OF OPERATIONS

millions of €

	2017	2016	Change	Change %	2015
TOTAL REVENUE	2,943	3,467	(524)	(15.1)	3,355
Loss from operations (EBIT)	(1,495)	(1,919)	424	22.1	(1,750)
Depreciation, amortization and impairment losses	(657)	(676)	19	2.8	(780)
EBITDA	(837)	(1,243)	406	32.7	(970)
Special factors affecting EBITDA	(121)	(574)	453	78.9	(416)
EBITDA (ADJUSTED FOR SPECIAL FACTORS)	(716)	(670)	(46)	(6.9)	(554)
CASH CAPEX	(1,005)	(936)	(69)	(7.4)	(983)



For information on changes in the organizational structure, please refer to the notes in the section "Group organization," page 31 et seq., and the disclosures under Note 31 "Segment reporting" in the notes to consolidated financial statements, page 220 et seq.

Total revenue

Total revenue in our Group Headquarters & Group Services segment in 2017 decreased by 15.1 percent year-on-year. This decline was mainly due to the fact that the costs of intragroup development services newly commissioned from Deutsche Telekom IT in Germany have no longer been charged internally since January 2016. Other reasons for the decrease were forgone revenue from DeTeMedien, the sale of which was completed in June 2017, and lower intragroup revenue from land and buildings, essentially due to further optimization of the use of space. In addition, lower intragroup revenue from Telekom Training and Deutsche Telekom IT – due to a reduction in the amounts charged for licenses and a narrower revenue-relevant cost base – had a negative impact. There was a positive effect on revenue from the structural further development of Deutsche Telekom Services Europe (DTSE).

EBITDA, adjusted EBITDA

Adjusted EBITDA at Group Headquarters & Group Services decreased by EUR 46 million compared with 2016 in the reporting year, primarily due to lower intragroup revenue from land and buildings, forgone earnings following the sale of DeTeMedien, and higher additions to provisions. By contrast, the following factors had a positive effect on adjusted EBITDA: the establishment of

our Board department Technology and Innovation, higher income from the sale of real estate, the reduction in headcount brought about by ongoing restructuring of the Vivento workforce, and lower operating costs at Group Services.

Overall, negative special factors of EUR 121 million impacted EBITDA in 2017, largely due to staff-related expenses. Proceeds from the sale of DeTeMedien had an offsetting effect. Negative special factors of EUR 574 million in 2016 were mainly due to staff-related expenses.

EBIT

The improvement in EBITDA was the main cause of the year-on-year increase of EUR 424 million in EBIT. Depreciation, amortization and impairment losses were down EUR 19 million year-on-year, due in particular to lower depreciation and impairment losses on land and buildings as a result of our ongoing efforts to optimize our real estate portfolio.

Cash capex

Cash capex increased by EUR 69 million year-on-year, primarily owing to increased development activities in the Board department Technology and Innovation.

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DEVELOPMENT OF BUSINESS AT DEUTSCHE TELEKOM AG

Deutsche Telekom AG prepares its annual financial statements in accordance with the principles of German GAAP, as specified in the German Commercial Code (Handelsgesetzbuch – HGB) and the German Stock Corporation Act (Aktengesetz – AktG).

As the Headquarters of the Deutsche Telekom Group, we perform strategic and cross-segment management functions and provide services for other Group companies. The profits and losses of our subsidiaries and Group financing measures have a material effect on our financial position and results of operations. In our home market, there was a slight upward trend in revenue. This was partly due to a rise in mobile revenues and, in particular, in non-contract handset business. Increased IT and broadband revenues also had

a positive impact on fixed-network revenue, although it was not sufficient to offset the overall decline in revenue in the fixed-network business. In our Systems Solutions operating segment, business was negatively affected by the continued decrease in revenues from the traditional IT business, characterized by a general downward trend in prices in the market as well as a decline in order entry. A positive revenue trend in our growth areas and an increase in terminal equipment revenue, but also lower roaming charges and ongoing intense competition impacted on the Europe operating segment in 2017.

Deutsche Telekom AG reported income after taxes for the 2017 financial year of EUR 4.9 billion. In addition to the operating business, the development of business in the reporting year was influenced by a number of very different factors, including the intragroup restructuring within the DFMG group, the reversal of a write-down (indirect stake held in T-Mobile US, Inc., Bellevue) as well as a write-down at T-Mobile Global Zwischenholding GmbH, Bonn (indirect stake held in the BT Group plc, London), and a write-down of the carrying amount for the investment in T-Systems International GmbH, Frankfurt/Main, arising from both the company's own business and from income related to subsidiaries, associated and related companies.

RESULTS OF OPERATIONS OF DEUTSCHE TELEKOM AG

Statement of income of Deutsche Telekom AG under German GAAP (total cost method)

millions of €

	2017	2016	Change	Change %	2015
NET REVENUE	3,603	3,927	(324)	(8.3)	3,313
Other own capitalized costs	4	4	0	-	7
TOTAL OPERATING PERFORMANCE	3,607	3,931	(324)	(8.2)	3,320
Other operating income	2,769	2,120	649	30.6	4,065
Goods and services purchased	(1,060)	(1,151)	91	7.9	(1,165)
Personnel costs ^a	(2,732)	(3,516)	784	22.3	(2,949)
Depreciation, amortization and write-downs	(341)	(338)	(3)	(0.9)	(387)
Other operating expenses ^a	(4,251)	(3,570)	(681)	(19.1)	(4,186)
OPERATING RESULTS	(2,008)	(2,524)	516	20.4	(1,302)
Financial income (expense), net	7,151	4,717	2,434	51.6	3,492
Income taxes	(198)	(154)	(44)	(28.6)	(282)
INCOME AFTER INCOME TAXES	4,945	2,039	2,906	n.a.	1,908
Other taxes	(18)	(19)	1	5.3	(19)
INCOME AFTER TAXES	4,927	2,020	2,907	n.a.	1,889

^a Pursuant to the provisions of IDW RS HFA 30, as amended, which was adopted in December 2016, the expenses arising from the collateral promise for pensions are recognized under personnel costs; in 2015, they had been included under other operating expenses. Figures for 2015 have been adjusted accordingly.

The negative operating results improved by approximately EUR 0.5 billion year-on-year, due mainly to a year-on-year decrease in personnel costs of EUR 0.8 billion and an increase in other operating income of EUR 0.6 billion. Higher other operating expenses of EUR 0.7 billion and a decline of EUR 0.3 billion in net revenue had an offsetting effect.

The decline in net revenue compared with the previous year is primarily attributable to lower revenue from renting and leasing out.

An increase of EUR 0.4 billion in foreign currency translation gains and income from derivatives were the main drivers of the year-on-year growth in other operating income, which was up by EUR 0.6 billion. The foreign currency translation gains in the reporting year result in particular from exchange rate effects realized from the repayment of U.S. dollar loans extended or taken out. Offsetting effects from hedging are included in other operating expenses. Furthermore, other operating income improved in the reporting year as a result of the sale of the remaining shares in Scout24 AG, Munich, which generated EUR 0.3 billion.

Other operating expenses were up EUR 0.7 billion year-on-year, due mainly to an increase of EUR 0.7 billion as a result of higher foreign currency transaction losses and expenses arising from derivatives, caused in particular by the repayment in the current year of U.S. dollar loans extended or taken out and by effects from the market performance of U.S. dollar currency derivatives. Offsetting effects from hedging are included in other operating income.

The decrease in personnel costs of EUR 0.8 billion is mainly attributable to lower expenses arising from the early retirement program for civil servants.

Net financial income increased by EUR 2.4 billion to EUR 7.2 billion, primarily as a result of a EUR 3.2 billion increase in income related to subsidiaries, associated and related companies. The increase of EUR 1.0 billion in write-downs on financial assets, primarily due to the write-down of the carrying amount of the investment in T-Systems International GmbH, Frankfurt/Main, had an offsetting effect.

Income related to subsidiaries, associated and related companies, which increased by EUR 3.2 billion compared with the prior year, was positively affected in the reporting year by profits transferred by DFMG Holding GmbH, Bonn, T-Mobile Global Zwischenholding GmbH, Bonn, and Telekom Deutschland GmbH, Bonn. The transfer of the loss from Deutsche Telekom IT GmbH, Bonn, and from T-Systems International GmbH, Frankfurt/Main, had an offsetting effect.

In addition to the operating business of the consolidated subsidiaries, the income related to subsidiaries, associated and related companies resulted from effects arising from reorganization measures as well as from a write-up to the original acquisition costs at a subsidiary. A write-down on the investment held indirectly by T-Mobile Global Holding GmbH, Bonn, in the British BT Group plc, London, had an offsetting effect.

The reduction of EUR 0.2 billion in the net interest expense compared with the prior year was primarily the result of higher interest income from subsidiaries in the amount of EUR 0.3 billion, especially from T-Mobile USA, Inc., Bellevue. By contrast, expenses in connection with the interest added back on noncurrent accruals increased by EUR 0.2 billion.

Income after income taxes was particularly impacted by the aforementioned effects and increased by a total of EUR 2.9 billion year-on-year in 2017.

Other tax expense of EUR 18 million combined with the aforementioned factors resulted in income after taxes of EUR 4,927 million in 2017. Taking into account EUR 1,001 million in unappropriated net income carried forward, unappropriated net income totaled EUR 5,928 million.

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FINANCIAL POSITION OF DEUTSCHE TELEKOM AG

Balance sheet of Deutsche Telekom AG under German GAAP

millions of €

	Dec. 31, 2017	Dec. 31, 2017 %	Dec. 31, 2016	Change	Dec. 31, 2015
ASSETS					
Intangible assets	195	0.2	249	(54)	261
Property, plant and equipment	2,698	2.2	2,993	(295)	3,295
Financial assets	93,807	77.3	81,240	12,567	84,469
NONCURRENT ASSETS	96,700	79.7	84,482	12,218	88,025
Inventories	1	0.0	1	0	1
Receivables	22,073	18.2	16,308	5,765	15,795
Other assets	1,659	1.4	1,629	30	1,338
Cash and cash equivalents	157	0.1	208	(51)	221
CURRENT ASSETS	23,890	19.7	18,146	5,744	17,355
Prepaid expenses and deferred charges	676	0.6	516	160	418
Difference between plan assets and corresponding liabilities	51	0.0	36	15	16
TOTAL ASSETS	121,317	100.0	103,180	18,137	105,814
SHAREHOLDERS' EQUITY AND LIABILITIES					
Capital stock and reserves	53,011	43.7	51,651	1,360	50,615
Unappropriated net income	5,928	4.9	3,795	2,133	4,299
SHAREHOLDERS' EQUITY	58,939	48.6	55,446	3,493	54,914
Pensions and similar obligations ^a	3,164	2.6	3,247	(83)	3,512
Tax accruals	238	0.2	238	0	255
Other accruals ^a	2,321	1.9	1,642	679	1,493
ACCRUALS	5,723	4.7	5,127	596	5,260
Debt	6,398	5.3	5,021	1,377	9,428
Other liabilities	50,101	41.3	37,413	12,688	36,019
LIABILITIES	56,499	46.6	42,434	14,065	45,447
Deferred income	156	0.1	173	(17)	193
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES	121,317	100.0	103,180	18,137	105,814

^a Pursuant to the provisions of IDW RS HFA 30, as amended, which was adopted in December 2016, the accruals from the collateral promise for pensions are recognized under pension accruals; in 2015, they had been included under other accruals. Figures for 2015 have been adjusted accordingly.

In addition to shareholders' equity, our financial position is mainly determined by noncurrent assets, and receivables from and payables to Group companies. Loans recognized under financial assets as well as receivables from and payables to subsidiaries primarily resulted from Deutsche Telekom AG's financing function for its subsidiaries, whereby financing on the external capital market is generally handled by Deutsche Telekom AG International Finance B.V., Maastricht, and passed on to Deutsche Telekom AG.

The balance sheet total increased by EUR 18.1 billion year-on-year to EUR 121.3 billion.

The development of total assets was attributable in particular to the increase of EUR 12.2 billion in noncurrent assets and the increase of EUR 5.8 billion in receivables.

The growth in financial assets of EUR 12.6 billion year-on-year was mainly due to the increase in loans to T-Mobile USA, Inc., Bellevue, of EUR 8.7 billion (net). Financial assets also increased by EUR 5.4 billion as a result of the capital increase at CTA Holding GmbH, Bonn. In particular, the write-down of the carrying amount of the investment in T-Systems International GmbH, Frankfurt/Main, in the amount of EUR 1.0 billion had an offsetting effect.

The decrease of EUR 0.3 billion in property, plant and equipment was primarily due to the depreciation of real estate.

The increase of EUR 5.8 billion in receivables from subsidiaries resulted from a EUR 5.4 billion increase in receivables from cash management. The increase in receivables from cash management

is attributable to higher income related to subsidiaries, associated and related companies recorded in the reporting year.

The development of total shareholders' equity and liabilities was mainly influenced by the increase of EUR 12.7 billion in other liabilities, of EUR 3.5 billion in shareholders' equity, and of EUR 1.4 billion in financial liabilities. Other accruals also increased by EUR 0.7 billion.

The increase of EUR 12.7 billion in other liabilities was in particular the result of net loans of EUR 6.0 billion taken out from Deutsche Telekom International Finance B.V., Maastricht, as well as loans of EUR 5.4 billion taken out from CTA Holding GmbH, Bonn.

The increase in shareholders' equity was mainly due to income after taxes for the financial year of EUR 4.9 billion and its effect on unappropriated net income as well as to the deposits of EUR 1.4 billion reported in capital stock and reserves by shareholders who chose to exchange their dividend entitlement for the 2016 financial year for shares as part of the fulfillment of dividend entitlements. The EUR 2.8 billion dividend payment for the previous year had an offsetting effect.

The increase in financial liabilities was mainly due to new loans taken out for a net amount of EUR 0.7 billion and the issue of commercial paper for a net amount of EUR 0.5 billion.

The increase in other accruals is mostly attributable to the addition in the amount of EUR 0.5 billion to accruals arising from the new arrangement for early retirement for civil servants.

Statement of cash flows of Deutsche Telekom AG under German GAAP

millions of €

	2017	2016	Change	2015
INCOME AFTER TAXES	4,927	2,020	2,907	1,889
Net cash provided by (used for) operating activities	2,988	(1,531)	4,519	(134)
Net cash (used for) provided by investing activities	(12,890)	4,156	(17,046)	1,470
Net cash provided by (used for) financing activities	9,851	(2,638)	12,489	(1,502)
NET CHANGE IN CASH AND CASH EQUIVALENTS	(51)	(13)	(38)	(166)
Cash and cash equivalents, at the beginning of the year	208	221	(13)	387
CASH AND CASH EQUIVALENTS, AT THE END OF THE YEAR	157	208	(51)	221

Net cash provided by/used for operating activities increased year-on-year by EUR 4.5 billion, resulting in net cash provided by operating activities of EUR 3.0 billion. This increase was due mainly to the positive change in income after taxes after elimination of the non-cash write-downs, which were EUR 1.0 billion higher than in the previous year, but also to the EUR 1.2 billion lower net increase in receivables from cash management compared with the

previous year. In particular, the decrease in liabilities from the early retirement program for civil servants compared with an increase in the previous year had an offsetting effect.

Net cash used for investing activities in the reporting year was largely attributable to medium- and long-term investments at subsidiaries of EUR 10.8 billion, mainly due to the increase in loans

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to T-Mobile USA, Inc., Bellevue, and to a capital increase at CTA Holding GmbH, Bonn. Primarily repayments of medium- and long-term investments by subsidiaries in the amount of EUR 3.0 billion, mainly by T-Mobile USA, Inc., Bellevue, had an offsetting effect. Net cash used for investing activities also included interest received of EUR 0.8 billion. In the previous year, net cash provided by investing activities of EUR 4.2 billion had included in particular an equity repayment by Deutsche Telekom IT GmbH (formerly T-Mobile Worldwide Holding GmbH), Bonn, in the amount of EUR 2.0 billion, repayments of medium- and long-term investments by subsidiaries of EUR 2.1 billion, interest received of EUR 0.6 billion, and cash inflows from the disposal of property, plant and equipment of EUR 0.2 billion and from the sale of further shares in Scout24 AG, Munich, of EUR 0.1 billion. Medium- and long-term investments of EUR 0.9 billion at subsidiaries had an offsetting effect.

Net cash provided by financing activities increased by EUR 12.5 billion year-on-year to EUR 9.9 billion and primarily comprised the net issuance of medium- and long-term liabilities of EUR 9.7 billion and the net issuance of current financial liabilities in the amount of EUR 2.8 billion in the reporting year. Interest paid of EUR 1.2 billion and the payment of the cash dividend for the 2016 financial year of EUR 1.4 billion had an offsetting effect. In the prior year, net cash used for financing activities of EUR 2.6 billion had primarily comprised net repayments of current financial liabilities of EUR 8.7 billion, the payment of the cash dividend for the 2015 financial year of EUR 1.5 billion, and interest paid of EUR 1.3 billion. The issuance of medium- and long-term liabilities of EUR 8.3 billion and cash inflows from the close-out of interest rate and currency derivatives of EUR 0.6 billion had an offsetting effect.

Combined, this resulted in a decrease in cash and cash equivalents of EUR 51 million in the reporting year.

RISK MANAGEMENT IN HEDGE ACCOUNTING

We use derivatives to hedge interest rate and currency exposures; i.e., exclusively for hedging purposes, not for speculative gains. In the process, we continuously monitor the effectiveness of the hedges.

CORPORATE RESPONSIBILITY AND NON-FINANCIAL STATEMENT

■ Act responsibly. Enable sustainability.

We are more than a company providing society with telecommunications infrastructure. In an ever more complex and digital world, we are a trusted adviser through every stage of life. As such, we take our responsibility for society and the environment seriously. We work systematically to minimize the potentially negative impact of our business activities while creating effective, positive impetus for sustainable change. We have been reporting transparently on our corporate responsibility (CR) activities for over 20 years. Every year – in our CR report and annual report, and on our website – we provide comprehensive information on the challenges we face and the progress we have made as a responsible company focused on sustainable action. We regularly prepare a materiality analysis to help us align our sustainability activities to the expectations of our stakeholders and structure our reporting accordingly.

We have prepared this combined non-financial statement (NFS) to fulfill our reporting obligations under the CSR Directive Implementation Act: The NFS replaces the CR section in our combined management report. We have not only considered legal requirements in selecting which topics to report on, but also based our decision on many years of experience with our materiality process. This helps us ensure we fulfill our stakeholders' expectations. The Supervisory Board of Deutsche Telekom AG has reviewed the content of the NFS with the support of PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (independent auditor) in the form of a limited assurance engagement. The audit was based on the International Standards on Assurance Engagements ISAE 3000 (revised). Unless stated otherwise, all disclosures in the NFS apply in equal measure to the Group and the parent company. To avoid repetitions within our management report, we refer to further information provided in other sections wherever relevant. References to disclosures not contained in the combined management report are provided as background information; these disclosures are not part of the NFS and thus are not covered by the review. In addition, this year we once again explain how our core business contributes to achieving the UN Sustainable Development Goals (SDGs) as part of the 2030 Agenda. In the reporting year, we received the Building Public Trust Award for best integrated reporting on the SDGs. Relevant passages in the management report are marked with the respective SDG symbol. With the publication of our 2017 CR report in April 2018, we will continue to use a proven format to fulfill our stakeholders' expectations of transparency, basing our work on the guidelines of the Global Reporting Initiative (GRI). In the reporting year, our CR report once again received the Platinum Econ Award for outstanding reporting. The concepts described in this NFS are in line with this longstanding reporting tradition and make reference to the GRI Standards.



For detailed information on our business model, please refer to the sections "Group organization," page 31 et seq., and "Group strategy," page 34 et seq.

EXPLANATION OF THE BUSINESS MODEL

We are one of the leading telecommunication companies world-wide. We offer our consumers fixed-network/broadband, mobile, Internet, and Internet-based TV products and services, as well as ICT solutions for our business and corporate customers.

STRATEGIC AND ORGANIZATIONAL APPROACH TO SUSTAINABILITY

We see ourselves as a responsible company on the basis of our Leading European Telco strategy: We want to be the leading telecommunication provider in Europe. For us, social and ecological responsibility is inseparably connected with such a leadership role. We believe it is part of our mission to "Act responsibly. Enable sustainability." We are committed to implementing sustainability along our entire value chain and to playing an important role in meeting today's ecological, economic, and social challenges. We are expressly committed to the principles of the United Nations Global Compact, the German Sustainability Code, and the Code of Responsible Conduct for Business. Furthermore, we support the UN SDGs; in particular, we contribute to goals no. 3: Good health and well-being, 4: High-quality education, 5: Gender equality, 8: Decent work and economic growth, 9: Industry, innovation, and infrastructure, 11: Sustainable cities and communities, and 13: Climate action. We were awarded the distinguished National German Sustainability Award in December 2017 for our comprehensive sustainability management.

Our CR strategy, which is aligned with our core business, includes three fields of action: "Connected life and work – enabling a sustainable lifestyle," "Connect the unconnected," and "Low-carbon society." In addition, the following topics are of particular importance within our sustainability management system: data security and data privacy, digitalization, sustainable supply chains, human rights, circular economy, and resource decoupling, as well as responsible employers.

Our Board of Management bears overall responsibility for our CR goals, discussing and making decisions on key CR-related issues. The Group Corporate Responsibility (GCR) unit develops Group-wide guidelines and principles. It is also responsible for positioning and aligning CR strategically, and monitors all of the corresponding processes. The CR managers from the different business units and national companies are responsible for implementing our CR strategy, and work closely together in the international CR Manager Network. GCR is also advised by the CR Board, composed of the heads of key Group areas, in order to ensure direct feedback between CR and our core business. Our values and basic principles are anchored in our Guiding Principles, the Code of Conduct, and the Code of Human Rights & Social Principles. The cornerstones of our sustainability management activities are formally set out in our CR Policy for all Group units.

We record environmental, social and governance (ESG) data and performance indicators as part of our CR controlling system. We use this data primarily to calculate our Group-wide ESG KPIs (key performance indicators), which we use to measure and control our CR performance. We regularly review these KPIs to ensure they provide reliable information, revising them as needed. In some cases, the KPIs and other metrics can be linked to the SDGs to show the progress we are making in the SDG focus areas.

We use the Socially Responsible Investment ESG KPI to determine how the finance markets rate our sustainability activities. This indicator measures the proportion of T-Shares held by investors whose investment strategy is based not only on economic but also at least partially on the ecological and social aspects of corporate governance. As of September 30, 2017, roughly 18 percent of all T-Shares were held by SRI (socially responsible investment) investors, and around 3 percent were held by investors who manage their funds primarily in accordance with SRI aspects. In addition, during the reporting year our share was again listed on leading sustainability indexes, such as RobecoSAM's prominent DJSI World and DJSI Europe. Our share also continued to be listed on the FTSE4Good and UN Global Compact 100 indexes. [SDG](#)

8 DECENT WORK AND ECONOMIC GROWTH



Listing of the T-Share in sustainability indexes/ratings

Rating agency	Indexes/ratings/ranking	2017	2016	2015	2014	2013
RobecoSAM	DJSI World					
	DJSI Europe					
CDP	STOXX Global Climate Change Leaders					
oekom research AG	"Prime" (Sector Leader)					
Sustainalytics	STOXX Global ESG Leaders					
	iSTOXX 50 SD KPI					
	UN Global Compact 100					
FTSE Financial Times Stock Exchange	FTSE4Good					

Successfully listed


Not listed

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PROCESS FOR DETERMINING SIGNIFICANT TOPICS

Our materiality process has been in place at our Company since 2015 in compliance with the method suggested by the Global e-Sustainability Initiative (GeSI) for our industry. This allows us to ensure we consider all issues key to the ICT sector. We actively and systematically integrate relevant stakeholders into the process. For more detailed information on our approach, please refer to our CR report.


We first held an interdisciplinary internal workshop to discuss how we can best fulfill the requirements of the CSR Directive Implementation Act. We then developed a concept for the content of the NFS based on the results of our materiality process. This involved identifying and clustering topics that are important to understanding the course of business, the outcome of business, and the situation of the Company, and to understanding the effects on non-financial aspects. We discussed and adjusted the concept during another interdisciplinary workshop. The Board of Management decided to issue the NFS as part of the annual management report, and the Supervisory Board agreed to this in its meeting in September 2017. Group Corporate Responsibility presented and discussed the concept in a meeting with the Audit Committee in November 2017.

As part of our comprehensive system of risk and opportunity management, we also determine current and potential risks and opportunities arising from ecological, economic, or social aspects, or from the management of our Company. Topics like climate protection, suppliers, data privacy, and data security, as well as mobile communications and health, involve potential risks, which we previously described in the "Risk and opportunity management" section of the management report. We maintain this practice to provide the transparency our stakeholders expect, even if the risk assessment has found that these topics have a "low" risk significance and do not therefore need to be rated as "very likely severe" in the meaning of the CSR Directive Implementation Act. This NFS focuses on these risks and opportunities in relation to relevant aspects. 


ASPECT 1: ENVIRONMENTAL CONCERNS


"We assume responsibility for a low-carbon society" is one of the action areas of our CR strategy. It not only expresses our commitment to minimize the potential climate impacts of our business activities, but also our desire to utilize the opportunities offered by digitalization for sustainable development.  The impacts of our business activities are comparatively minor in relation to other topics, such as water or waste, covered by our comprehensive environmental management system based on the international standard ISO 14001. Therefore, they are not included in this NFS, but rather in our CR report.


CLIMATE CHANGE AND ITS REPERCUSSIONS


Demand for fast data services with full-coverage availability is growing rapidly. That is why we continue to push the build-out of our infrastructure and increase data transmission rates. Our investments in the network build-out make us one of the biggest investors in the industry. Operating our network consumes energy. Increasing energy consumption is associated not only with higher costs, but can also lead to an increase in CO₂ emissions and thereby accelerate climate change and its repercussions. For this reason, we need to ensure our energy consumption grows at a slower rate than the volumes of data we transmit and, at the same time, promote the use of renewable energies to decouple energy use from CO₂ emissions. We are also required to utilize the possibilities offered by digitalization, as it too can help save energy and slow climate change. 


Our integrated climate strategy includes four aspects of climate protection: CO₂ emissions, renewable energy, energy efficiency, and sustainable products. The climate strategy applies Group-wide and is implemented on an interdisciplinary basis at the level of the national companies. Our Board of Management set a climate-related goal as early as in 2013: By the year 2020, we intend to reduce total CO₂ emissions in the Group (excluding T-Mobile US) by 20 percent compared with 2008. 40 business units in 29 countries have committed themselves to this goal. Our national companies are helping us achieve this goal in different ways and to different extents, depending on developments in their local markets. Group Corporate Responsibility reports to the Board of Management on the status quo on an annual basis. We have already achieved a moderate reduction in emissions (excluding T-Mobile US) over the past few years. Despite the challenges posed by rapidly growing data volumes and the continuous build-out of networks to cope with demand, we continue to stand by our ambitious climate goal and look into further measures that could be needed to help us meet this goal, such as increasing the relative share of energy obtained from renewable sources.

In order to achieve our climate goal, we are focusing on areas with especially high energy consumption, such as our networks and data centers. For instance, we are migrating our network infrastructure to IP technology, which is not only more powerful, but also consumes less electricity than existing technologies. By the end of 2017, we had migrated 69 percent of our lines – around 17.3 million – to IP.  We are working to process data traffic from no more than a few, particularly efficient data centers. The PUE metric serves as an indicator for improvements in energy efficiency. We calculate this metric using the method recommended by The Green Grid Association, which takes the total energy consumed by data centers into account, not only that used to operate the servers. We reduced the average PUE metric at T-Systems data centers in Germany from 1.85 to 1.54 between 2008 and 2017. Our data center in Biere, Saxony-Anhalt, is extremely efficient. It was also awarded the respected LEED Gold sustainability certification (Leadership in Energy and Environmental Design). By migrating data from existing data centers to Biere, we achieved a PUE value of 1.43 by the end of 2017. During the course of 2018, we will migrate additional servers to Biere. The PUE metric is expected


Further information on the opportunities and risks associated with climate protection is provided in the section "Risk and opportunity management," page 111 et seq.



For further information, please refer to the section "Risk and opportunity management," page 111 et seq.


For further information, please refer to the section "Development of business in the operating segments," page 61 et seq.

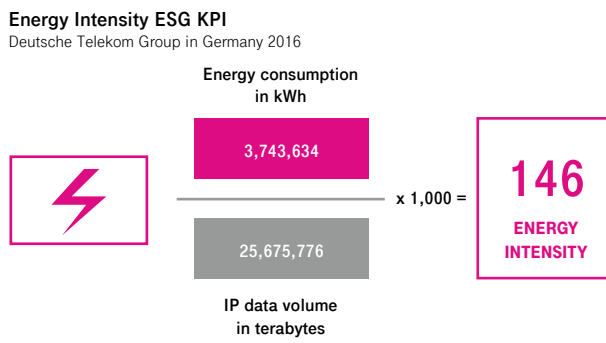

For further information, please refer to "Deployment of ICT products to the benefit of society" in this section, pages 83 and 84.

to rise further as a result of the increased utilization of our data center capacity there.

We are increasing our share of renewable energy – both through direct purchases and the acquisition of certificates for electricity from renewable energy sources – in order to reduce CO₂ emissions. In addition, we also invest in our own systems whenever possible and reasonable, for instance constructing cogeneration plants or installing photovoltaic systems. Climate protection is also an important consideration in the way we manage our fleet of vehicles in Germany, which includes testing out alternative drive concepts.

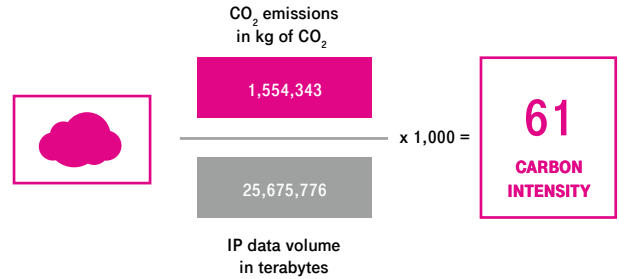
We determine the effectiveness of our climate protection measures using key performance indicators (KPIs). We have been recording two new KPIs since 2016: Energy Intensity and Carbon Intensity. These replaced the Energy Consumption and CO₂ Emissions KPIs. The two new ESG KPIs reflect our energy consumption and our CO₂ emissions in relation to the volume of data transmitted. They thus show the specific trend in the energy and emissions efficiency of our network. The KPI values for Deutsche Telekom in Germany are shown in the following graphics for 2016. The result for the Energy Intensity KPI is 146 and 61 for Carbon Intensity. We expanded the coverage of these KPIs to further parts of the Group in the course of 2017 and initial positive trends became apparent even before the year-end. We will publish the KPIs for the 2017 reporting year in our CR report. The Renewable Energy KPI shows how much of our Company's entire electricity consumption is obtained from renewable sources. In 2016, the share was 33 percent. The figure takes into account the share of renewable energy purchased directly, Guarantees of Origin, Renewable Energy Certificates, auto-production, and the share of renewable energies in the national mix. We will also disclose this KPI for 2017 in our CR report to be published in April 2018. We use the Enablement Factor ESG KPI to calculate the positive CO₂ effects facilitated for our customers through the use of our products. 

For further information, please refer to "Deployment of ICT products to the benefit of society" in this section, pages 83 and 84.



Carbon Intensity ESG KPI

Deutsche Telekom Group in Germany 2016

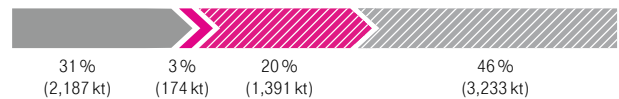


We use the internationally recognized GHG protocol to calculate our CO₂ emissions. This allows us to take measures to reduce our ecological footprint at the corporate and product levels. The standard distinguishes between three CO₂ emissions categories (Scope 1, 2, and 3). As part of the CDP, in June of every year we publish a Group-wide report not only on Scope 1 and Scope 2 emissions, but also Scope 3 emissions from our business operations in Germany and virtually all European subsidiaries.

The following graphic visualizes emissions of the different scopes from our business activities in Germany; shown as CO₂-equivalent emissions (CO₂e emissions).

CO₂e emissions (Scope 1-3)

Deutsche Telekom Group in Germany in % and kilotons of CO₂e



Scope 3 emissions from upstream activities:

Transport services, products and services purchased, capital goods, production waste, energy and fuel upstream chains, business travel, and journey to work.

Scope 1 emissions from Deutsche Telekom's own activities:

Emissions from the operation of Deutsche Telekom's systems, buildings and vehicles.

Scope 2 emissions from energy procured:

Emissions from the generation of electricity and district heating procured by Deutsche Telekom.

Scope 3 emissions from downstream activities:

Emissions from the transport of products sold to the customer, use of products sold or leased, and disposal and recycling of products sold.

We are aware that, to effectively contain climate change, all those involved need to collaborate and take determined action. That is why we participate in many national and international associations and organizations. One of them is GeSI – a corporate association with the vision of making society more climate-friendly and sustainable with ICT solutions. We also want to promote dialog within society on the opportunities the digital transformation offers for climate protection. Within the scope of the 23rd World Climate Change Conference in Bonn, we invited numerous stakeholders to an event to discuss "The Impact of ICT on climate change – curse or blessing," in November 2017. We are also working syste-

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matically and successfully on improving climate protection throughout our supply chain. Since 2016, CDP's supplier engagement rating has assessed how well companies have integrated the topic of climate protection into their supply chains. Over 3,300 companies participated in the rating; in 2016, just 29 companies qualified for the Supplier Engagement Leader Board, and Deutsche Telekom was one of them. [SDG](#)

ASPECT 2: EMPLOYEE CONCERNS

The digital transformation is supposed to improve everyone's lives. That is why people will remain a priority for us. This applies in particular to the around 217,300 employees working in our Company. They use their commitment, their expertise, and their abilities to smooth the path towards a digital society and make a key contribution to our business success. Five Guiding Principles, representing our values, form the cornerstones for collaboration within our Company. [■](#) Our strategic priorities in HR focus on four areas. [■](#) We value participation and cooperation based on fairness, we promote diversity, and engage in systematic health management. [SDG](#)

COLLABORATION WITH EMPLOYEES' REPRESENTATIVES AND TRADE UNIONS

Digitalization is fundamentally changing the way we work together. Employees are expected to show more flexibility, social skills, and personal responsibility. They also need to be life-long learners and be more self-directed. We have made it our goal to support our employees in this transformation – and to help them not only manage change, but also take an active role in shaping it.

Codetermination rights play a key role in the digital transformation. We want to create the working world of the future together with employees' representatives and trade unions – with an eye to the needs of our workforce and the success of our Company. We negotiated and signed over 250 agreements in 2017 through constructive dialog with our works councils. One key project was the organizational measure "Einfach Anders" (Simply different), which focused on a re-alignment of the entities within the Germany operational segment. The new organizational structure allowed us to harmonize the management of service responsibilities combined within the Service board department, to establish a customer-centric sales process for consumers and business customers in separate sales entities, and to combine the activities for the network build-out in a single entity. We concluded another 65 collective agreements with the ver.di union in 2017. In order to make phased retirement an even more attractive option for leaving working life early with sufficient social security, a general collective agreement on phased retirement was concluded in 2017 between Arbeitgeberverband für Telekommunikation und IT e.V. (agv:community e.V., the employers' association for the telecommunications and IT industry) and the ver.di union. As the underlying laws and contracts vary from country to country, codetermination matters with trade unions and employee representatives are managed locally. Group management is involved in all major issues as a matter of principle. [SDG](#)

The works councils, central works councils, and Group Works Council represent the interests of the employees at our Group in Germany. Our partner at a European level is the European Works

Council (EWC). We also have executive staff representation committees and representatives of disabled employees at unit, company, and Group level. The EWC, which currently has 32 members, has been a key dialog partner for us for many years and represents the interests of Group employees within EU countries. Collective bargaining plays an important role and has a long tradition at our Company, a fact made clear by the percentage of employees covered by collective agreements. As of December 31, 2016, 69 percent of employees in Germany were covered by collective agreements.

We thoroughly accompanied the union topics in our operative segment USA in 2017 and discussed individual issues in dialogs with T-Mobile US' management. The responsibility for national Human Resources Management matters lies with T-Mobile US' management. This responsibility is carried out with great commitment and accompanied by excellent customer satisfaction results. In a US-wide survey of 360,000 customers carried out by market researcher "HarrisX", T-Mobile US achieved the highest customer satisfaction rates among all mobile providers in the US in each of the four quarters in 2017.

Deutsche Telekom respects freedom of association and the right to collective bargaining in accordance with national regulations. This naturally applies to the USA as well. Employees at T-Mobile US have the right to form and join a trade union. At the same time, employees are also free to choose not to do so. T-Mobile US will not favor or impede employees on the basis of their choice.

T-Mobile US' employee survey results for 2017 show that as many as 93 percent of respondents take pride in working for T-Mobile US. A further 84 percent said their company inspires them to "go above and beyond" their normal job duties to help the company succeed and another 88 percent said they often recommend T-Mobile to others as a great place to work. These results are among the highest in all of Deutsche Telekom group companies.

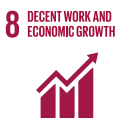
T-Mobile US has also been honored with a Glassdoor Employees' Choice Award, recognizing the Best Places to Work in 2018. The Employees' Choice Awards program, now in its 10th year, relies solely on the input of employees, who elect to provide feedback on their jobs, work environments and companies via Glassdoor. More than four out of five (81 percent) T-Mobile employees say they recommend the company to a friend – the highest in the US wireless industry. In addition to the Glassdoor award, T-Mobile US also received further recognitions for Best Places to Work throughout 2017.

Collaboration with employee representatives is based on our commitment to trusted cooperation – anchored in our Group-wide Employee Relations Policy. It sets out eleven core elements to describe what we stand for as an employer around the world. The policy also describes our aspiration with regard to the following HR topics: employee development, responsible handling of changes, health and sustainability, fair pay, work-life balance, leadership, diversity, the prohibition of discrimination, and how we communicate and work together with employees' representatives. In order to ensure the Employee Relations Policy is implemented throughout the Group, two or three national companies undergo




[■](#)
Our Guiding Principles are stated in the section "Group organization," page 31 et seq.

[■](#)
For further information, please refer to the section "Employees," page 96 et seq.



an internal review process each year. If the results of this review deviate from the norm, we initiate improvement measures. Our Code of Human Rights & Social Principles also includes a voluntary commitment to the freedom of association and collective bargaining (in compliance with national law in each case).

Our employee survey, carried out every two years, is a key indicator of the relationship between our Company and its workforce. We supplement it with pulse surveys, which give us a snapshot of the mood across the Group twice a year. In the most recent 2017 employee survey (excluding T-Mobile US), the commitment index was 4.1 (on a scale of 1.0 to 5.0) and therefore remained at a high level. 





For more detailed information, please refer to the section "Employees," page 96 et seq.

3 GOOD HEALTH AND WELL-BEING



DIVERSITY AND EQUAL OPPORTUNITY

Social trends like globalization, demographic developments, and different understandings of roles must not result in individual groups being shut out of the labor market. Equal opportunity is not only essential to a stable society, but to our Company as well. Respecting human individuality and harnessing individuals' distinctive traits for joint success is just as important for our Group as developing a shared identity. A Culture & Diversity Team, based in the HR Development unit, was created specifically for this task.


Women and men, young and old as well as people with different abilities and cultural backgrounds from roughly 150 countries work together very effectively at our Company. This diversity helps us remain competitive around the world with good ideas and outstanding products and consolidate our position as an attractive employer. Developments in the share of women in leadership positions and on the supervisory boards are reported to the Board of Management every six months, while the age structure and internationality of the workforce is reported on an annual basis in our Personnel Structure Report. For us, diversity also means offering our employees numerous opportunities to develop personally and grow professionally, regardless of their gender, age, sexual preference, health situation, ethnic background, religion, or culture. Our Group-wide Diversity Policy, five Guiding Principles, Employee Relations Policy, and Code of Human Rights & Social Principles form the foundation for our commitment. We are also a founding member of the Diversity Charter corporate initiative and want to promote diversity within and outside of our Company.  In order to comply with the new legal requirements set out in the Act to Promote Transparency of Pay Structures, we filed a separate report, which does not form part of the audited management report. 



For detailed information on our diversity measures, including on the advancement of women, please refer to the section "Employees," page 96 et seq.

OCCUPATIONAL HEALTH AND SAFETY

Measures that promote health within the Company not only help individual employees and ensure long-term business success, but

also have positive effects on society as a whole. We use health management to take on social responsibility and proactively promote a culture of health. We support our employees in maintaining their health and occupational safety with a host of target audience-specific measures and extensive prevention programs. We consider the statutory requirements to be only the minimum standard we must achieve. Our corporate occupational health and safety measures are effectively incorporated into our structures via certified management systems and appropriate policies and guidelines. We support this Group-wide approach with a uniform Health, Safety & Environmental Management system at international level, based on international standards OHSAS 1800, ISO 14001, and ISO 9001 for health, occupational, and environmental safety, and quality. 

The Board of Management assumes overall responsibility for occupational health and safety, and environmental protection. Quarterly reports on the health rate are just one example of its commitment in this area. Our Health & Safety Environment handbook describes the details of our health and safety management system, including the parties involved, their duties, and the programs. The handbook serves to harmonize, simplify, and align our management system with common targets across the Group. We combine and control our occupational and health safety programs at Group level; health and safety managers are responsible for implementing these programs locally. We systematically review our programs to ensure they are effective. To do so, we review the results of our employee survey, evaluating stress prevention measures under collective agreements, competitor benchmarks, and other relevant indicators. We analyze this data each year to derive measures that exceed the statutory requirements. Raising awareness, prevention, and encouraging individual responsibility have a high priority at our Company.

We use Group-wide initiatives to promote health awareness and health literacy among all employees. These include services that can be used by all teams in 30 countries based on the results of the health index, which is determined every two years. Occupational health promotion in Germany covers a range of services for employees, such as stress prevention programs; flu vaccinations; colon cancer screening; information on diet and nutrition, exercise, and relaxation; and a comprehensive annual health check-up. We also offer psychosocial support to our employees and managers. Standards in Germany serve to improve occupational safety by regulating aspects such as safe, ergonomic environments in buildings and vehicles. We also offer driver safety training (car and motorbike) for all employees and their relatives, as well as cycling schemes for employees at various locations across Germany. Alongside generally available services, we also have target

10 REDUCED INEQUALITIES



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group-specific programs in place, such as driver safety training for specific areas of work or training on the prevention of falling accidents in cooperation with the “Tritt sicher” (step safely) campaign developed by Berufsgenossenschaft Verkehr, the German professional association for transport and traffic. By raising awareness and implementing preventive measures, our aim is to promote employees’ health and motivation, improve the health rate, and continue to reduce the accident rate.

Many different key figures demonstrate the effectiveness of our corporate health management services. The health rate (including long-term illnesses) at Deutsche Telekom in Germany decreased slightly in 2017, by 0.1 percentage points to 93.7 percent, although it remained at an average level. The health rate is reported to the Board of Management at the end of each quarter. In 2017, we launched a project designed to improve the health rate by 2020. The aim is to achieve a health rate across the Group of 95.9 percent (excluding long-term illnesses). The total number of work-related accidents continued to decline in the reporting year in comparison with the previous year. The accident rate in Germany was 8.5 accidents (resulting in over three days of absence) per thousand employees, well below the industry average. The Group-wide health index – calculated as part of the 2017 employee survey in 30 countries – increased positively by 0.1 to 3.6 (on a scale from 1 to 5). From 2018, new steps will be taken designed primarily to improve the health rate. These include, for example, a workshop in which managers learn about a range of short-, medium-, and long-term strategies to influence the health rate. They will also be given the skills to become more confident at handling healthy and sick employees. The initiative will be piloted in Germany with the goal of rolling it out across the Group by 2020.

The digital transformation is also taking on an increasingly important role in the context of health. In addition to identifying potential stressors triggered by the effects of digitalization, our current products are also being adapted to the demands of rising levels of virtualization, digitalization, and internationalization on a step-by-step basis. For example, we already offer web-based training for managers on health and safety, mental health, and operational integration management.

ASPECT 3: SOCIAL CONCERNS

We are finding new answers to many different challenges our society currently faces through the digital transformation. Since it affects every area of our lives, access to modern information technologies is an important key to participating in the information and knowledge society. As a telecommunications company, we are responsible for providing such access to as many people as possible and for promoting the competent use of ICT. The security of our customers’ data is a key concern. Used correctly,

ICT can also contribute to sustainable development and help us achieve the SDG goals.

DEPLOYMENT OF ICT PRODUCTS TO THE BENEFIT OF SOCIETY

One of the biggest challenges we must face is climate change. We want to help limit global warming to less than two degrees Celsius, which is why we are working to reduce our own CO₂ footprint. We can make a much larger contribution with our products and services. According to the GeSI study SMARTer2030, ICT products have the potential to save almost ten times as much CO₂ emissions in 2030 in other industries as the ICT industry itself produces. We can also use our products, services, and activities to participate in managing many other ecological and social challenges, as was made clear in a comparison with the 17 sustainability goals (SDGs) put out by the United Nations, page 22. For instance, ICT solutions can help reduce resource consumption in agriculture and increase harvests, help get cities ready for the future in terms of sustainability, stabilize power supply grids, or improve access to education and medical care. These areas of application carry market potential for us. In order to evaluate the concepts described in this NFS, it is important to also look to the opportunities that digitalization opens up for sustainable development. We are thus addressing the topic at this point, even though it is not a holistic concept in the meaning of the CSR Directive Implementation Act. The individual national companies are responsible for developing new products and solutions.

Since 2014, we have been analyzing the scope of the sustainability benefits offered by select products. These advantages include benefits in health care. In Greece, a telemedicine network was set up in 2016 to connect health care centers on the Aegean islands with the mainland. As examinations can be transmitted via live stream directly to hospitals in Piraeus, expensive medical transports from the islands to the mainland are necessary only when the patient actually needs to be treated in a hospital. In South Africa, a smart water meter offered by T-Systems South Africa helps reduce the consumption of scarce water resources. It helps optimize consumption in private households and makes occupants aware of hidden pipeline leaks. ICT can even help better understand illnesses and improve treatment – like our cell phone game Sea Hero Quest, which is helping with dementia research. Overall, we have subjected 22 of our product groups to a detailed investigation of how they contribute to sustainability. We use the Sustainable Revenue Share ESG KPI to determine how much revenue (excluding T-Mobile US) we generate with these products; in the reporting year this share was approximately 40 percent. For detailed information about the methods used in our analysis, please refer to the CR report.

For further information, please refer to the section “Risk and opportunity management,” page 111 et seq.



13 CLIMATE ACTION



We also calculate the positive CO₂ effects facilitated for our customers through the use of our products. We combine this figure with our own CO₂ emissions, then use this enablement factor to measure our overall performance in relation to climate protection. According to this figure, the positive CO₂ effects facilitated for our customers in Germany were 71 percent higher in 2017 than our own CO₂ emissions (enablement factor of 1.71 to 1). [SDG](#)

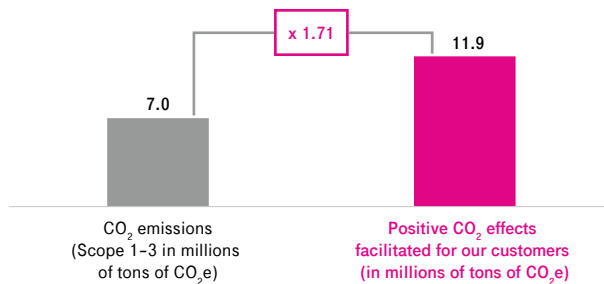
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



For further details on our build-out goals, please refer to the section "Group strategy," page 34 et seq.

Enablement Factor ESG KPI

Deutsche Telekom Group in Germany



3 GOOD HEALTH AND WELL-BEING



For more detailed information, please refer to the section "Risk and opportunity management," page 111 et seq.

Sustainable products are another key competition factor at our Company. In order to highlight these sustainability benefits for our customers, we aim to have our products certified by recognized environmental labels such as the Blue Angel. The majority of Telekom Deutschland's fixed-network devices carry the Blue Angel seal of approval. The strict requirements for these environmental awards not only provide us with ways to further improve our products, but also encourage us to do so.

ACCESS AND PARTICIPATION IN THE KNOWLEDGE SOCIETY

All around the world, having access to modern information technologies is a requirement for economic performance and participation in the knowledge and information society. That is why we continue to rapidly expand our infrastructure and improve transmission speeds with new, secure technology. At the same time, we use our social initiatives to reduce potential obstacles to ICT use. Responsibility for shaping the digital transformation has to be assumed by society as a whole. The Board of Management of Deutsche Telekom AG plays an active role in this discussion.

Demand for fast data services with full-coverage availability is growing continuously. Each year we invest around EUR 5 billion in Germany alone in building out our network infrastructure. This has made us the biggest investor in this sector for several years. [EM](#) This network build-out is based on the goals of our Europe-wide integrated network strategy, which we use to help achieve the network build-out goals of the EU Commission and the Federal Government's Digital Agenda and broadband strategy. Our strategy is based on four pillars: LTE, optical fiber, VDSL vectoring, and

hybrid technology. As one component, we plan to upgrade our mobile networks with 4G/LTE technology to offer greater network coverage with fast mobile broadband. In 2017, we supplied 94 percent of the population of Germany with LTE. We continued to build out the fiber-optic network in 2017, covering around 46 percent of households in Germany with high-speed Internet (at least 50 Mbit/s) by the end of the year. In addition to vectoring technology, we are also using other innovative products, like our hybrid router, which combines the transmission bandwidths of fixed-network and mobile communications, thus enabling much higher transmission speeds, in particular rural areas. [SDG](#) [EM](#)

In general, we want to make our network infrastructure and our products as efficient and as environmentally and health-friendly as possible. That is why we are committed to addressing the topic of mobile communications and health responsibly. Our Group-wide EMF Policy (EMF = electro-magnetic fields) has played a key role in this process since 2004: It includes uniform minimum requirements for mobile communications and health which go far beyond applicable national regulations. [SDG](#) [EM](#)

However, simply having access to technology is not enough to ensure everyone can participate in the knowledge and information society. People also need to know how to use media safely, competently, and responsibly. More and more, this issue not only has a private dimension – the protection of personal data – but also a social and political one. Incorrect information and hate posts shape public opinion and can even influence elections. That is why we are working to build media literacy skills in broad swaths of society. Group Corporate Responsibility is in charge of managing this topic at Group level. The individual national companies are responsible for developing and implementing media literacy projects as this allows them to make much greater provision for local conditions. We present all of our initiatives in Germany on the German-language website "Medien, aber sicher!" (Media, sure! But secure) (www.medienabersicher.de). With our award-winning Teachtoday initiative (www.teachtoday.de), we teach children and young people how to confidently and expertly navigate the digital world. Many of our national companies are also working to improve media literacy: For instance, Telekom Romania has been offering programming workshops for children and young adults since 2011. The Deutsche Telekom Foundation is one of Germany's largest corporate foundations working to improve education in the field of digital learning and teaching. Children are not the only ones, however, who need support in navigating the digital world, which is why we offer information and materials for every age and user group. [SDG](#)

Data security is another focal point of our efforts. Our German-language online advisory service www.sicherdigital.de and our "We care" app magazine in German and English offer practical hints and tips on how to use digital media safely and securely.



For further information on our investment activities, please refer to the "Statement of the Board of Management on business development in 2017," page 49.

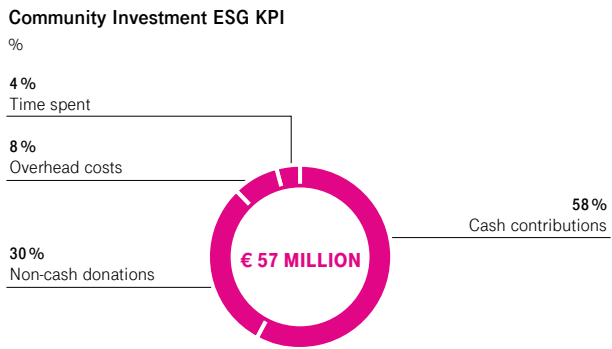
4 QUALITY EDUCATION



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Being able to tell the difference between reliable information and intentionally misleading statements is a key aspect of media literacy in our view. That's why we invited all of our employees in Bonn to attend the first "1001 Truths – Trust and opinion-forming online" event which was held in July 2017. We provided interesting insights and practical suggestions related to the topic of "fake news" in workshops, panel discussions, and events. For detailed information, please refer to our 2017 CR report.

We measure the impact of our social commitment with a set of three Group-wide ESG KPIs. The Community Investment ESG KPI maps our social engagement in terms of financial, human, and material resources: a total of EUR 57 million.



The Beneficiaries ESG KPI indicates the number of people engaged and people reached. This figure totaled 19 million in the reporting year. The Media Literacy ESG KPI determines the percentage of people in our target group we actually reached with measures to enhance media literacy as part of our social engagement. At 41 percent, this metric was slightly higher than the prior-year figure of 40 percent. We aim to reach 45 percent by 2020. The ESG KPI values for the Deutsche Telekom Group in Germany are EUR 32 million (Community Investment), 18 million people reached (Beneficiaries), and 44 percent (Media Literacy).

Our efforts to help refugees is another building block in promoting a diverse society. After concentrating on comprehensive initial aid in response to the large numbers of refugees in 2015, we are now focusing on integrating these refugees into the labor market. Based on current figures, around 86 percent of refugees do not have any formal professional qualifications that are recognized in Germany. That is why, in 2016, we founded the "Internship PLUS direct entry" initiative together with the Deutsche Post DHL Group, Henkel, and the Federal Employment Agency. We also hold special applicant days to provide easier access to internships. Through recruitment measures, communication on social media, and volunteer work, we increased the number of applications received from refugees, bringing the number of applicants per vacant position up from

around two to five. In 2017, around 340 refugees benefited from work options offered by our Company, such as internships, training, "Internship PLUS direct entry," or direct entry. We have helped these people enter the German labor market. [SDG](#)

DATA PRIVACY AND DATA SECURITY

The process of digitalization comes with new kinds of threats, such as hacker attacks on the sensitive data of private individuals or companies. People will only actually use new ICT solutions if they trust the security of their personal data – and only then can these solutions show their true potential for more sustainable development. As an ICT company, the trust of our customers is extremely important to our business success. That is why the privacy and security of their data is so important to us. [SDG](#)

In 2008 we set up a Board of Management department for Data Privacy, Legal Affairs and Compliance as well as the Group Privacy unit. The responsible Board member has been advised by the independent Data Privacy Advisory Council, which comprises renowned experts from politics, science, business, and independent organizations, since 2009. In addition, we were the first DAX company to have our data privacy-related compliance management system reviewed and certified according to the IDW PS 980 standard in September 2014. It describes the measures, processes, and audits we use to ensure compliance with laws, regulations, and voluntary commitments to data privacy in our Group.

Data privacy and data security are subject to our Group policies for data privacy (Binding Corporate Rules Privacy) and security. The former regulates how personal data is handled, and a supplementary document entitled Binding Interpretations sets forth concrete recommendations and best-practice examples for implementing the EU General Data Protection Regulation which takes effect in May 2018. The second Group policy includes significant security-related principles valid within the Group, which are based on international standard ISO 27001. These policies allow us to guarantee an adequately high and consistent level of security and data privacy throughout our entire Group.

We have been publishing an annual transparency report for Germany since 2014, which covers the types and amount of information we disclose to security agencies and allows us to fulfill our legal obligations as a telecommunications company. Our national companies have also been publishing similar transparency reports since 2016.

In order to ensure even better data privacy and data security within our Group, our corporate units are audited and certified regularly by internal and external professionals. This includes regular Group-wide internal security checks as well as audits of individual Group units as part of our Security Maturity Reporting. This helps us evaluate the maturity of the security status quo in our Group, based on a self-assessment.



For detailed information, please refer to the section "Risk and opportunity management," page 111 et seq.

Our consumers and business customers can find information on the topic of security on our new web portal launched in 2017 (<https://security.telekom.com>).

17 PARTNERSHIPS FOR THE GOALS



We use two surveys – the Group Data Privacy Audit (GDPA) and Online Awareness Survey (OAS) – to measure our employees' awareness of data privacy and security by means of annual random checks. We use the GDPA to survey 50,000 Deutsche Telekom employees on topics related to data privacy and data security. We use these results to calculate the Data Protection Award indicator, which quantifies the level of data protection in the units on a scale of 0 to 100 percent. It is based on what the employees said they thought, did, and knew about data protection. In 2017, the Data Protection Award indicator was 75 percent (excluding T-Mobile US, prior year: 70 percent). The Online Awareness Survey, which we have been conducting since 2005, surveys roughly 40,000 employees and provides key data on their awareness of security. Scientific advisers help us use its results to determine the Security Awareness Index (S.A.I.). In 2017, the index was 78.4 (excluding T-Mobile US, prior year: 78.2) of a maximum of 100 points, higher than in any other company. The S.A.I. for Deutsche Telekom in Germany is currently 79.8. We also have our processes and management systems as well as products and services certified by external, independent organizations such as TÜV, DEKRA, and auditing firms. TÜV North has once again confirmed in 2017 that Telekom Deutschland's IT systems are secure.

Telecommunications companies are required to train their employees on issues related to data protection law when they begin their employment. Deutsche Telekom goes above and beyond these legal requirements: Every two years, we train all of our employees in Germany and commit them to data privacy and telecommunications secrecy. We have also implemented corresponding requirements in our international companies. In addition, we provide training in units where there is a higher risk that data may be misused – i.e., in the customer and HR units – in the form of online training designed for self-study, data privacy presentations, and classroom training on specialized topics such as data privacy in call centers. This helps to ensure that all employees have in-depth understanding of the relevant data privacy policies.

We launched the Telekom Security entity effective January 1, 2017 to focus on internal security issues and develop security solutions for consumers as well as business customers. This allows us to provide our customers with the perfect security solutions along the entire value chain, from product development and secure, high-performing networks through to high-security data centers, applications, and individual consulting. On top of this, we opened our new Cyber Defense and Security Operation Center in October 2017. It is one of the largest and most modern defense centers in Europe. Around 200 experts work there around the clock to monitor our and our customers' systems.

We react to new threats and continuously develop innovative processes to defend the systems against attacks. Since 2016, for instance, we have been offering a drone shield for business customers with critical infrastructure like data centers, stadiums,

or official agencies as a solution for protecting against the growing danger posed by private drones. We worked with the German air traffic control service to raise awareness of this problem at the 2017 Drone Detection Day in the Hesse city of Langen. We also invited partners and customers to the Telekom Security Conference in Munich for the second time in June 2017. The conference centered on understanding new trends and solutions relevant to security.

We work with research institutes, industry partners, initiatives, standardization bodies, public institutions, and other online service providers worldwide with the goal of fighting cyber crime and increasing security on the Net. For instance, we collaborate with the German Federal Office for Information Security throughout Germany and with the European Union Agency for Network and Information Security at a European level. [SDG](#)

Data privacy and security have always played an important role in the development of our products and services. We review the security of our systems at every step of development using the Privacy and Security Assessment process both for new systems and for existing systems when the technology or method of data processing is modified. We use a standardized procedure to document the data privacy and data security status of our products throughout their entire life cycle.

Youth protection aspects are also taken into consideration in our product and service design. When we develop services that could be relevant in terms of youth protection in Germany, we consult our Youth Protection Officer for suggestions of restrictions or changes. In 2014, we appointed a Child Safety Officer (CSO) in each of our national companies in Europe. The CSO acts as a central contact for members of the community, and plays a key internal role in coordinating issues relevant to youth protection. Since protecting minors is a challenge across many different industries, we cooperate with different youth protection organizations and participate in alliances such as the "CEO alliance to better protect minors online," which tries to make the Internet a more secure place for children and young people. [SDG](#)


ASPECT 4: RESPECTING HUMAN RIGHTS

Compliance with human rights is highly important to our Group. This applies both internally within our Company and to our business partners and suppliers as well. To also ensure compliance with human rights outside of our Group, we expressly require our over 30,000 suppliers in more than 80 countries to assume this responsibility as well.

LABOR STANDARDS IN THE SUPPLY CHAIN AND IN THE GROUP

There are still places in the world where human rights are not a given. We may be exposed to country- and supplier-specific risks through our global procurement activities; these include, for instance, the use of child labor or poor local labor and safety


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conditions. Violations can cause severe damage to those affected, and can also result in reputational loss and negative financial consequences for companies. 

As a responsible company, we have made an express commitment to the UN Guiding Principles on Business and Human Rights adopted by the United Nations Human Rights Council in 2011 (Ruggie Principles). The obligation to respect human rights is anchored in our basic policies – in our Guiding Principles and in the Deutsche Telekom Social Charter, which we updated during the reporting year and developed into the Code of Human Rights & Social Principles. The Board of Management adopted the amended version in November 2017. This update underscores our commitment to protecting human rights and to the goals of the German National Action Plan on Business and Human Rights adopted by the Federal Government in 2016. Additionally, the Code of Human Rights & Social Principles is our commitment to complying with the fundamental principles and standards set forth by the International Labour Organization (ILO) and the Organisation for Economic Co-operation and Development (OECD) as well as with the Universal Declaration of Human Rights and the UN Global Compact. We also require our suppliers to comply with all of our guidelines related to human rights. Within the Group, our primary focus is on safeguarding the right to conclude collective agreements and on guaranteeing diversity and equal opportunity. For further information, please refer to the passages entitled “Collaboration with employees’ representatives/trade unions” and “Diversity and equal opportunity” in this section. 

The UN Guiding Principles on Business and Human Rights require businesses to systematically identify the impact their operations have on human rights, and to prevent, mitigate, or compensate these where necessary. In order to meet these requirements, we have developed an extensive program to implement the UN Guiding Principles throughout our Group and introduced an ongoing process comprising several interconnected measures and tools. The program includes promoting awareness, a mechanism for lodging complaints, a risk and impact analysis, and reporting.

We mainly use two instruments to review our Code of Human Rights & Social Principles: First, we prepare a Social Performance Report each year. In 2016, all 103 companies surveyed declared in the report that they are in compliance with the requirements of the Code of Human Rights & Social Principles and the report did not record any violations in 2016. The number of surveyed companies increased in 2017 to 122. In addition, in 2017 we also evolved the Social Performance Report into the Human Rights and Social Report, adding questions on the individual points of the Code of Human Rights & Social Principles. We will be publishing the 2017 report on our website in March 2018. We also maintain a central contact point for human rights issues, available at the

e-mail address humanrights@telekom.de or through an anonymous whistleblower system. We have summarized all relevant contact information on our whistleblower portal Tell me!. We look into all tip-offs received and introduce countermeasures as soon as the information is identified as plausible. In 2017, seven tip-offs relating to human rights issues were received either directly via the portal or via the (anonymous) tip-off system. Not all of these tip-offs were deemed plausible. Whenever necessary, we carry out review processes at our national companies to assess employer-employee relationships. To do so, we collect five human rights-related key performance indicators, such as employee satisfaction, then assess these using a stop light system.  We also formally review compliance with the Employee Relations Policy each year. The findings are discussed with the regional managers of the respective national companies; if necessary, we agree upon measures such as a Human Rights Impact Assessment, which is designed to assess the actual and potential consequences of corporate activities on human rights and the ability of the organization to prevent, mitigate, or compensate these consequences. We completed such an assessment at T-Systems do Brasil in 2017 and carried out Employee Relations Policy reviews at T-Systems Netherlands and IT Services Hungary in the same year. In addition, we created a special training module on human rights, available for all employees to complete as of January 2018.

More and more, the public expects companies to take responsibility over their entire supply chains and utilize the opportunities they have to influence specific issues. We have been working to improve sustainability throughout our supply chain for many years. We derive our sustainability strategy in procurement from our CR strategy; it is anchored in the purchasing processes used throughout our Group. The heads of the CR and Procurement units are responsible for implementing sustainable procurement practices. They report to the CHRO and the CFO, and an escalation process calls for decisions to be made at Board of Management level in severe cases. The Sustainable Procurement Working Group supports international procurement units in meeting sustainability requirements. Our sustainability principles for procurement are set forth in the Global Procurement Policy; associated Procurement Practices provide specific purchasing instructions for Germany and are considered recommendations for our national companies. We train our employees throughout the Group using an e-learning tool. In addition, a buyer handbook has been available since 2016 to provide an overview of which CR criteria must be considered at which point of the procurement process.

Basic ethical, social, and ecological principles are set forth in our Supplier Code of Conduct, updated in 2017, which is part of our General Terms and Conditions for Purchasing and which must be recognized by all of our suppliers. We give the topic of sustainability a 10 percent weighting in requests for tenders.



For further information, please refer to the section “Risk and opportunity management,” page 111 et seq.



For detailed information on employee satisfaction, please refer to the section “Employees,” page 96 et seq.



We cannot guarantee that all of our suppliers will conform to the principles of our Supplier Code of Conduct. However, we review this compliance regularly to minimize risks and further develop suppliers, working closely with them on these issues. We do so using a four-phase approach: The Supplier Code of Conduct is an integral part of all supplier agreements, and as such is binding for all of our suppliers (phase 1). As the business relationship proceeds, we ask strategically relevant or high-risk suppliers to enter extensive information about their practices in the E-TASC (Electronics Tool for Accountable Supply Chains powered by EcoVadis) information system. We take things a step further in our relationships to certain suppliers that exhibit a higher CR risk and conduct on-site social audits (phase 2). Our focus here is not only on our direct suppliers but also on downstream suppliers as far as possible. We also boost the effectiveness of our audits by collaborating with twelve other companies in the Joint Audit Cooperation (JAC). We completed a total of 89 social audits in 2017 – 26 of these with our direct and 63 with our indirect suppliers. As in previous years, we concentrated our auditing activities on suppliers in Asia, in particular in China and neighboring countries such as India, Malaysia, South Korea, and Thailand, as well as in Brazil, Mexico, and Eastern Europe. Audited suppliers included manufacturers in the areas of IT hardware, software and services as well as networks and devices. [SDG](#)

10 REDUCED INEQUALITIES



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



We use the information provided by the companies themselves and audit findings to classify and rate suppliers, primarily those that offer several material groups, according to CR criteria (phase 3). In our multi-award winning Supplier Development Program (phase 4) we work together to develop solutions on issues like environmental protection, work hours regulations, or health protection. The success of the program not only has social and ecological benefits, it can also be measured in business terms: For instance, one supplier reduced lost working days by 35 percent. However, better working conditions do not just have a positive impact on employee motivation and increase productivity, they also improve product quality, in turn reducing the number of complaints received about our products. Ecological improvements include, for instance, one supplier's 36 percent reduction in water consumption. Our suppliers also integrate their sub-contractors in our development program, expanding its impact along our value chain. We added three new suppliers to the program in 2017 to bring the total up to 14. In order to help make the global supply chain for ICT products more sustainable, we are developing our supplier program to become an industry standard; other ICT companies will be able to join the program and also involve their own suppliers. [SDG](#)

17 PARTNERSHIPS FOR THE GOALS



We use the Sustainable Procurement ESG KPI to measure and manage our sustainability performance in procurement. This KPI measures the ratio between the procurement volume we receive from suppliers whose compliance with social and environmental criteria has been verified through self-assessments, E-TASC, or social audits, and our total procurement volume. The share of the procurement volume that has been risk-assessed was 81 percent in 2017. Our goal is to cover at least 80 percent by 2020.

ASPECT 5: FIGHTING CORRUPTION

Corruption and unfair business practices violate national and international law. We reject every type of corruption, which is why we focus on corruption avoidance measures.

ETHICAL BUSINESS PRACTICES AND COMPLIANCE

We feel it is highly important that all staff and executive bodies in our Group act with integrity and comply with our values, rules of conduct, and applicable laws at all times. The goal of our compliance activities is to prevent violations and fraudulent business behavior and to integrate compliance into our business processes early on and on a long-term basis. Our customers need to be able to trust our actions meet the highest standards for compliance and integrity around the world. This is essential if we are to be seen as a reliable partner. [SDG](#)

We have expressed our commitment to complying with ethical principles and current legal standards. We have anchored this commitment in our Guiding Principles and Code of Conduct, revised in 2017, with the goal of focusing on issues of compliance and integrity and finding a positive way to raise employee awareness of, and motivation to tackle, these issues. The Code of Conduct is valid throughout the Group and will be introduced in all of our national companies.

Group Compliance Management, our central compliance organization, also plays a key role in establishing corporate governance structures and a corporate culture that focus on integrity. It promotes a compliance culture and establishes a set of values centering around the issue of compliance at our Company, and encourages managers and employees to internalize these values. Hence, our understanding of what compliance means far exceeds pure adherence of corporate action to legal requirements, i.e., laws and internal regulations, and focuses on the integrity of everyone in our Group.

We have introduced a comprehensive compliance management system: a way to reduce risks and make sure conduct throughout the Group complies with the existing regulations. All of our activities

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comply with legal and statutory requirements and with our own policies and internal data privacy regulations. Responsibility for the compliance management system lies with the Board of Management department for Data Privacy, Legal Affairs and Compliance. In addition, one person at management or managing board level in each Group company is in charge of compliance. Our Chief Compliance Officer is responsible for the Group-wide design, advancement and implementation of the compliance management system. Compliance officers implement the compliance management system and our compliance goals locally at the level of our operational segments and national companies.

We take many different actions and measures to prevent and fight corruption. Our compliance management system is based on the Compliance Risk Assessment (CRA), which we use to identify and assess compliance risks and introduce suitable preventative measures. We have established an annual process for this purpose throughout the Group that we use to identify responsibilities and define clear assessment criteria that are documented in a traceable manner. The companies that will take part in the CRA are selected on the basis of the level of maturity of their compliance management system (maturity-based model). In the reporting year, the CRA included 73 companies and covered around 98 percent of the workforce. The individual Group companies are responsible for implementing the CRA and receive support and advice from the central compliance organization. After the management/managing boards in the national companies have been informed of the CRA findings, these findings are used to outline the compliance program for the following year: Measures and responsibilities are defined and management approves the program. These activities are monitored closely to ensure that measures are completed. We have our compliance management system certified regularly, with a focus on anti-corruption measures. In 2016 and 2017, a total of 22 companies – 10 German and 12 international – were reviewed.

We regularly provide risk-oriented and target group-specific training on compliance and avoiding corruption. We have set up the “Ask me!” advice portal focused on the issue of compliance. The portal contains reliable information for employees on laws, internal policies, and behavioral standards relevant to their daily activities.

Despite the best preventive measures, we are not always able to prevent breaches of law or violations of regulations at the Company. The Tell me! whistleblower portal is used by employees and external parties for reporting breaches or suspected breaches of the law or of internal policies and regulations. In 2017, we received 146 compliance-related tip-offs through the Tell me! portal (108 tip-offs in the prior year). Of these, during the course of the year, 43 were confirmed to be cases of misconduct and dealt with accordingly. We systematically pursue all tip-offs, including those that reach us via other channels, within the scope of the legal framework

available to us, and implement appropriate sanctions. We have introduced a Group-wide reporting process to control and monitor these activities. This primarily includes reporting on Group-wide compliance cases and the status of the compliance program.

Our suppliers sign our Supplier Code of Conduct, committing to refrain from any kind of corruption and any actions that could be interpreted as corrupt. We expect, and work to ensure, that our suppliers observe these obligations, principles, and values, and take all necessary measures to prevent and penalize active and passive corruption. We have been offering regular e-learning and classroom training on compliance to our suppliers since 2014, as well as providing them with a compliance guideline. We select our business partners based on compliance criteria and conduct risk-oriented compliance business assessments. [SDG](#)

17 PARTNERSHIPS FOR THE GOALS



INNOVATION AND PRODUCT DEVELOPMENT

WE FOCUS ON INNOVATION – FOR OUR CUSTOMERS

The digital transformation is progressing apace, bringing far-reaching change to virtually all areas of life on a social, economic, and political level. From intelligent robots and smart factories to self-driving cars, it is changing the world as we know it. Artificial intelligence is taking root in our daily lives, while real life and the virtual world are converging into the Internet of Things. [SDG](#)

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



As a leading telecommunications and information technology provider, we want to shape this digital world and find the answers to tomorrow's questions, today. Our innovations give us leverage to set ourselves apart from the competition, both to safeguard the long-term success of our Company and to position ourselves as a premium provider for our consumers and business customers in the long term.

PRODUCT INNOVATION – THE CORE OF OUR INNOVATIVE ACTIVITIES

The Product Innovation unit is our lynchpin when it comes to developing innovative products and services. Formerly a part of Group Innovation*, this Group unit was set up on January 1, 2017, and is assigned to our newly established Board of Management department Technology and Innovation. Product Innovation coordinates and prioritizes innovation activities for consumers and business customers and looks after the continual development of the Group-wide product innovation strategy. It also generates disruptive ideas and works closely with Technology to ensure technology-driven innovations. Close working relationships between Product Innovation and further units across the entire Group encompass traditional product development projects for

our operating segments. The aim of such projects is to expand our product portfolio to include more innovative products and solutions and to improve existing products. These projects have a development horizon of one to two years. However, the central focus of our new Group unit is on innovation topics. As a driver of innovations with a development horizon of three to five years, we are shaping the digital future for our customers.

In the reporting year, Product Innovation pushed ahead with the process of transforming our innovation projects on the basis of three principles:

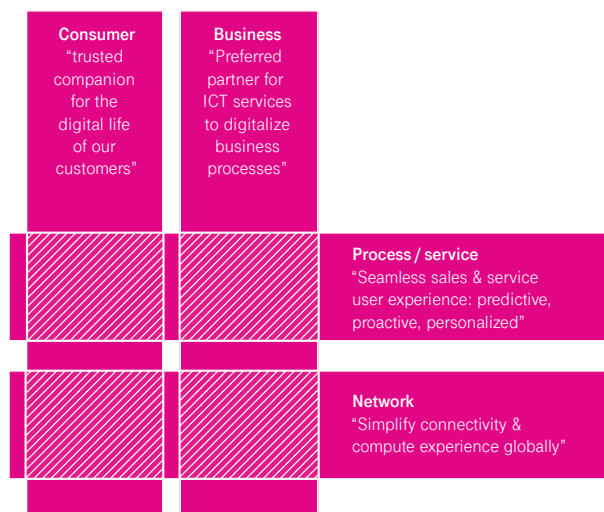
- Innovation focus: Pursue fewer – but all the more promising – areas of innovation at intra-Group level;
- Innovation management: Extend innovation project funding and introduce a more flexible funding approach;
- Collaboration and partnering: Ensure all innovation activities are developed and prioritized jointly by Product Innovation and the business segments and draw systematically on external experts and partners.

INNOVATION FOCUS

FOUR AREAS OF INNOVATION

Where does innovation come from? Everywhere. That’s why it is important to ensure all of our innovation activities take place at an intra-Group level and are aligned strategically. Our four inter-related innovation areas – consumer products, business customer products, network/infrastructure, and processes/service – provide a consistent framework that can be applied across the Group.

Innovation areas

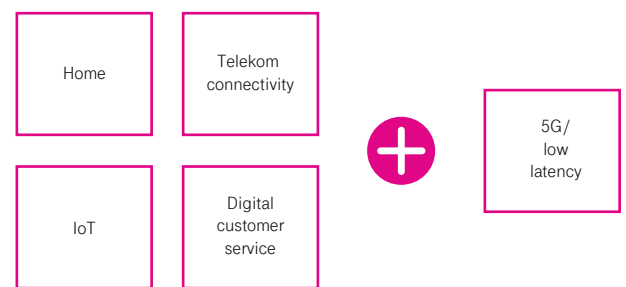


4+1 – OUR FORMULA FOR INNOVATION

In addition, for our innovations to be successful we must focus on just a handful of areas – but we have to choose the right ones. True to this approach, in the reporting year we reduced the number of major innovation areas from 64 to five. We parted ways with some projects (like the Tolino eReader), and put an end to work on others (such as payment).

The resulting formula for innovation is now 4+1: the Group’s five prioritized areas of innovation.

4+1 – Our formula for innovation



The 4+1 topics are handled on an intra-departmental basis and in close cooperation with the segments:

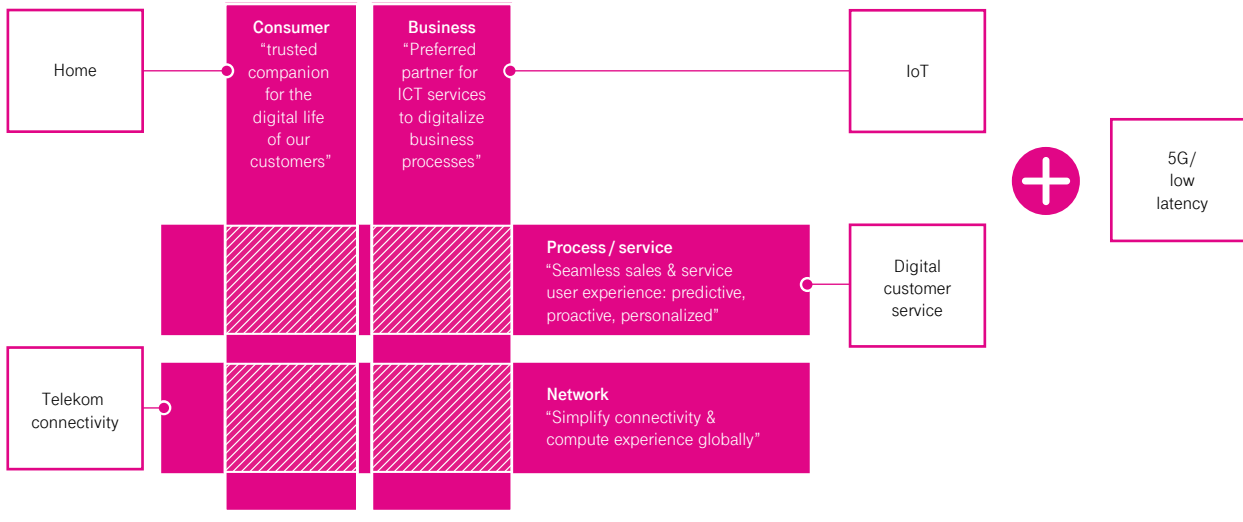
- **Home:** Customers see for themselves what the seamless convergence of next-generation products and services can offer in the connected home, for an outstanding customer experience. Fully integrated, user-friendly IPTV/Entertain, SmartHome, and Smart Voice Hub services and devices interplay automatically and seamlessly and are simple and intuitive to use.
- **Telekom connectivity:** We create a unique connectivity experience by managing different access technologies, from Wi-Fi to 5G, seamlessly to give our customers access to digital services and content everywhere – simply, securely, and in top quality.
- **Internet of Things (Narrowband IoT):** Narrowband IoT technology is a new type of narrowband communication between “things” in which small volumes of data are transmitted over extended periods of time. Narrowband opens up the door to countless new M2M and IoT applications for our business customers, while being more cost efficient, powerful, and resource-friendly than existing M2M solutions. [SDG](#)
- **Digital customer care (eCare & eSales):** By integrating artificial intelligence into customer service, we free up capacity to focus on further improving customer care and interaction.
- **5G/low latency:** This area of innovation stretches further into the future and forms the basis for the real-time communication that is key to innovative applications in the virtual and immersive Internet of the future – like self-driving cars, robotics, Industry 4.0, and ever-more realistic virtual reality.

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The first four fields are directly related to our core business and the four innovation areas. They generate directly measurable added value in the form of additional revenues and improved customer satisfaction. In contrast, with 5G/low latency we are driving forward a disruptive innovation field for our Group that has the potential

to radically and permanently transform existing markets and business models. The development timeframe in this context is substantially longer than for the first four innovation areas. All five are reviewed each year to ensure that we continue to concentrate on the right topics.

Innovation areas and 4+1 innovation priorities



In the reporting year, we already brought several promising product and service innovations to market under the 4+1 model:

In **home** innovations, we integrated the QIVICON Home Base functionalities directly into the router so that customers now only need one piece of equipment. The **Speedport Smart**, launched mid-May, features SmartHome functionalities. The **Magenta SmartHome app** for Apple and Android was updated in December 2017 to further improve the customer experience in terms of controlling and automating the connected home. The app can now be connected to more than 200 machines and devices for energy-efficient operation, including state-of-the-art equipment such as the smart smoke detector Nest Protect and the latest Osram lights. We also offer the ERGO emergency service to assist in situations where residents cannot be contacted. What is more, Volkswagen owners can now control their SmartHome solution directly via their on-board infotainment system.

In the **Telekom Connectivity** area of innovation, we developed the CONNECT app for the German market. CONNECT enables users to transition smoothly and smartly between networks and logs into HotSpots and Wi-Fi networks automatically while ensuring full control over costs and speed. This is just one of the ways in which we ensure customers benefit from the best connectivity and the best customer experience. [SDG](#)

We continued our pioneering role in the **Internet of Things (IoT)** innovation area in the reporting year. T-Mobile Netherlands celebrated a world premiere by being the first company to roll out **Narrowband IoT technology** nationwide. In Germany, too, we launched our first **Narrowband IoT service packages** and built

out the availability of narrowband IoT networks in all of our footprint markets. Several pilot projects with corporate customers in the areas of smart metering, smart parking, and asset tracking are already up and running.

Our new **digital customer care** assistant at T-Mobile Austria, **Tinka**, helps customers online and via Facebook to use our products and services intuitively and can answer questions on products and services. Tinka started life as a text-based chatbot in 2016. We then incorporated artificial intelligence elements in 2017 to enable her to interpret and correctly respond to more complicated questions. Since mid-2017, a digital, artificial intelligence-equipped assistant has also been available around the clock to answer German customers' questions on technical problems. The assistant relieves the burden on service colleagues of responding to routine inquiries and frees up valuable time to deal with customer concerns in person.

As part of our long-term focus on innovation in the area of **5G/low latency**, we are laying the groundwork for the digital world of tomorrow. Our showcase of 5G-enabled robotics demonstrated, for example, at Mobile World Congress 2017 how robots can interact efficiently and synchronously using 5G network technology and low latency.

INNOVATION MANAGEMENT

Innovation cycles are getting shorter and shorter. As a result, we must be agile and flexible in how we manage and budget our innovation projects. We orient ourselves to best-practice approaches used by innovative startups and successful companies, and to the latest findings from research and academia.





PORTFOLIO AND INNOVATION BOARD

Established 2013, the Portfolio & Innovation Board (PIB) plays a central role in managing our innovations. It ensures that we prioritize correctly by identifying and selecting key areas of innovation for our Group and deciding on the method of implementation. Our efforts are guided primarily by the four innovation areas and we create full transparency across the Group regarding our investments in innovation.

CORPORATE INNOVATION FUND

Our Corporate Innovation Fund (CIF) is managed centrally by the PIB. Similar to a venture capital approach, the CIF offers all business and product ideas generated within the Group a flexible and results-oriented form of funding for a specific project phase. The provision of additional innovation budget allows us, for example, to fund new innovation projects at short notice and with little red tape. Such financing is granted independently of annual planning periods, and therefore intensifies our focus on market and customer requirements. Innovation can take place anywhere across Deutsche Telekom, as long as the proposed business and product ideas fit within our Group's central innovation focuses.

For example, in the reporting year, the Corporate Innovation Fund (CIF) funded the startup and financing phase of the Paketchef solution. Paketchef targets the last mile of parcel delivery services by giving the customer the freedom to choose when and where they receive their parcels. Our Group-internal entrepreneurs' platform UQBATE (www.uqbate.com) also supported this project. Paketchef is thus a good example of successful corporate entrepreneurship and was singled out as the second-best corporate startup at the Corporate Startup Summit & Award in November 2017. [SDG](#)



INVESTMENT COMMITTEE FOR THE 4+1 TOPICS

We established the Investment Committee to speed up investment decisions on our 4+1 areas of innovation. Its objective is to act like an (internal) venture capitalist. The Investment Committee allocates funding according to success, orienting itself to the start-up industry and the venture-capitalist approach of tying funding to the achievement of key milestones. This gives us the flexibility we need when developing innovation topics and focuses efforts on success. Funding is only made available for the next project phase when specific outcomes that are relevant to our customers are achieved.

The deciding factor for us is always that our ideas and innovations are developed closely in line with the demands of our customers from the very start. Projects that become less promising over time are stopped immediately.

COLLABORATION

Working closely with other departments throughout the entire Group is the key to successful innovation. We involve the segments with market responsibility in the development process right from the get-go. This joint effort ensures that we do not miss the mark during this phase.

Another important contributor to successful internal collaboration is the diversity that exists across our Company. Empirical studies confirm our experiences that diversity is positively correlated to innovativeness. [SDG](#)

CUSTOMER RESEARCH AND DESIGN THINKING

We want our Group to enjoy long-lasting market success, which is why we take a customer-centric approach to developing innovations. We investigate and analyze customers' wishes even before they are articulated, to design innovative solutions and products together with customers themselves. In doing so, we draw on a toolbox full of diverse, flexible – both intelligent and user-centric – methods. We have also defined a standard design-thinking approach across the Group and, with the Design Academy, set up one of the largest professional training programs in the history of our Company.

INNOVATION FORUM

Being able to work with customers rapidly, independently, and on an ongoing basis is essential, so we recruit customers via the innovation forum, a Group-internal customer panel comprising 1,600 households. These customers help us to develop products and services by contributing their ideas, experiences, and wishes.

CUSTOMER EXPERIENCE

What does it take to create an outstanding customer experience? And how can we do this? Product Innovation has defined the answers to these questions using what it calls the experience framework. The framework, or vision, links together the customer and business perspectives logically to describe specific action areas. This gives us a set of measures and methods that allow us to design a coherent customer experience. Our efforts in this area have received several accolades. For example, at IFA 2017 our virtual reality solution, Basketball, won a UXDesign Award presented by the International Design Center Berlin (IDZ). The solution uses virtual reality to turn a live-streamed basketball game into a real 360° experience.

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THREE-PRONGED INNOVATION STRATEGY

To tap into even greater innovation capacity, we not only rely on our own developments but also successfully integrate new ideas from outside Deutsche Telekom. We take a three-pronged approach to innovation to set ourselves apart from the competition and generate growth:

- In-house developments,
- partnerships, and
- startup funding.

FEEL THE FUTURE – OUR PRODUCT AND SERVICE INNOVATIONS

Below are a few examples of developments in the reporting year:

- **Smart parking.** Searching for parking spaces wastes time, causes traffic jams, and pollutes the air. Summer 2017 brought relief to Hamburg in the form of the new digital parking service Park and Joy. The first parking spaces in the city were equipped with narrowband sensors transmitting over the mobile network. Over the next three years, numerous public parking spaces, parking garages, and private parking lots across the country are to be connected to the network. [SDG](#)
- Since February 2017, Slovak Telekom has offered its customers a SmartHome service based on the white-label portfolio from QIVICON. It combines the open, secure QIVICON platform, the new QIVICON Home Base, the White Label app, and other compatible devices from a range of manufacturers. Our SmartHome platform offers further benefits in the form of certification and security. QIVICON has been certified in accordance with the ISO 9001 quality management standard as well as being awarded the top mark by the AV-Test Independent IT-Security Institute.
- **immmr** is a one-stop service for voice and video calling and messaging. The app virtualizes the user's mobile telephone number allowing them to call any number from any device – even from multiple numbers. The first managed OTT service worldwide, immmr combines the best of Internet-based communication with the strengths of mobile technology. After introducing the app under the immmr brand in Slovakia at the end of 2016, we have been focusing in 2017 on relaunching it under the Telekom brand.
- The future belongs to the **eSIM** card. We support the GSMA's eSIM standard in Germany, which premieres in the Apple Watch Series 3, making us the only network operator in Germany to offer the Apple Watch with this new eSIM function.

- The use of voice assistants to operate services is becoming increasingly important. We designed our own **Smart Speaker** featuring our continually learning Magenta voice assistant. It can be used to control equipment connected to the device, such as EntertainTV, using voice commands. The assistant was developed together with researchers at the Fraunhofer Institute for Digital Media Technology (IDMT). In terms of data security too the Smart Speaker meets the most demanding requirements: commands are stored for only 30 days. The servers it uses are located exclusively in Germany, making them subject to Germany's strict data protection law. The Smart Speaker will be available in Germany in the first half of 2018.

With our central research unit, **Telekom Innovation Laboratories (T-Labs)**, we operate our own research and development facilities at locations in Berlin, Darmstadt and Bonn in Germany, Beer Sheva in Israel, and Mountain View in the United States. Some 300 experts and scientists in diverse fields work closely with our Technology and Innovation Board department and our operating segments. They foster open innovation by working with partners from industry, international universities, research institutions, and startups. [SDG](#) Based primarily in Berlin, the T-Labs have had close ties to Technische Universität Berlin since 2004. We also entered into further academic partnerships in the reporting year, including with TU Wien in Vienna and the Einstein Center Digital Future in Berlin. In 2017, T-Labs focused on a range of topics including the following:

- A Group-wide initiative was launched in 2017 focusing on a new research area at T-Labs – **blockchain** – to look into the technology and the possibilities it offers in terms of efficient, secure, environmentally friendly confidential data transfer between partners across a decentralized network. Together with a range of partners, we are working on numerous prototypes which, for example, utilize blockchain technology in the Internet of Things (IoT), including in cooperation with Telekom Deutschland and T-Systems.
- **New media experience** is all about improving the user experience, in particular at the user interface to new media formats. We look through the eyes of the customer to create solutions for at home and on the move, as well as for smart cities. The focus of our research is on cloud-based applications and integrating new formats such as virtual reality/augmented reality and 360°, which we already unveiled in several showcases (360° Basketball Bundesliga, Telekom Cup, Magenta VR Portal).

13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS





- We are working both on new services and to improve existing services for our customers using a range of methods that include machine learning and **artificial intelligence**. The FASAS project is developing mechanisms to detect cyber attacks on our networks at an early stage and trigger automated protection measures. FASAS, a partnership between Telekom Security, Ben-Gurion University in Israel, and T-Labs, represents the successful transfer of research findings and was awarded the Best Big Data Project at Deutsche Telekom 2017 prize. We are migrating the solutions into live operations on a step-by-step basis, with the next update due in the first quarter of 2018. [SDG](#)
- **Smart cities** as a strategic focal area has grown out of the many years of lab test results and research findings at T-Labs. Together with partners, we are testing innovative solutions for energy, mobility, and communication in our European flagship project mySmartLife in Hamburg. [SDG](#)

INNOVATIONS FROM PARTNERSHIPS

We draw on the expertise and abilities of our partners in order to implement the digital transformation successfully. [SDG](#) We rely on the tremendous innovative energy coming out of Silicon Valley, Israel, Germany, and other innovation hotspots across the globe.

Some examples of successful partnerships can be found below:

- After successfully launching StreamOn in Germany, Poland, and Croatia, we expanded our new zero-rating video platform to include Greece and Romania. Our customers in these countries can now stream big-name video services from partners such as **YouTube**, **Netflix**, and **Amazon Video** on their mobile devices without using up their inclusive data volume. We also launched a new StreamOn option in Croatia, Hungary, Albania, and Greece offering unlimited access to social media and chat services, including Facebook, Messenger, WhatsApp, and Instagram. We will roll out this service to additional countries in 2018 and bring extra partners on board.
- At the end of 2017, Telekom Deutschland and T-Mobile Austria joined forces with our partner **Mojio** to bring a connected car service to market which transforms consumers' vehicles into smart cars, giving them an overview of car usage, handling, and condition, as well as Wi-Fi for passengers. Similar Mojio-based services in the form of SyncUp Drive and Chytré Auto are already on offer at T-Mobile US and T-Mobile in the Czech Republic. In addition, Digital Drive – another Mojio-based technical solution – from T-Systems is a manufacturer-neutral retrofit option for dealers, original equipment manufacturers (OEMs), insurance companies, and fleet operators. Digital Drive enables them to offer their customers own-branded digital connected car services.

- We formed a partnership with **Checkpoint** to deliver security solutions for business customers and consumers. Business customers benefit from secure e-mail transmission with the APT Protect Pro cloud solution, while Telekom Deutschland and Cosmote in Greece launched the Protect Mobile service for consumers in collaboration with Checkpoint. Protect Mobile is a convergent security product available as a simple add-on that protects mobile customers against viruses. An additional app offers protection when connected to Wi-Fi.
- We joined forces with **CyberX** and **Radiflow** to offer comprehensive protection for connected industrial systems. Industrial Threat Protect Pro (CyberX) identifies vulnerabilities and provides transparency, while Industrial Network Protect Pro (Radiflow) protects against the uncontrolled flow of data and unauthorized access to the network. [SDG](#)

STARTUP FUNDING

Our **hub:raum** incubator connects startups with the right contacts at our Group. In addition to seed financing, hub:raum offers the startups targeted programs that tie in with the strategic technologies at our Group. With its focus on our core areas, such as artificial intelligence and the smart home, hub:raum primarily deals with startups that fall within our 4+1 innovation areas. Since it was established in 2012, hub:raum has helped us to build up an investment portfolio of over 20 companies and 250 startups in Europe and Israel. In 2017 alone, almost 20 projects between startups and our Group business units were launched (www.hubraum.com). We would like to mention just some of these startups below: [SDG](#)

- **Twyla** has created a flexible piece of chatbot software designed to help large companies improve their digital customer experience and take on the diverse challenges of customer service. The solution is simple to integrate and frees up customer advisors' time to concentrate on more complicated customer inquiries (www.twylahelps.com).
- An app designed by **eParkomat** shows users vacant parking spaces in the vicinity and guides them there via smartphone quickly and easily. It uses an algorithm to forecast the availability of vacant parking spaces in real time by analyzing the number of mobile devices that are logged into a specific mobile network (www.eparkomat.com). [SDG](#)
- **Reparando** is a speedy mobile repair service that comes to the aid of faulty smartphones. Currently available to customers in 20 cities across Germany, the Stuttgart-based startup has carried out more than 10,000 repairs since it was established mid-2015 (www.reparando.com).

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In 2017, hub:raum also launched or continued to pursue three programs dealing with the Group's strategic technologies: low latency/edge computing, future communications (with our partner), and the narrowband IoT program launched in 2016. Program participants gain access to Group experts and support with developing their businesses.

DEUTSCHE TELEKOM CAPITAL PARTNERS

We have restructured our commitment in the areas of venture capital, private equity, and technology innovation with our Deutsche Telekom Capital Partners group (DTCP), which was established at the beginning of 2015, and are extending it considerably. DTCP is Deutsche Telekom's investment management group and is positioned at the center of our redesigned investment concept. DTCP offers growth capital for startups with a proven business model, investments in mature companies, and consulting in the technology, media, and telecommunications sectors. Its objective is to create value for the Group, investors, portfolio companies, and other stakeholders and it has access to some EUR 500 million in capital to pursue this goal. DTCP's investments have a strong financial motivation. The group aims to acquire shares in companies, to see these companies grow, and to sell the shareholdings again at a profit. Choosing the most successful startups and collaborating closely with them leads to strategically relevant cooperation options and business relationships with our Group.

DTCP also provides guidance to our strategic investment fund Telekom Innovation Pool (TIP) on investments that are primarily strategically motivated. TIP focuses its investment activities not only on external startups that are strategically relevant, but also supports and implements in-house ventures as spin-offs. For the latter, new business ideas from our Group are spun off as young companies, making greater entrepreneurial freedom and shorter decision paths possible. Additionally, DTCP advises DTVF (Deutsche Telekom Venture Funds GmbH) on its portfolio. The aim is to support the development of the around 55 existing investments (including through follow-up investments) and divest them at a profit.

DTCP was already conducting successful deals in its first two years in business. This involved the profitable sale of the startups Nexmo (to Vonage), Replay (to Intel), and Fireglass (to Symantec). In 2017, DTCP invested venture capital in several companies, including mobile marketing platform AppsFlyer, big data analytics company Fornova, machine learning-based personalization technology Dynamic Yield, and software-as-a-service enterprise-architecture specialist LeanIX. It also advised the Telekom Innovation Pool on matters such as investing in the IoT orchestration platform Axonize and our cloud computing spin-off mobileedgeX. In terms of mature businesses, DTCP invested in mobile infrastructure provider SwissTowers AG.

PATENTS/IPR PORTFOLIO

Patents are gaining more and more significance in the telecommunications industry. Market players and their areas of activity are changing, with a knock-on effect on our intellectual property rights (IPR) agenda. On the one hand, our Group's scope for action must be maintained. On the other hand and alongside our own research and development activities, we want to pave the way to open innovation through collaboration projects and partnerships. National and international IPRs are vital for these types of activity. We are strongly dedicated to generating our own property rights. In the reporting year, we filed 295 patent applications, taking the total number of IPRs held by the Group to around 8,300. We pursue our intense efforts to develop and structure our IPR portfolio. This secures the value of the rights we hold and ensures they are in line with our Group's strategic objectives. We have put in place a professional patent law management process to keep our IPR assets safe.

EXPENDITURE AND INVESTMENT IN RESEARCH AND DEVELOPMENT

Research and development (R&D) expenditure includes pre-production research and development, such as the search for alternative products, processes, systems, and services. By contrast, we do not class as research and development expenditure the costs of developing system and user software which is designed to improve productivity and make our business processes more effective. R&D expenditure in the Deutsche Telekom Group amounted to EUR 57.7 million in 2017. As the parent company, Deutsche Telekom AG bears part of the Group's research and development expenditure, the amount in this case being EUR 27 million (2016: EUR 58 million). However, this figure cannot be viewed in isolation from our three-pronged innovation strategy comprising in-house developments, partnerships, and startup funding.

Our Group's investments in internally generated intangible assets to be capitalized were also up year-on-year at EUR 235.7 million compared with EUR 129.5 million for the previous year. These investments predominantly relate to internally developed software, mainly in our Group Headquarters & Group Services segment and our Systems Solutions operating segment. About 3,000 employees worked in the Group's R&D areas in 2017 (2016: approx. 2,900).

Expenditure and investment in research and development

millions of €

	2017	2016	2015	2014	2013
Research and development expenditure	57.7	84.1	108.1	95.6	97.0
Investments in internally generated intangible assets to be capitalized	235.7	129.5	101.3	93.2	112.0

EMPLOYEES

- Opportunities and challenges of digitalization
- Our HR work based on the HR priorities
- HR awards in 2017
- Headcount development in 2017

OPPORTUNITIES AND CHALLENGES OF DIGITALIZATION

Digitalization will completely revolutionize our lives and the way we work. Even now, we are already beginning to see new forms of collaboration, unprecedented business models, and greater automation of activities. That's why it is vital that we equip our managers and employees with digital skills, because people are the keys to our success, both today and tomorrow. It's also why we need to be an attractive employer to talented individuals. We must create working environments and use technologies that enable us to network among ourselves. Leadership will change, too, to become more participative and virtual. Decision-making will become ever faster. Digitalization opens the door to a host of amazing opportunities for innovation and we intend to make the best possible use of them. [SDG](#)



The topics mentioned here guide our strategic priorities in HR. In 2017, we continued to work on the following key areas:

OUR HR PRIORITIES

1. Talent strategy and planning
2. Performance management and leadership
3. Working in the digital age
4. Skills management and innovative training opportunities

Below we describe details of example projects and initiatives designed with these priorities in mind.

OUR HR WORK BASED ON THE HR PRIORITIES

1. TALENT STRATEGY AND PLANNING

When it comes to transforming the Group, our workforce plays a crucial role. It is hugely important to us to have the right people in the right jobs and to further develop their individual skills.

Recruitment. We want to make our work even more global, digital, and efficient in the future, which is why we aim to attract the biggest talents to our Company worldwide. Conventional recruitment

channels, such as employee recommendations, job advertisements, campaigns, trade fair presences, and active recruitment on social networks, are enhanced by the opportunities provided by digitalization. New channels, such as our Global Online Challenge Platform or Roberta the Robot – our virtual assistant at job fairs – connect us with candidates who have the future skills we need. Gamification is another attractive approach to this target group, as is our open workspace project, CMD+O. We have extended our Women's STEM Award to an international audience and now take applications from female students of STEM subjects not only in Germany, but from across all of Europe. [SDG](#)

Employer brand. We are already an attractive employer, but we want to get even better. In 2017, our global HR team created a new worldwide employer brand for the Group, known as the Employer Value Proposition (EVP): "We shape the digital world to bring people closer together." The new EVP is accompanied by a provocative campaign with the slogan: "If you can't think big – don't apply." This new employer brand gives us a consistent look and feel across all labor markets worldwide, yet is flexible enough for our different national companies to contribute their individual strengths.

Succession and talent management. We know that good employees are not only recruited from outside the Company. Many people with key skills and huge potential already work within our Group. In 2017, we imbued our succession planning activities with the necessary structure by taking a global approach. The new digital process allows us to plan and develop candidates on an ongoing basis, and we always have an overview of potential successors to management positions. Additionally, our Global Talent Pool is a platform and database that gives us complete transparency over our global talents and their respective profiles. Talents can use the Global Talent Pool group on YAM, our social network, to plan the next steps of their career, identify strategic project assignments, and find interesting job vacancies. We also exclusively offer a portfolio of digital development opportunities, including CV consulting, career meetings, e-training modules, and mentoring, to prepare our global talents for new positions. This system makes it easier to fill vacancies, improves the visibility of talented employees, and promotes rotation. We also organized two simultaneous Talent Summit conferences in Bonn and Athens to foster international networking, which were attended by over 300 talents.

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2. PERFORMANCE MANAGEMENT AND LEADERSHIP

“Lead to win” leadership model. The working world is becoming increasingly dynamic, agile, and innovative. In order to keep pace with these changes, we updated our “Lead to win” leadership model in the reporting year. Essentially, “Lead to win” focuses on a continuous exchange about performance and development issues in line with the principles “Collaborate,” “Innovate,” and “Empower to perform,” along with our Guiding Principles. The main changes in 2017 included uncoupling individual bonus payments, personal development using ongoing feedback, and a stronger focus on Group-wide collaboration.

levelUP! In the age of digitalization, managers must possess skills and methods that differ greatly from those needed by the analog world. That’s why we launched a new professional development program for executives, levelUP! – an innovative digital further-training service for successful leadership in the digital age. levelUP! has a flexible modular structure that uses mainly interactive learning formats.

Practicing diversity. For over a decade now, we have sustainably and comprehensively practiced and promoted diversity throughout the Group. [SDG](#) In 2015, we launched a campaign on unconscious bias, which is now running at international level. The goal is to raise employee awareness of this issue and bring fresh stimulus for greater diversity within the Company. We once again took part in the German Diversity Day featuring the motto “Diversity makes the difference – cultural skills for business success.” Gender equality remains a particular concern of ours. Back in 2010, Deutsche Telekom AG set itself the target of filling 30 percent of management positions across the Group with females. We aim to meet this target by 2020. Across the globe, the proportion of women in middle and upper management stood at 25.4 percent at the end of 2017. Following the introduction of the Act on Equal Participation of Women and Men in Executive Positions in the Private and the Public Sector (Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst), we extended the target to include the Board, the two levels directly beneath the Board, and our internal supervisory boards in Germany. Since 2015, via our Supervisory Board Readiness Program, we have trained almost 60 women to take on national and international supervisory board mandates. The percentage of female members on our supervisory boards in Germany rose from 17.7 percent in 2010 to 37.3 percent in December 2017. In 2017 we also hosted the annual Chefsache Conference; a network of managers from industry, academia, the public sector, and the media dedicated to equal opportunities and patronized by Federal Chancellor Angela Merkel. [SDG](#)

Achieving a good work-life balance. Alongside offering traditional support in the form of childcare facilities and family care options, we are also moving increasingly to an HR policy oriented to differ-

ent life phases that offers flexible working conditions for greater self-determination, and, in doing so, exploits the opportunities provided by digitalization. After concluding the general collective agreement with ver.di in 2017, we rolled out mobile working across the Group as a new way of working. This allows our employees to work from home or on the move, provided the nature of the task lends itself to this. In addition, flexible working hours, the opportunity to go part-time with a guaranteed option to return to full-time work, and the lifetime work accounts all give employees greater freedom to structure their day flexibly and achieve a better work-life balance. [SDG](#)

Employee satisfaction. In the most recent Group-wide employee survey of 2017 (excluding T-Mobile US), our commitment index score – our measure of employee satisfaction – already at a high level, remained at 4.1 (on a scale of 1.0 to 5.0). We also conduct regular pulse surveys to obtain feedback from our employees. 71 percent of employees took part in the pulse survey in November 2017, of which 72 percent stated they were satisfied with our Company; for comparison, this figure stood at 73 percent in the pulse survey of November 2016. Even though the feedback is already very positive, we have several initiatives in place to further improve the corporate culture and employee satisfaction. We expect to see employee satisfaction remain consistently high in the next employee survey due in 2019.

Employee satisfaction (commitment index)^a

	2017	2015
GROUP (excluding T-Mobile US) ^b	4.1	4.1
Of which: Germany	4.1	4.1
Of which: international	4.1	4.0

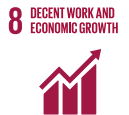
^a Commitment index according to the most recent employee surveys in 2017 and 2015.
^b T-Mobile US conducts its own employee survey.

Employee health. Our health management strategy is designed to maintain our employees’ health and performance. We view occupational health and safety legislation as minimum requirements. [SDG](#) In addition, we practice a corporate culture that encourages employees to take personal responsibility for their health. Managers make an important contribution in this respect. Our commitment to this topic has won us numerous accolades. [SDG](#)

3. WORKING IN THE DIGITAL AGE

What does the transformation of the working world mean for our employees? The innumerable opportunities inspire our HR work, culminating in a range of measures on “people,” “places,” and “technologies.”

People. The transformation of corporate organization and culture is accelerating, driven by the pace of digitalization. Transformation



[SDG](#) For further information on occupational health and safety, please refer to the section “Corporate responsibility and non-financial statement,” page 77 et seq.



is not an end in itself, but an expression of the relentless demand for adapted, more flexible work forms and operating structures. The automation of transactional and repetitive activities creates new options for “human” value creation, while social media and digital platforms unlock new ways of working across hierarchical divides. The person and employee continues to be our focus. But who are our employees and how do they work in the digital age? To get to the bottom of these important questions, we asked our workforce about their experiences and wishes regarding the use of digital tools, and created “persona” from our findings. These allow us to develop tailor-made IT solutions and digital learning and further training offers. As in the previous year, in 2017 we once again set standards in the field of design thinking. We have now brought more than 10,000 employees into contact with this creative development method, thus establishing a broad basis on which this approach to innovation and transformation can be applied to daily work. Our Massive Open Online Course (MOOC) format has been up and running for several years now and is used to address current business challenges in global teams. The next Magenta MOOC initiative, with the slogan “Tap into design thinking,” will bring this method to an even larger user group. As of the 2017 year-end, 4,700 employees had already registered for this online course. [SDG](#)



Places. The workplace of the future will also undergo transformation. Our Future Work program offers modern, open office environments and shared work zones to promote flexible working, a trust-based leadership culture, and mobile working. As of the end of the reporting year, just under 18,000 employees in Germany were already working in line with our Future Work principles. The Group Headquarters underwent complete restructuring, along with sites in Düsseldorf, Essen, and Berlin. Our goal is to continue to pursue the transformation of our corporate culture from one based on being at the office to one based on results.



Technologies. Because we want to make the most of the opportunities brought about by digital transformation, we are testing out new technologies in fields such as professional training and development. Using virtual reality, for example, we can teach and hone presentation skills in front of a virtual audience. The internal automation of our HR processes is also progressing apace thanks to the use of chatbot prototypes. Our staff app, launched in December 2017, established a basis for bringing further HR processes, like the “punch clock,” to the smartphone. Mobile solutions not only make everyday work easier, they also promote modern and

flexible working. We will be upgrading the mobile phones of up to 50,000 employees with latest-generation smartphones to give more people access to the latest services. We are aware that we must promote virtual collaboration if we are to maximize performance. A key part of this is our YAM, which is attracting new users continually. YAM had more than 123,000 users as of the end of 2017 and continues to establish itself firmly as a dialog-based communications platform and the central nervous system of our Company. We have also upgraded the direct communications channel with the Board of Management level via YAM, with many of our Board members and managers using blogs, vlogs, chats and discussion forums to communicate. In addition, most employees worldwide now have access to the following options for collaboration between departments and across national borders: video and web conferencing services, live broadcasts and chat/messaging services, and knowledge-sharing via secure data rooms.

4. SKILLS MANAGEMENT AND INNOVATIVE TRAINING OPPORTUNITIES

Skills management. One of our most important resources is the skills of our employees. In order to secure competitiveness and employment, together with the employee representatives we agreed to implement a strategic skills management pilot project at four business units. Alongside retraining opportunities and inter-departmental exchanges, the focus is on identifying skills gaps at an early stage and deriving long-term training programs to redress the balance. To date, some 5,000 employees have gone through this process, thus allowing us to identify potential for improvement and implement training measures together with the participating Group units and our employee representatives. [SDG](#)

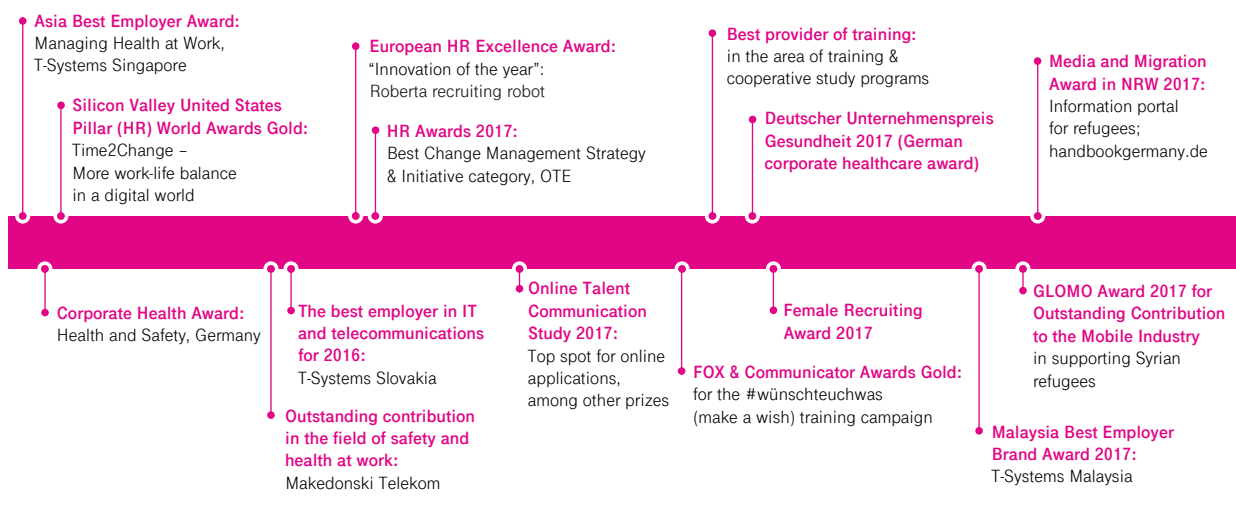
The 80/20 model. The 80/20 model is yet another innovative program to improve employee motivation and collaboration across departments. It gives employees the freedom – on a voluntary basis and in agreement with the participating manager – to dedicate 20 percent of their working hours to internal Group projects. The model allows skills gaps to be closed, while giving employees the opportunity to apply their skills in other areas, irrespective of their department. Introducing this level of flexibility not only promotes the general success of the Company but also creates a new and innovative way of working in which employees’ skills are valued and managers receive targeted support.

Part-time training leave. The “German part-time training leave model” is another opportunity for employees to advance their

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skills and thus safeguard their employability. We presented this model together with Federal Minister of Labor Andrea Nahles in June 2017. The proposal is similar to the partial retirement model with the added bonus that the employee is given a job guarantee or protection against compulsory redundancy for a specific period of time. The part-time training leave model is an all-round win-win situation. Employees keep their jobs and social security, the costs for the state are substantially reduced compared to the costs of financing unemployment, and companies train up their employees for the future.

Major HR awards in 2017



HEADCOUNT DEVELOPMENT


The Group's headcount fell by 0.5 percent compared with the end of the prior year. Development across the segments was varied. The number of employees in our Germany operating segment declined by 2.3 percent as a result of efficiency enhancement measures, fewer hires in the operating units, and the take-up of socially responsible instruments. The total number of employees in our United States operating segment increased by 2.4 percent at December 31, 2017 compared to December 31, 2016, due to an increase in customer support and network employees, partially offset by a decrease in customer acquisition employees. In our Europe operating segment, the workforce grew by 1.3 percent year-on-year, partly due to the extra employees needed at our national

company in Poland to staff the new branches opened there. The headcount in our Systems Solutions operating segment increased by 1.2 percent, largely as a result of the integration of Telekom Security employees. In our Group Development operating segment, the number of employees declined by 23.5 percent, primarily as a result of the deconsolidation of Strato as of March 31, 2017. The headcount in the Group Headquarters & Group Services segment was down 4.7 percent compared with the end of 2016, mainly due to the ongoing staff restructuring at Vivento and the Group-wide bundling of the Telekom Security unit under our Systems Solutions operating segment. By contrast, the number of employees in our new Technology and Innovation Board department increased.

WORKFORCE STATISTICS

Headcount development

	Dec. 31, 2017	Dec. 31, 2016 ^a	Dec. 31, 2015 ^a	Dec. 31, 2014	Dec. 31, 2013
FTEs IN THE GROUP	217,349	218,341	225,243	227,811	228,596
Of which: Deutsche Telekom AG	21,428	22,571	26,205	28,569	29,577
Of which: civil servants (in Germany, active service relationship)	15,482	15,999	18,483	19,881	20,523
Germany operating segment ^a	63,928	65,452	67,927	68,754	66,725
United States operating segment	45,888	44,820	44,229	39,683	37,071
Europe operating segment ^a	47,421	46,808	48,920	53,499	53,265
Systems Solutions operating segment ^a	37,924	37,472	37,850	46,244	49,540
Group Development ^a	1,967	2,572	2,768	-	-
Group Headquarters & Group Services ^a	20,222	21,216	23,548	19,631	21,995
BREAKDOWN BY GEOGRAPHIC AREA					
Germany	101,901	104,662	110,354	114,749	116,643
International	115,448	113,679	114,888	113,061	111,953
Of which: other EU member states	59,952	59,456	60,710	63,032	63,939
Of which: rest of Europe	2,620	2,581	2,945	3,127	3,238
Of which: North America	46,332	45,364	44,803	40,346	37,856
Of which: rest of world	6,543	6,278	6,431	6,556	6,920
NATURAL ATTRITION	4.7	4.0	4.4	4.2	4.2
Of which: Germany	1.7	1.4	1.3	1.4	1.8
Of which: international	9.2	8.1	9.3	8.6	7.6
PRODUCTIVITY TREND^b					
Net revenue per employee	thousands of € 346	331	306	275	262

^a Since January 1, 2017, we have reported on the Group Development operating segment and within the Group Headquarters & Group Services segment on the Board of Management department Technology and Innovation. Comparative figures have been adjusted retrospectively. 

^b Based on average number of employees.



For more information, please refer to the section "Group organization" page 31 et seq., and to the disclosures in Note 31 "Segment reporting" in the notes to the consolidated financial statements, page 220 et seq.

Personnel costs

	2017	2016	2015	2014	2013
Personnel costs in the Group	15.5	16.4	15.8	14.7	15.1
Of which: Germany	8.5	9.8	9.4	9.1	9.4
Of which: international	7.0	6.6	6.4	5.6	5.7
Special factors ^a	0.6	1.6	1.2	0.9	1.4
Personnel costs in the Group (adjusted for special factors)	14.9	14.8	14.6	13.8	13.7
Net revenue	74.9	73.1	69.2	62.7	60.1
ADJUSTED PERSONNEL COST RATIO	19.9	20.3	21.2	22.0	22.7
PERSONNEL COSTS AT DEUTSCHE TELEKOM AG UNDER GERMAN GAAP	2.7	3.5	2.9	2.8	3.1

^a Expenses for staff-related measures.

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SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

For information on events after the reporting period, please refer to Note 42 "Events after the reporting period" in the notes to the consolidated financial statements, page 247, and to the notes to the annual financial statements of Deutsche Telekom AG as of December 31, 2017.

FORECAST¹


STATEMENT BY THE BOARD OF MANAGEMENT ON THE EXPECTED DEVELOPMENT OF THE GROUP

We successfully continued our growth course again in 2017. We already set ourselves apart by having the best and most modern networks and we want to continue building on this technology leadership. Over the coming years, we will also focus more on integrated offers, in line with the expectations of our customers. This goes hand in hand with our "Leading European Telco" strategy – with the aim of becoming Europe's leading telecommunications provider. This is closely related to our financial targets for the period up to 2018: As communicated at our Capital Markets Day in February 2015, we are aiming for the following compound annual growth rates (CAGR) for the period from 2014 to 2018:

- **Revenue:** 1 to 2 percent
- **Adjusted EBITDA:** 2 to 4 percent
- **Free cash flow:** approx. 10 percent

For 2018, we expect to post the following year-on-year growth trends, assuming a comparable consolidated group and constant exchange rates:

- **Revenue** is likely to increase again slightly in 2018.
- **Adjusted EBITDA** is expected to reach some EUR 23.2 billion in 2018, up from EUR 22.2 billion in the reporting period.
- **Free cash flow** is expected to grow to around EUR 6.2 billion in 2018, up from EUR 5.5 billion in the reporting period.

The new accounting standards IFRS 9 and IFRS 15 took effect as of January 1, 2018. This will have a net impact going forward on the revenue and EBITDA of our Germany, United States, and Europe operating segments, and hence on the Group. The planning for the coming years, and thus the statements made in this section, already take these new financial reporting standards into account. As the figures for the 2017 financial year have been prepared in accordance with IAS 18, while the forecasts for 2018 and beyond already take the new accounting standards into consideration, a direct comparison of the two years is only possible to a limited extent. 

ECONOMIC OUTLOOK

In its economic forecast from January 2018, the International Monetary Fund (IMF) expects annual global economic growth of 3.9 percent in both 2018 and 2019. This faster growth is attributable to the economic upswing in emerging and developing economies as well as stable growth in industrialized nations. We expect the stable economic trend in our core markets to continue. The economies in Germany, the United States and the countries of our Europe operating segment are largely recording positive growth rates, driven by buoyant trends in both private consumer and investment spending. The situation on the labor markets is also likely to improve as a result.



For more details on the new standards, please refer to the section "Summary of accounting policies" in the notes to the consolidated financial statements, page 153 et seq.

¹ The forecasts contain forward-looking statements that reflect management's current views with respect to future events. Words such as "assume," "anticipate," "believe," "estimate," "expect," "intend," "may," "could," "plan," "project," "should," "want," and similar expressions identify forward-looking statements. These forward-looking statements include statements on the expected development of revenue, EBIT, EBITDA, adjusted EBITDA, ROCE, cash capex, and free cash flow. Such statements are subject to risks and uncertainties, such as an economic downturn in Europe or North America, changes in exchange and interest rates, the outcome of disputes in which Deutsche Telekom is involved, and competitive and regulatory developments. Some uncertainties or other imponderabilities that might influence Deutsche Telekom's ability to achieve its objectives are described in the section "Risk and opportunity management," page 111 et seq. of the combined management report, and the "Disclaimer," page 265 at the end of the Annual Report. Should these or other uncertainties and imponderabilities materialize or the assumptions underlying any of these statements prove incorrect, the actual results may be materially different from those expressed or implied by such statements. We do not guarantee that our forward-looking statements will prove correct. The forward-looking statements presented here are based on the future structure of the Group, without regard to significant acquisitions, disposals, business combinations, or joint ventures that may arise at a later date. These statements are made with respect to conditions as of the date of this document's publication. Without prejudice to existing obligations under capital market law, we do not intend or assume any obligation to update forward-looking statements.

Forecast on the development of GDP and the unemployment rates in our core markets for 2018 and 2019

%

	GDP for 2018 compared with 2017	GDP for 2019 compared with 2018	Unemployment rate in 2018	Unemployment rate in 2019
Germany	2.3	1.9	5.4	5.3
United States	2.6	2.2	4.0	3.8
Greece	2.2	2.2	19.6	18.6
Romania	4.1	3.7	5.1	4.8
Hungary	3.5	3.2	4.0	4.0
Poland	3.8	3.4	6.1	6.2
Czech Republic	3.4	3.0	3.7	3.4
Croatia	2.8	2.8	11.0	10.0
Netherlands	2.2	2.0	4.4	4.6
Slovakia	3.6	3.8	7.1	6.8
Austria	2.2	1.8	5.2	5.0
United Kingdom	1.3	1.4	4.4	4.5

Source: Bloomberg Consensus; January 2018.

MARKET EXPECTATIONS
GERMANY

The market for telecommunications services in Germany, which declined by 0.3 percent in 2017 compared with the prior year, is expected to stabilize in 2018 (source: EITO, European Information Technology Observatory). There are a number of reasons for this: First of all, the regulation-induced decrease in revenue is likely to slow down. Second, the negative trends in traditional fixed-network telephony are expected to be offset by growing demand for mobile data volumes and faster connectivity in the consumer and business customer area. For the wider ICT market, which covers IT services as well as telecommunications, EITO forecasts growth of 1.7 percent for 2018. This forecast is primarily based on growth in the IT market, which is currently 3.0 percent and mainly driven by strong demand in two areas: services for business customers (e.g., outsourcing, project business, consulting) and software-based services (virtualization and cloud business, e.g., in the form of Software as a Service, Platform as a Service, or Infrastructure as a Service).

Innovative integrated products and attractive supplementary services – such as TV and music options, and smart home – are becoming increasingly important for our competitive position with consumers, while cloud services, security applications, and solutions for Industry 4.0 are gaining in significance with business customers. We are also setting ourselves apart from other providers with our download and upload bandwidths, the mobile data volumes we include in our rate plans, and innovations in our rate plans.

The mobile communications market in Germany is dominated by three providers, each with its own network infrastructure, who deploy 4G/LTE technology to ensure that the majority of the population has access to high-speed mobile Internet. By contrast, the fixed-network broadband market hosts a large number of players with differing infrastructures – from national through to regional providers. We are assuming that competition from cable network operators will remain intense and that the number of providers who have their own DSL and fiber-optic networks will increase.

UNITED STATES

The U.S. mobile market continues to be characterized by intense competition among the major mobile carriers. Competitive factors within the U.S. mobile market include dynamic changes in pricing, voice market saturation, service and product offerings, customer experience, network quality, development and deployment of technologies, availability of spectrum licenses, and regulatory changes. The mobile postpaid market in the United States is embracing device financing options, such as T-Mobile US' equipment installment plans and device leasing through JUMP! On Demand, allowing customers to subscribe for wireless services separately without the purchase of or payment for a bundled device. Additionally, data services and the availability of unlimited data plans, continue to be a growth driver despite the high level of competition, supporting further network investment by the major mobile carriers in the U.S. mobile market.

EUROPE

The positive trend seen in the traditional communications markets in our Europe operating segment in 2017 will continue over the next two years. Analysts have adjusted their forecasts accordingly: For example, Analysys Mason now expects the markets to remain stable overall in 2018 and 2019, with annual growth in fixed-network business of 2 percent in both the broadband and pay TV markets, while the significance of voice services will likely continue to diminish, shrinking by some 7 percent per year. In the mobile markets, data services are expected to grow by approximately 5 to 6 percent per year – driven by massive growth in data traffic, especially from the use of mobile video services. According to analyses by Ovum, by 2019, mobile video services will account for more than 60 percent of data traffic on mobile networks in Eastern Europe and for almost 80 percent in Western Europe. By contrast, the relevance of traditional voice services also continues to wane in mobile communications: analysts forecast a decline of around 5 percent per annum in this area. The trend towards convergent offers comprising fixed-network and mobile services (FMC) also continues unabated in our Europe operating

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segment. We expect more than 30 percent of all broadband lines to be part of an FMC offer by 2019.

According to Oxford Economics, real GDP will continue to rise in all our countries in 2018 and 2019 by between 2 and 4 percent per annum. This positive economic situation will have a particular impact on the IT markets in our Europe operating segment. EITO forecasts growth of 3 percent for the countries of Central and Eastern Europe for 2018.

SYSTEMS SOLUTIONS

The ICT market is expected to see further growth in the next two years in line with the ongoing improvement of the global economy, while cost pressure and strong competition are expected to persist. At the same time, we expect the digital transformation to stoke demand for solutions for cloud services, big data, smart network services such as Industry 4.0, the Internet of Things, and M2M as well as for the mobilization of business processes and ICT security (cyber security).

We estimate that the ICT markets will develop along divergent paths in the two main market segments:

- **Telecommunications:** The highly competitive fixed-network telecommunications market for large business customers remains challenging. Innovative change, intense competition, constant price erosion, and the interventions of national regulators are all likely to diminish total market revenues, even though both mobile data services business and the Internet of Things will continue to grow in the coming years.
- **IT services:** The clear growth in the market for IT services in the reporting year is likely to continue in 2018 and 2019. At the same time, this market is undergoing a radical transformation, e.g., due to ongoing standardization and automation, demand for smart services, and the changes being wrought by cloud services in outsourcing business. Further challenges have arisen in the shape of digitalization, the growing importance of ICT security (cyber security), big data, and increasing mobility. Traditional IT business is likely to decline due to price competition, while cloud services, mobility, and cyber security may reach double-digit growth. In view of this, we continue to plan to step up investments in growth markets – especially in digitalization, cloud services, cyber security, and smart network solutions for the healthcare sector, the public sector (smart city), and the automotive industry.

GROUP DEVELOPMENT

Our companies T-Mobile Netherlands and Deutsche Funkturm (DFMG) dominate the development of our Group Development operating segment.

- The high price and competitive pressure in the Dutch mobile market will continue to intensify over the coming years. One of the main trends contributing toward this is the growing bundling of fixed-network and mobile products into convergence offers (FMC). What is more, both the strong discount segment, comprising mobile providers' secondary brands, and MVNOs will continue to make for lively competition.
- With some 28,000 locations, DFMG is the biggest provider of passive wireless infrastructure for mobile communications and broadcasting in Germany. We expect demand for cell sites to rise steadily over the next few years, due to the fact that network operators plan on the one hand to close gaps in coverage, and on the other to increase the density of mobile networks to meet the growing demand for mobile data services.

EXPECTATIONS FOR THE GROUP

Expectations up to 2019. For the next two years, we expect profitable growth to continue. Revenue and adjusted EBITDA are expected to rise at Group level in 2018: a good basis to achieve our financial ambitions by 2018 as communicated at our Capital Markets Day in February 2015.

We expect our financial performance indicators to develop as follows in 2018 and 2019:

- **Revenue** should increase slightly year-on-year in 2018 and continue to rise in 2019. This forecast is based on the rigorous implementation of the Un-carrier strategy in our United States operating segment, which will bring with it sustained customer growth over the next two years. For 2019, we expect all operating segments to make a positive contribution to the revenue growth of our Group.
- **Adjusted EBITDA** is expected to come in at around EUR 23.2 billion in 2018 and to rise in 2019 due to the expected upward revenue trend over the same two-year period.
- **EBITDA** is expected to decline in 2018 compared with the prior year. EBIT is also expected to decrease in 2018 on account of multiple positive special factors recorded in 2017, such as the partial reversal of impairment losses on spectrum licenses previously acquired by T-Mobile US and to the sale of Strato and Scout24 AG. We expect to see slight growth in EBIT in 2019 and growth in EBITDA. This is in line with the expected positive trend for adjusted EBITDA.

- **Return on capital employed (ROCE)** is expected to decrease in 2018, since ROCE in 2017 was positively impacted by the aforementioned special factors. Despite this anticipated decline, we are well on track to achieve the expected weighted average cost of capital (WACC) and hence fulfill our promise made at the 2015 Capital Markets Day. In 2019, return on capital employed should remain stable year-on-year.
- Our investments – in terms of **cash capex** (before spectrum investments) – are expected to amount to around EUR 12.5 billion in 2018. Over the next two years, too, we want to continue investing heavily in building out our network infrastructure in Germany, the United States, and Europe in order to safeguard our technology leadership in the long term. Capital expenditure is expected to fall slightly year-on-year in 2019.
- **Free cash flow** (before dividend payments and spectrum investment) is expected to reach around EUR 6.2 billion in 2018 and rise sharply again in 2019. It is to thus make a crucial contribution toward keeping our relative debt – measured as the ratio of net debt to adjusted EBITDA – within the target corridor of 2 to 2.5x in 2018 and 2019.
- At the end of 2017, the rating agencies Standard & Poor's, Fitch, and Moody's gave us ratings of BBB+, BBB+, and Baa1 respectively, thus placing us in the group of solid investment grade companies. The outlook from all three rating agencies was "stable." Maintaining a solid investment grade rating within the A- to BBB range will enable us to retain unrestricted access to the international financial markets and is thus a key component of our finance strategy.

Our debt issuance program puts us in a position to place issues on the international capital markets at short notice, while our commercial paper program enables us to issue short-term papers on the money market. Our finance strategy continues to include a liquidity reserve that, at any given time, covers at least our capital market maturities over the next 24 months.

Repayments of bonds and loans in the amount of EUR 2.9 billion and EUR 4.8 billion will fall due in 2018 and 2019, respectively. In order to refinance our maturities and maintain the liquidity reserve, we plan to issue new bonds in various currencies. The bond issue in November 2017 already covers part of the refinancing needs for 2018. In January 2018, T-Mobile US also placed bonds with a total volume of USD 2.5 billion on the market. The exact execution of further transactions depends on developments in the international finance markets. We will also cover part of our liquidity requirements by issuing commercial paper.

We intend to continue leveraging economies of scale and synergies through suitable partnerships or appropriate acquisitions in our footprint markets. There are no plans, however, for major acquisitions or expansion in emerging markets. We will continue to subject our existing partnerships and equity investments to regular strategic reassessments with a view to maximizing the value of our Company.

Our **expectations** for the period until 2019 for the Group and the operating segments as regards our financial and non-financial performance indicators are shown in the following tables. They assume a comparable consolidated group and constant exchange rates. The forecast statements made already take into account the new accounting standards IFRS 9 and IFRS 15, which took effect as of January 1, 2018. If the economic situation should deteriorate or any unforeseen state or regulatory interventions arise, the expectations expressed here may change accordingly. All trends denote year-on-year changes. To indicate the intensity and trends of our forecasts, we apply the following assessment matrix: strong decrease, decrease, slight decrease, stable trend, slight increase, increase, strong increase.

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Financial performance indicators

		Results in 2017	Pro forma for 2017 ^{a, b}	Expectations for 2018 ^{c, d, e}	Expectations for 2019 ^{c, d, e}
NET REVENUE					
Group	billions of €	74.9	74.9	slight increase	increase
Germany	billions of €	21.9	21.9	stable trend	slight increase
United States (in local currency)	billions of \$	40.3	40.3	increase	increase
Europe	billions of €	11.6	11.6	stable trend	slight increase
Systems Solutions	billions of €	6.9	6.9	decrease	increase
Group Development	billions of €	2.3	2.2	slight decrease	increase
PROFIT (LOSS) FROM OPERATIONS (EBIT)					
	billions of €	9.4	9.4	decrease	slight increase
EBITDA					
	billions of €	24.0	23.9	decrease	increase
EBITDA (ADJUSTED FOR SPECIAL FACTORS)					
Group	billions of €	22.2	22.2	23.2	increase
Germany	billions of €	8.5	8.4	8.6	increase
United States (in local currency)	billions of \$	10.5	10.5	11.3	increase
Europe	billions of €	3.7	3.7	3.8	slight increase
Systems Solutions	billions of €	0.5	0.5	0.4	slight increase
Group Development	billions of €	0.9	0.9	0.9	increase
ROCE					
	%	5.8		decrease	stable trend
CASH CAPEX^f					
Group	billions of €	12.1	12.1	12.5	slight decrease
Germany	billions of €	4.2	4.2	stable trend	stable trend
United States (in local currency)	billions of \$	5.2	5.2	stable trend	stable trend
Europe	billions of €	1.8	1.8	stable trend	slight decrease
Systems Solutions	billions of €	0.4	0.4	strong increase	decrease
Group Development	billions of €	0.3	0.3	increase	increase
FREE CASH FLOW (BEFORE DIVIDEND PAYMENTS AND SPECTRUM INVESTMENT)					
	billions of €	5.5		6.2	strong increase
RATING					
Standard & Poor's, Fitch		BBB+		from A- to BBB	from A- to BBB
Moody's		Baa1		from A3 to Baa2	from A3 to Baa2
OTHER					
Dividend per share ^{g, h}	€	0.65		Dividend follows free cash flow growth Minimum € 0.50	Dependent on the finance strategy for the years following 2018 ⁱ
EPS (adjusted for special factors)	€	1.28		decrease	slight increase
Equity ratio	%	30.0		25 to 35	25 to 35
Relative debt		2.3x		2 to 2.5x	2 to 2.5x

^a Significant changes in the organizational structure and in the composition of the consolidated Group included up to the date of preparation of the consolidated financial statements and the combined management report (e.g., the integration of Vivento Customer Services GmbH into our Germany operating segment; Vivento was previously assigned to our Group Headquarters & Group Services segment).

^b Based on the International Financial Reporting Standards (IFRSs) applicable in 2017, i.e., without taking account of the changes in IFRS 9 and IFRS 15, in particular.

^c On a comparable basis.

^d Tele2 Netherlands and UPC Austria are not included in the expectations.

^e The expectations are based on the currently applicable International Financial Reporting Standards (IFRSs), i.e., taking into account IFRS 9 and IFRS 15 (see also footnote i), but not taking into account the changes resulting primarily from IFRS 16, which has not yet been applied. 

^f Before spectrum investment.

^g The indicated expectation regarding the dividend per share refers to the respective financial year indicated.

^h Subject to approval by the relevant bodies and the fulfillment of other legal requirements.

ⁱ We will provide information about the further development of our finance strategy for the years following 2018 at our Capital Markets Day, which is planned for the end of May 2018.



For information on standards, interpretations, and amendments issued, but not yet to be applied, please refer to the section "Summary of accounting policies" in the notes to the consolidated financial statements, page 153 et seq.

Non-financial performance indicators

		Results in 2017	Pro forma for 2017 ^a	Expectations for 2018	Expectations for 2019
GROUP					
Customer satisfaction (TRI*M index)		68.6		slight increase	slight increase
Employment satisfaction (commitment index) ^b		4.1		stable trend	stable trend
FIXED-NETWORK AND MOBILE CUSTOMERS					
GERMANY					
Mobile customers	millions	43.1	43.1	increase	increase
Fixed-network lines	millions	19.2	19.2	decrease	decrease
Of which: retail IP-based	millions	12.0	12.0	strong increase	strong increase
Broadband lines	millions	13.2	13.2	increase	increase
Television (IPTV, satellite)	millions	3.1	3.1	strong increase	strong increase
UNITED STATES					
Branded postpaid	millions	38.0	38.0	increase	increase
Branded prepay	millions	20.7	20.7	increase	increase
EUROPE					
Mobile customers	millions	48.8	48.8	increase	slight increase
Fixed-network lines	millions	8.4	8.4	slight decrease	slight decrease
Of which: IP-based	millions	5.7	5.7	strong increase	strong increase
Retail broadband lines	millions	5.6	5.6	increase	increase
Television (IPTV, satellite, cable)	millions	4.2	4.2	increase	increase
SYSTEMS SOLUTIONS					
Order entry	billions of €	5.2	5.2	increase	increase
ESG KPIs					
Energy Intensity ESG KPI ^c	kWh/terabyte	146		strong decrease	strong decrease
Carbon Intensity ESG KPI ^c	kg CO ₂ /terabyte	61		strong decrease	strong decrease
Sustainable Procurement ESG KPI	%	81		stable trend	stable trend


^a Significant changes in the organizational structure and in the composition of the consolidated Group included up to the date of preparation of the consolidated financial statements and the combined management report.

^b Commitment index as per the 2017 employee survey.

^c Figures for the Deutsche Telekom Group in Germany for 2016.

For further information on the development of the non-financial performance indicators of our operating segments, please refer to "Expectations for the operating segments" in this section.

In both 2018 and 2019, we intend to achieve a moderate improvement in **customer loyalty/satisfaction** – which is measured using the **TRI*M index** performance indicator.

Having already achieved a high level of 4.1 – on a scale of 1.0 to 5.0 – on the **commitment index** in the 2017 employee survey, and in view of the results of the pulse surveys conducted in 2017, we expect the positive response of our employees regarding our Company to remain stable in the next employee survey, which is scheduled for 2019. 

Our planning is based on the exchange rates in the following table.

Exchange rates

Croatian kuna	HRK	7.46
Polish zloty	PLN	4.26
Czech koruna	CZK	26.33
Hungarian forint	HUF	309.19
U.S. dollar	USD	1.13

The following table contains a summary of our model calculations and analyses of the key external factors that may have an effect:



For detailed information on our ESG KPIs and our expectations, please refer to the section "Corporate responsibility and non-financial statement," page 77 et seq.

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Factors that may affect results

Premises	Current trend	Impact on results
ECONOMY		
Macroeconomic trends in Europe (incl. Germany)	steady	○
Macroeconomic trends in the United States	increasing	○
Inflation in Europe (incl. Germany)	increasing	○
Inflation in the United States	increasing	○
Development of the U.S. dollar exchange rate	steady	○
Development of exchange rates of European currencies	steady	○
REGULATORY/STATE INTERVENTION		
Regulation of mobile communications in Europe (incl. Germany)	steady	○
Regulation of the fixed network in Europe (incl. Germany)	steady	○
Taxes (in Europe/the United States)	increasing	☑
MARKET DEVELOPMENT		
Intensity of competition in the telecommunications sector in Europe (incl. Germany) and the United States	steady	○
Intensity of competition in the telecommunications sector in the United States	steady	○
Price pressure in telecommunications markets	steady	○
ICT market	increasing	○
Data traffic	increasing	○

☑ positive ○ unchanged ☒ negative

Expectations for Deutsche Telekom AG. The development of business at Deutsche Telekom AG as the parent company of the Group is reflected particularly in its service relationships with our subsidiaries, the results from our subsidiaries' domestic reporting units, and other income from subsidiaries, associated, and related companies. In other words, our subsidiaries' results from operations and the opportunities and challenges they face are key factors shaping the future development of Deutsche Telekom AG's figures. Accordingly, in addition to our expectations for the Group, the expectations described on the following pages concerning the operating segments' revenue and earnings – such as strong competition, regulatory intervention, market and economic expectations, etc. – have an impact on our expectations concerning the development of Deutsche Telekom AG's future income after taxes.

Based on the aforementioned expectations for our operating segments and the resulting effects, and taking existing retained earnings into account, Deutsche Telekom AG also expects to distribute a dividend of at least EUR 0.50 per dividend-bearing share for the 2018 financial year, subject to approval by the relevant bodies and the fulfillment of other legal requirements. Relative growth in free

cash flow is also to be taken into account when measuring the amount of the dividend for the specified financial year.

EXPECTATIONS FOR THE OPERATING SEGMENTS

GERMANY

In our Germany operating segment, we continue to work on our comprehensive transformation program: We want to continue driving forward the IP migration, reduce the complexity of products and processes, use new technologies, and increase the use of automation. In this context, it is important to us that the transformation process is customer-friendly while also being technologically efficient. Our aim is to secure our market position as the leading integrated telecommunications provider in Germany by providing innovative and competitive products and services. In mid-2017, we pooled our customer and technical service so as to offer the best customer experience with the best service.

In the fixed network, we want to offer the best customer experience with fiber-optic products. We are paving the way for this with our integrated network strategy. We are building an IP-based network with high transmission bandwidths so that, in the future, we can offer our customers competitive high-speed lines, e.g., by migrating our VDSL network to vectoring technology. In addition, we are investing heavily to offer greater coverage and even higher speeds in rural areas as well. We are using innovative products for this purpose – like our hybrid router, which combines the bandwidths of fixed-network and mobile communications, thus enabling much higher transmission speeds. [SDG](#) Furthermore, we are working towards further partnerships to provide even more customers with high bit-rate Internet access.

In 2014, we were the first provider in Germany to market a comprehensive and integrated fixed-network/mobile (FMC) product: MagentaEins. We have gradually added new products to this range, such as an FMC offering specifically for our business customers. When designing our products, we pay particular attention to high quality and a simple rate plan structure. In addition, our multiple-brand strategy in mobile communications allows us to address the entire customer spectrum – from smart shoppers through to premium customers. The new Magenta Business program addresses business customers.

We want to secure an ever-larger share of the growing TV market by stepping up marketing activities in the housing sector with a focus on entertainment and content offers. To this end, we are investing in our IPTV platform and winning new customers with attractive content and services.

We want to remain the market leader in Germany in terms of revenue in both mobile communications and the fixed network and extend our market lead in service revenues. As our customers' demand for bandwidth is constantly growing, we intend to continue investing extensively in broadband networks, innovative products, and customer service. Our success in this area has proven us right: Our broadband revenues are constantly growing and customer satisfaction levels, too, are on a positive trajectory. We now want



to cement these two trends, with "progress through digitalization" being one of the drivers of this positive development in customer satisfaction. One example of this is the further development of mobile services (e.g., Magenta apps) for customers.

Overall, revenue in our Germany operating segment should stabilize in 2018 – despite intense competition and the strong impact of regulation on our core business. In addition, we expect broadband and TV revenues as well as the number of IP offerings to rise, as well as further growth in business with business customers. The positive trend in IT and cloud business is set to continue. We want to continue expanding our fiber-optic services, both by means of business models with wholesale products (such as the contingent model) and through further partnerships, e.g., in the housing sector. In addition, we are working with our partners to expand offers such as SmartHome or content and security services for our customers.

We expect growth initiatives in Germany to generate revenue growth and offset the volume-driven decline in revenue from traditional fixed-network business. We want to continue consolidating our position as market leader in mobile and fixed-network communications. Thanks to the outstanding quality of our network and the progress being made in fiber-optic roll-out, we anticipate greater demand for mobile and broadband products as well as growth in the number of broadband, TV, IP, high-speed, and hybrid lines. We would like to continue offering best customer experience with integrated services (e.g., MagentaEins), digital products, and service experiences. Our IT and technical service revenues should help feed this trend. In addition, we want to make advances with the smart home business and offer further M2M and security services. We expect growth in cloud services to continue. Wholesale sales volumes should continue to develop very positively thanks to strong demand for our contingent model. The revenue trend is only expected to be stable year-on-year due to the transition to the IFRS 15 accounting standard in 2018.

We expect adjusted EBITDA to increase year-on-year for the next two years in our Germany operating segment. In 2018, we expect adjusted EBITDA of around EUR 8.6 billion and a steady improvement in our margin. Growing revenues as well as savings in indirect costs – primarily from a reduction in redundancies and from increased productivity – will be the main factors in this trend. We forecast an adjusted EBITDA margin of some 39 percent in both 2018 and 2019.

Our course is set for innovation and growth: While we will continue to promote investments in new technologies with even greater intensity in the future, we are reducing investments in legacy systems. The focus of our capital expenditures in the coming years will thus fall on our network infrastructure and our mobile network (e.g., FTTC, super vectoring, FTTH, 4x4 MIMO, 5G). At the same time, we want to further build out our fiber-optic network and close gaps in the

network in rural areas. One focus here is business parks and we are driving forward the FTTH build-out accordingly. We want to continue this roll-out efficiently and participate in development programs. We expect our investments in new technologies (cash capex) to remain stable at a high level for the next two years.

UNITED STATES

In 2018, T-Mobile US will continue to execute on its Un-carrier promise to deliver the best value experience in the U.S. wireless industry. Key elements of the Un-carrier promise include delivering distinctive value for consumers in all customer segments by eliminating customer pain points and providing excellent 4G/LTE services through a strong mid-band spectrum position supplemented by low-band spectrum in key metropolitan areas and a nationwide fourth-generation LTE network. Additionally, the Un-carrier initiatives focus on attracting and retaining a loyal customer base by offering devices when and how customers want them, and plans that are simple, affordable and without unnecessary restrictions to deliver the best value in wireless.

T-Mobile US expects continued increases in branded postpaid and branded prepaid customers in 2018 and a further increase in 2019. However, competitive pressures and unforeseen changes in the wireless communications industry in the United States may significantly affect the expected ability to attract and retain branded postpaid and prepaid customers.

T-Mobile US expects an increase in total revenues in U.S. dollars in 2018 and a further increase in 2019 as a result of continued customer growth momentum.

For 2018 and 2019, T-Mobile US expects a sustained increase – in U.S. dollars – in adjusted EBITDA. As a result of the significant growth in customers over the past year, revenue growth is expected to outpace increases in expense as T-Mobile US is able to take advantage of improved scale effects.

However, continued investment in the network and increased spending for marketing of the T-Mobile US brand will likely influence adjusted EBITDA. Competitive pressures may also significantly affect expected revenues and adjusted EBITDA in U.S. dollars. Exchange rate fluctuations may significantly affect revenues and adjusted EBITDA in euros in 2018 and 2019.

Excluding expenditures relating to spectrum, T-Mobile US expects cash capex in U.S. dollars to be generally in line with 2017 as it continues to expand its 4G/LTE network.

EUROPE

For the coming two years we have set ourselves the target of establishing seamless connectivity at home and on the go. We are thus focusing on convergent fixed-network and mobile products (FMC), on ICT solutions for business customers, and on digitalization.

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On the road to becoming the leading European telecommunications provider, we need our already integrated national companies to further strengthen their market position. We want to systematically transform our mobile-centric companies into integrated enterprises. In the coming year, we will turn our national company in Austria into a strong convergent telecommunications provider through the agreed acquisition of the cable operator UPC Austria (subject to approval by the relevant competition authorities). Since the transaction was not yet closed as at the date of preparing the consolidated financial statements and the combined management report, the value contributions from the agreed acquisition in Austria are not included in our outlook.

In terms of the strategic growth area of FMC, our convergent product portfolios MagentaOne and MagentaOne Business provide strong offerings with which we can successfully help to shape developments in the European markets. On the one hand, we want to win new customers with our innovative portfolio, on the other hand, we want to offer our existing customers the full MagentaOne product range. We believe that, in this way, we can also increase household coverage in the markets of our Europe operating segment. The advance of digitalization helps with the seamless provision of a wide range of products and services. We support our business customers and consumers in Europe on their journey into the digital world. For example, we want to establish an app for consumers that will act as a central, online communications channel which will give our customers simple and seamless access to their products and services with us. We have already successfully marketed this app in a number of our national companies; in the short to medium term, we plan to introduce it in all of our national companies so as to offer our customers the best experience.

Another focus in the consumer area is the seamless enjoyment of TV and entertainment services, with a particular focus on high-quality and exclusive content. In the future, we will negotiate to acquire rights to broadcast soccer matches, such as the Champions League, or the rights to TV movies/series, as well as to relevant local content. We are also working in partnership with OTT players such as Netflix. We will continue to participate in the production of our own content and channels, as in Greece, for example, with the OTE History channel. In order to make TV content an even better experience for our customers, we have developed interactive services for the new TV platform in Croatia, among other things. We also want to offer customers of our mobile-only companies access to the broad spectrum of TV services. Overall, we expect to further increase our revenues from TV business over the next two years.

For business customers, we want to become the preferred partner for the digital transformation and a pioneer of innovation in industry over the coming years. We set the course for this in 2017. B2B/ICT revenues are also expected to see further growth. Above all, the core business in the area of small and medium-sized enterprises (SMEs) performed well, primarily thanks to our attractive product range of convergent solutions (fixed network, mobile communications, and cloud from a single source). We concluded contracts

for ICT and cloud services with numerous corporate customers in the reporting year, thereby strengthening our market position. In order to derive additional benefit from this, we have not only pushed digitalization with SMEs, but are also focusing on supporting cities and municipalities in Europe on their path to becoming efficient smart cities, for instance, through fast, intelligent solutions in the areas of lighting, parking, and air quality. We have further decided, together with the countries of the Europe operating segment, to establish a competence center in Hungary to focus on the topic of smart cities.

Our state-of-the-art network infrastructure supports digitalization. With the aim of becoming the leading European telecommunications provider, we will continue to focus on technology leadership over the next two years: For example, we plan to take part in further spectrum auctions. Our investments in mobile communications are focused on two areas: expanding LTE reach and implementing LTE Advanced technology in order to increase network capacity. This will make transmission rates of over 300 Mbit/s possible. In 2017, we already covered 94 percent of the population on average in the countries of our Europe operating segment with LTE and are thus well on track: Ultimately, we aim to achieve network coverage of between 89 and 99 percent in our footprint countries in 2018. The next-generation mobile communications standard, 5G, is just around the corner with the first tests underway and pilot projects being readied for launch. We have already successfully launched Narrowband IoT as 5G technology in six national companies. One aim of our integrated network strategy is to make further advances in the fiber-optic roll-out. Our strategy in Greece has been to focus on fiber-optic roll-out up to the street cabinets using vectoring technology. In the other integrated companies, we have been investing in the FTTH roll-out for a number of years now, and plan to continue doing so in combination with vectoring. In addition, we will launch the FTTH roll-out in the Czech Republic in 2018.

In our Europe operating segment, we expect to win more customers over the next two years, mainly thanks to the good performance of our convergence brand MagentaOne. Consequently, we expect the number of TV and broadband lines to increase in 2018 and 2019. The number of mobile customers is also set to grow. We expect fixed-network voice telephony to be replaced more and more by mobile communications, hence we forecast a slight decline in fixed-network lines for 2018 and 2019.

Changes in legislation, for example regarding taxes and duties, and national austerity programs may have a negative impact on our revenue and earnings in the next two years. Changes in exchange rates could also affect our earnings on a euro basis.

Based on these assumptions and parameters, we expect revenue in our Europe operating segment to remain stable in 2018 on a comparable basis, i.e., based on the pro-forma figures for 2017; this is assuming constant exchange rates and based on assumptions about regulation, new market players, spectrum auctions, and unchanged organizational structure. 2019 should then see a return to moderate revenue growth.

Vigorous competition in the markets of our operating segment could potentially put pressure on our margins. To be ready for such an eventuality, we want to increase our productivity and exploit the benefits of digitalization, for instance by automating processes, with the aim of realizing cost-cutting potential. We expect adjusted EBITDA to increase year-on-year in 2018 to around EUR 3.8 billion, and to continue to increase slightly in 2019.

In order to expand our technology leadership, we continue to invest in our integrated networks and plan to maintain our high level of investment over the next year. As such, cash capex will remain stable against the prior year.

SYSTEMS SOLUTIONS

In line with our Group strategy, we want to offer our business customers secure ICT solutions and to be strong in the Internet of Things. To this end, we have divided our organization into four operational units: the IT Division and the TC Division, which are responsible for traditional IT and telecommunications services, the Digital Division with a clear focus on the new growth areas, such as digital transformation and the Internet of Things, and Telekom Security, with which we work towards becoming the European market leader for cyber security.

We are among the top providers in the European IT market. Our very high levels of customer satisfaction are a key element in maintaining this position in the long term and in taking us a step closer to our goal of also playing a leading role in digitalization.

Our market is undergoing a radical transformation: from traditional IT business with big deals to flexible cloud computing and digitalization. Following a decline in order entry in 2017, in addition to traditional IT services, systems integration, and outsourcing, we are now placing additional emphasis on platform business and scalability. Partnerships are a core element of our growth strategy. By building out our networks, we can offer international, integrated connectivity and shape the digital transformation of key industries with new business models – as new cloud services and our comprehensive cloud portfolio underscore. Together with our partners we have created a cloud ecosystem, which brings together state-of-the-art technical products from global market leaders and specialist providers on our energy-efficient platforms. We have also expanded our portfolio of dynamic services: Customers can book infrastructure, SAP applications and much more as needed and pay only for what they use. The corresponding services are made available from our high-security twin-core data centers, like the one in Magdeburg/Biere – one of the few data centers in the world from which competing cloud providers offer their services. Our innovative products for the Internet of Things, such as smart parking, also contribute to achieving our sustainability targets. [SDG](#) These measures address the changes in the market and we expect them to turn around our IT business.

We want to grow our telecommunications business, for example, by increasing our international reach with the support of the Next Generation Enterprise Network Alliance. On our way to becoming the leading European telecommunications provider, we are concentrating on customers in Germany and in selected Western European countries. The TC Division is gradually building up sales and expanding our offering with innovative services such as managed LAN, Unified Communications, and IP VPN. We also want to win over customers internationally with consistent offerings, new products, and competitive prices – and all-IP migration and cloud services offer the best opportunities to achieve this.

As the previous technology and development partner for toll collection business in Germany, we already have a strong competitive position. There are further opportunities for growth from existing European toll collection projects in Belgium and Austria and the planned launch of a Europe-wide toll collection system (Toll4Europe).

Overall, we forecast growth in order entry for the Systems Solutions operating segment in 2018 and a decline in revenue on account of the sharp decrease in order entry in 2017. Adjusted EBITDA is expected to amount to around EUR 0.4 billion. For 2019, we expect further year-on-year growth in order entry, revenue growth, and a slight increase in adjusted EBITDA. We expect cash capex to increase strongly in 2018 due to non-recurring effects from investment in infrastructure, in particular for Toll4Europe. These non-recurring effects will have a reverse effect in 2019 and thus result in a decrease.

GROUP DEVELOPMENT

For 2018, we expect revenue to decrease slightly in our Group Development operating segment due to the accounting change at T-Mobile Netherlands. By contrast, revenue should increase in 2019. Adjusted EBITDA is set to remain stable in 2018 at around EUR 0.9 billion; for 2019 we expect it to increase.

We will continue to deal with the intense competition in the Netherlands through our strategy, which should take effect in 2018, following the stabilization of EBITDA in 2017. The main elements of this strategy are a repositioning of the core brand T-Mobile, expansion of the products and services on offer through T-Mobile Thuis (fixed network) and efficient management of costs. Furthermore, the acquisition of Tele2 Netherlands agreed in December 2017 marked an important component of our long-term strategy. This business combination, which is still subject to approval by the merger control authorities, will create a sustainable provider of convergent offers combining fixed-network and mobile communications on the Dutch market, which will be better positioned to challenge the FMC duopoly of KPN and Vodafone-Ziggo. Since the transaction was not yet complete at the date of preparing the consolidated financial statements and the combined management report, the value contributions from the agreed acquisition in the Netherlands are not included in our outlook.



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Network investments, which remain at a high level, will help to safeguard the strategy of T-Mobile Netherlands over the coming years. We expect investments at DFMG to grow in 2018 and 2019, mainly due to the further build out of cell sites in Germany.

GROUP HEADQUARTERS & GROUP SERVICES

We will resolutely continue our efficiency management measures at Group Headquarters & Group Services over the next two years by further optimizing our structures, in particular at Group Services, and continuing to focus on implementing our cost-cutting measures. This will lead to cost savings which will both help to improve our earnings and enable us to offer our services to the operating segments at lower cost.

Our Technology and Innovation Board department will again step up investments in technology development in Germany and in expanding centralized production platforms as part of the Pan-IP program in 2018 and 2019. This will impact on the cost structure in a number of ways: On the one hand, we expect IT operating costs to decrease; on the other, the establishment of the centralized production platforms will incur rising costs in the Technology and Innovation Board department. Overall, we expect the cost level to improve over the next two years as a result of additional cost-cutting programs.

RISK AND OPPORTUNITY MANAGEMENT

- We have an effective early-warning system for risks in place
- We identify our opportunities and specify them during the planning process

BOARD OF MANAGEMENT'S ASSESSMENT OF THE AGGREGATE RISK AND OPPORTUNITY POSITION

The assessment of the aggregate risk position is the outcome of the consolidated analysis of all material risk categories or individual risks. The aggregate risk position did not change fundamentally in 2017 compared with the previous year. Our major challenges particularly include the regulatory factors, intense competition, and strong price erosion in the telecommunications business. As

it stands today, Deutsche Telekom's Board of Management sees no risk to the Group's continued existence as a going concern. As of the reporting date and the time of preparing the statement of financial position, there were no risks that jeopardize Deutsche Telekom AG's and key Group companies' continued existence as a going concern.

We are convinced that we will also be able to master challenges and exploit opportunities in the future without having to take on any unacceptably high risks. We strive to achieve a good overall balance between opportunities and risks, with the aim of increasing added value for our Company and our shareholders by analyzing and seizing new market opportunities.

RISK AND OPPORTUNITY MANAGEMENT SYSTEM

As one of the world's leading providers in the telecommunications and information technology industry, we are subject to all kinds of uncertainties and change. In order to operate successfully in this ongoing volatile environment, we need to anticipate any developments at an early stage and systematically identify, assess and manage the resulting risks. It is equally important that we recognize and exploit opportunities. We therefore consider a functioning risk and opportunity management system to be a central element of value-oriented corporate governance.

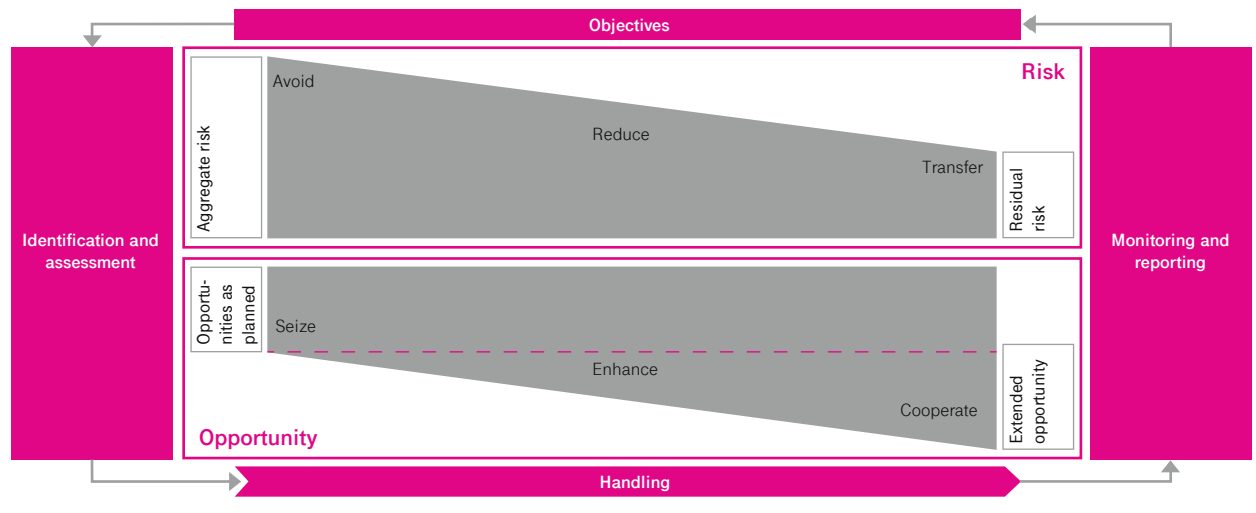
A risk and opportunity management system of this kind is not only necessary from a business point of view; it is also required by laws and regulations, in particular § 91 (2) of the German Stock Corporation Act (Aktiengesetz – AktG). The Audit Committee monitors the effectiveness of the internal control system and the risk management system as required by § 107 (3) sentence 2 AktG.

Our Group-wide risk and opportunity management system covers all strategic, operational, financial, and reputational risks as well as the corresponding opportunities for our fully consolidated entities. The aim is to identify these risks and opportunities early on, monitor them, and manage them in accordance with the desired risk profile.

We base our system on an established standard process (see the following graphic). Once risks and opportunities have been identified, we move on to analyze and assess them in more detail; the effects of risks and opportunities are not offset against each

other. We then decide on the specific course of action to be taken, for example, in order to reduce risks or seize opportunities. The respective risk owner implements, monitors, and evaluates the associated measures. All steps are repeatedly traversed and modified to reflect the latest developments and decisions.

The risk and opportunity management system



Our risk and opportunity management system is based on the globally applicable risk management standard of the International Standards Organization (ISO). ISO standard 31 000 "Risk management – Principles and guidelines" is regarded as a guideline for internationally recognized risk management systems.

Our Internal Audit unit reviews the functionality and effectiveness of our risk management system at regular intervals. The external auditor mandated by law to audit the Company's annual financial statements and consolidated financial statements in accordance with § 317 (4) of the German Commercial Code (Handelsgesetzbuch – HGB) examines whether the risk early-warning system is able to identify at an early stage risks and developments that could jeopardize the Company's future. Our system complies with the statutory requirements for risk early warning systems and conforms to the German Corporate Governance Code.

In addition, our Group Controlling unit specifies a series of Group guidelines and processes for the planning, budgeting, financial management, and reporting of investments and projects. These guidelines and processes guarantee both the necessary transparency during the investment process and the consistency of

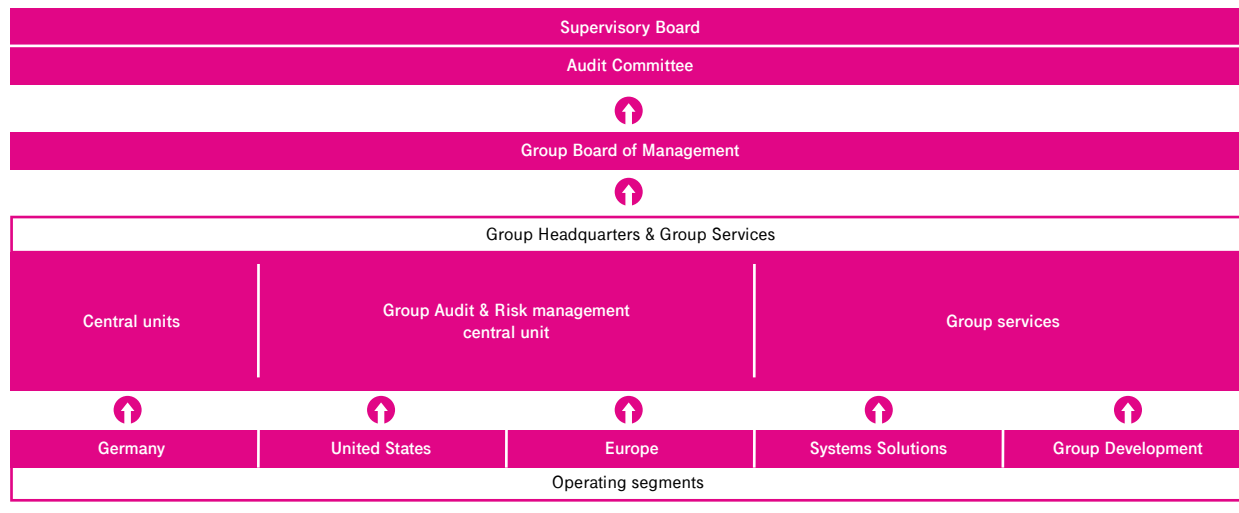
investment planning and decisions in our Group and operating segments. They also provide the Board of Management and the Board of Management Assets Committee with support in reaching their decisions. This process also includes the systematic identification of strategic risks and opportunities.

ORGANIZATION OF THE RISK AND OPPORTUNITY MANAGEMENT SYSTEM

The Group Risk Management unit defines the methods for the risk and opportunity management system that is applied Group-wide and for the associated reporting system. Our Germany, United States, Europe, Systems Solutions, and Group Development operating segments are connected to the central risk and opportunity management system via their own risk and opportunity management systems. The relevant risk owners in the operating segments and central Group units are responsible for managing and reducing risks. Management takes potential opportunities into account in the annual planning process and continuously develops them further during business operations.

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Risk and opportunity management



RISK IDENTIFICATION AND REPORTING

Each operating segment produces a quarterly risk report in accordance with the standards laid down by the central Risk Management unit and based on specific materiality thresholds. These reports assess risks, taking into account their extent in terms of impact on results of operations or financial position, as well as their probability of occurrence, and they identify action to be taken and suggest or initiate measures. The assessment additionally includes qualitative factors that could be important for our strategic positioning and reputation, and that also determine the aggregate risk. We base our assessment of risks on a period of two years. This is also the length of our forecast period.

The Group risk report, which presents the main risks, is prepared for the Board of Management on the basis of this information. The Board of Management informs the Supervisory Board. The Audit Committee of the Supervisory Board also examines this report at its meetings. If any unforeseen risks arise outside regular reporting of key risks, they are reported ad hoc.

In addition to the quarterly risk report, we use additional tools for monitoring and analyzing risks, in which we collect a large number of early-warning and economic indicators, e.g., on macroeconomic, political, and legal developments in our markets.

IDENTIFICATION AND ASSESSMENT OF OPPORTUNITIES IN THE ANNUAL PLANNING PROCESS

The systematic management of risks is one side of the coin; securing the Company’s long-term success by means of integrated opportunities management is the other. That is why identifying opportunities and subjecting them to a strategic and financial assessment is an essential part of our annual planning process. It allows us to factor those opportunities into our forecasts for financial and non-financial performance indicators.

The short-term monitoring of results and the medium-term planning process help our operating segments and Group Headquarters identify and seize the opportunities in our business throughout the year. While short-term monitoring of results mainly targets opportunities for the current financial year, the medium-term planning process focuses on opportunities that are strategically important for our Group. In this context we distinguish between two types of opportunity:

- External opportunities, i.e., those with causes over which we have no influence, for example, the revocation of additional taxes in Europe.
- Internal opportunities, i.e., those that arise within the Company, for example by focusing our organizational structure on innovation and growth areas and products, or through business partnerships and collaborations from which we expect to reap synergies.

We are constantly enhancing the efficiency of our planning process so as to gain greater scope for action. This puts the organization in a position to identify and seize new opportunities and generate new business. The preliminary plans of our operating segments form the basis for a concentrated planning phase during which members of the Board of Management, business leaders, senior executives, and experts from all business areas intensively discuss the strategic and financial focus of our Group and our operating segments, and from all of which they ultimately produce an overall picture. The identification of opportunities from innovation and their strategic and financial assessment play a major role throughout this process. This "brainstorming" may result in opportunities being rejected, passed back to the respective working groups for revision, or adopted and transferred to the organization.

RISK ASSESSMENT AND RISK CONTAINMENT

ASSESSMENT METHOD

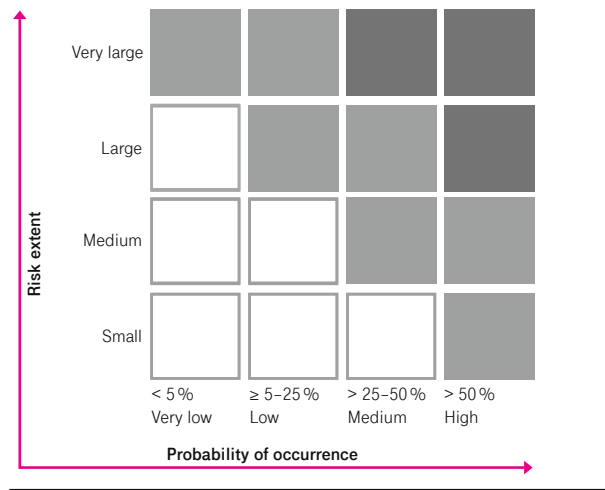
Risks are assessed on the basis of “probability of occurrence” and “risk extent.” The following assessment yardsticks apply:

Probability of occurrence	Description
< 5%	very low
≥ 5 to 25%	low
> 25 to 50%	medium
> 50%	high

Risk extent	Description
Small	Limited negative effects on business activities, results of operations, financial position, and reputation; individual EBITDA risk < € 100 million
Medium	Certain negative effects on business activities, results of operations, financial position, and reputation; individual EBITDA risk ≥ € 100 million
Large	Significant effects on business activities, results of operations, financial position, and reputation; individual EBITDA risk ≥ € 250 million, and/or affects more than one Group entity
Very large	Damaging negative effects on business activities, results of operations, financial position, and reputation; individual EBITDA risk ≥ € 500 million, and/or affects more than one Group entity

By assessing risks according to the aspects of probability of occurrence and risk extent, we classify them as low, medium and high risks, as shown in the graphic below.

Risk significance



■ High risk ■ Medium risk □ Low risk



We report all risks classified as “high” and “medium.” Exceptions are possible, for example, risks from prior years that we can continue to list for the sake of reporting continuity although they are classified as “low” in the current reporting period.

It should be noted that risks with an extent currently assessed as being small may in the future have a stronger impact than risks currently assessed as having a larger extent. This may be due to uncertainties that cannot be assessed at present and over which we have no influence. Uncertainties of this kind also give rise to risks that are currently unknown to us or that we presently consider to be insignificant and that may affect our business activities in the future.

RISK CONTAINMENT MEASURES

Risk management and insurance. To the extent possible and economically viable, we take out adequate Group-wide insurance cover for insurable risks. DeTeAssekuranz – a subsidiary of Deutsche Telekom AG – acts as an insurance broker for Group Insurance Management (part of Group Headquarters & Group Services). It develops and implements solutions for the Group’s operational risks using insurance and insurance-related tools and places them on the national and international insurance markets.

Taking out insurance cover is an essential option for our external **risk transfer**. The coverage of risks in our Group insurance programs requires the transfer of risk for the purpose of protecting the Group’s financial position. That means that the possible extent of the risk must have reached a volume “relevant for the Group” or the risks have to be bundled and managed at Group level to protect the Group’s interests (opportune reasons/cost optimization/risk reduction).

Business Continuity Management (BCM). BCM is a process within operational security and risk management that helps protect business processes from the consequences of damaging incidents and disruptions. It ensures the continuation of business processes through ongoing analysis, assessment, and management of relevant risks for people, technology, infrastructure, supply and service relationships, and information. The aim is to identify potential threats at an early stage and to keep the impact and duration of a disruption of critical business processes to an acceptable minimum by ensuring appropriate resilience in the organization plus the ability to effectively cope with threats. [SDG](#)

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To this end, BCM identifies critical business processes and business processes requiring protection, including any supporting processes, process steps, and assets (people, technology, infrastructure, information, and supply and service relationships). Appropriate precautionary measures are also defined. In particular, Security Management works in coordination with the relevant units and process owners to analyze the possible consequences of external and internal threats with relevance for security, such as natural disasters, vandalism, or sabotage. Once the extent of potential losses and probability of occurrence have been assessed, preventive measures can be put in place and contingency plans developed.

The risk owners initiate and execute further measures to contain the risks. A wide range of measures are available, depending on the risk type. A few examples of these measures are:

- We tackle market risks with comprehensive sales controlling and intensive customer management.
- We manage interest and currency risks by means of systematic risk management and hedge them using derivative and non-derivative financial instruments.
- We also take a whole array of measures to deal with operational risks: For example, we constantly implement operational and infrastructural measures in order to improve our networks; continually enhance our quality management system, the associated controls, and quality assurance; and offer our employees systematic training and development programs.
- We deal with risks from the political and regulatory environment through an intensive, constructive dialog with policymakers and the authorities.
- We minimize risks in connection with legal proceedings by ensuring suitable support for those proceedings and by designing contracts appropriately in the first place.
- The Group Tax unit identifies potential tax-related risks at an early stage and systematically records, assesses and monitors them. It takes any measures necessary to minimize tax-related risks and coordinates them with the Group companies affected. The unit also draws up and communicates policies for avoiding tax risks.

RISKS AND OPPORTUNITIES

In the following section, we present all risks and opportunities of significance to the Group that, as things currently stand, could affect the results of operations, financial position, and/or reputation of Deutsche Telekom and, via the subsidiaries' results, the results of operations, financial position and/or reputation of Deutsche Telekom AG. We describe the majority of the risks before the measures for risk containment are taken. If any remaining risks have been identified despite such measures for risk containment, they are labeled as such. If risks and opportunities can be clearly allocated to an operating segment, this is presented accordingly in the following.

In order to make it easier to understand and see their effects, we have allocated the individually assessed risks to the following categories:

Corporate risks

	Probability of occurrence	Risk extent	Risk significance	Change against prior year
INDUSTRY, COMPETITION, AND STRATEGY				
Economic risks, Germany	low	small	low	↔
Economic risks, United States	low	medium	low	↔
Economic risks, Europe	low	medium	low	↔
Risks relating to the market and environment, Germany	medium	small	low	↔
Risks relating to the market and environment, United States	low	large	medium	↔
Risks relating to the market and environment, Europe	medium	medium	medium	↔
Risks relating to innovations (substitution)	medium	medium	medium	↔
Risks relating to strategic transformation and integration	medium	medium	medium	↔
REGULATION	see pages 118 and 119			
OPERATIONAL RISKS				
Personnel, Germany and Systems Solutions	medium	small	low	↔
Risks relating to IT/NT network operations, Germany	low	large	medium	↔
Risks relating to IT/NT network operations, United States	very low	very large	medium	↔
Risks relating to IT/NT network operations, Europe	very low	large	low	↔
Risks relating to existing IT architecture, United States	medium	medium	medium	↔
Future viability of the IT architecture, United States	medium	large	medium	↔
Procurement	low	small	low	↔
Data privacy and data security	high	medium	medium	↔
BRAND, COMMUNICATION, AND REPUTATION				
Brand and reputation (reporting in the media)	low	small	low	↔
Sustainability risks	very low	small	low	↔
Health and environment	low	medium	low	↔
LITIGATION AND ANTI-TRUST PROCEEDINGS	see page 123 et seq.			↔
FINANCIAL RISKS				
Liquidity, credit, currency, interest rate risks	low	small	low	↔
Tax risks	see page 126			
Other financial risks	see pages 126 and 127			

↔ improved ↔ unchanged ↘ deteriorated

RISKS AND OPPORTUNITIES FROM INDUSTRY, COMPETITION, AND STRATEGY

Risks and opportunities relating to the macroeconomic environment. It is clear from the positive economic and political developments of the last few months that economic uncertainties have decreased both worldwide and in our footprint countries. The leading institutes and organizations have revised their economic forecasts upward and are expecting most economies to post very positive rates of growth. At the same time, the continuing economic uncertainty since the Brexit vote in June 2016 shows that the UK economy, and especially the pound, have been weakened. This political situation harbors uncertainties as regards development of the UK market – a market in which we are involved through our financial stake in BT.

The main risks to future economic growth in the countries are posed by political uncertainties in Europe and the United States, more intense protectionism in global trade, investments, and regarding factors influencing exchange rate fluctuations, the danger of an unexpected decline in growth in China, geopolitical crises, and, in the medium term, an unexpectedly sharp increase in interest

rates worldwide that could weigh on the otherwise positive economic trend. These risks are counterbalanced by opportunities in particular from stronger-than-expected investment activity coupled with continued moderate inflation and wage growth, as well as positive growth effects from the U.S. tax reform, which can have an impact both on the U.S. economy and on the export-oriented economies. Risks to economic development could manifest themselves in different ways in some of our markets. Consumers and business customers could rein in their consumption if the economy slows substantially again and uncertainty continues to rise. Government austerity measures could also have negative effects on demand for telecommunications services, for example due to reduced public-sector demand or lower disposable incomes in the private sector.

Risks relating to the market and environment. The main market risks we face include the steadily falling price level for voice and data services in the fixed network and in mobile communications. In addition to price reductions imposed by regulatory authorities, this is primarily attributable to intensive competition in the telecom-

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munications industry, cannibalization effects due to new products and services, and technological progress.

Competitive pressure is expected to continue, especially in the fixed network in Germany and Europe. In the broadband market, we are observing disproportionate growth in the market shares of regional network operators, particularly in Germany. They build out their own infrastructure and thus increase their market coverage. In certain regions, our competitors are extending their own fiber-optic network to the home so that they are independent of our network in the local loop, too. There is also strong competition to gain new customers by cutting prices and offering introductory discounts.

We also expect prices for mobile voice telephony and mobile data services to decrease further, which could adversely affect our mobile services revenue. Among the main reasons for the decrease in prices are providers that are pursuing aggressive pricing policies (MVNOs) and expanding in Germany and other European markets. Pure eSIM smartphone offerings could put even more pressure on prices for mobile voice telephony and mobile data services. In addition, the risk remains that smaller competitors will take unforeseen, aggressive pricing measures.

Another competitive risk lies in the fact that, both in the fixed network and in mobile communications, we are increasingly faced with competitors who are not part of the telecommunications sector as such, but are increasingly moving into the traditional telecommunications markets. This mainly relates to major players in the Internet and consumer electronics industries. We continue to be exposed to the risk of a further loss of market share and falling margins and of increasingly losing direct customer contact.

T-Mobile US operates in a very competitive wireless industry where customer attrition may increase as the wireless industry shifts away from service contracts and market saturation leads to increased competition for customers. The growing appetite for data services will increase demand on its network capacity. Furthermore, industries are converging as video, mobile, and broadband companies compete to deliver content. Joint ventures, mergers, acquisitions and strategic alliances are resulting in larger competitors who could enter into exclusive handset, device, or content arrangements or refuse to provide T-Mobile US with roaming services on reasonable terms. This may adversely affect T-Mobile US' competitive position and ability to grow. The scarcity and cost of additional wireless spectrum, and regulations relating to spectrum use, may also affect its business strategy, including plans to improve its network.

Our Systems Solutions operating segment also faces challenges. Continued strong competition and persistent price erosion are adversely affecting traditional ICT business. In addition, the technological shift toward cloud solutions and digitalization in the IT sector is prompting new, strongly capitalized, competitors to enter the market. The introduction of IP technology in telecommunications business is enabling price reductions, which poses a risk of revenue losses and declining margins at T-Systems.

The Group Development operating segment reported on risks and opportunities for the first time in the reporting year. T-Mobile Netherlands, Deutsche Funkturm (DFMG), and Deutsche Telekom Capital Partners (DTCP) and our equity investments in BT and Ströer SE & Co. KGaA are assigned to this segment. Our approach of integrated, value-driven management aims to give our subsidiaries and equity investments the level of entrepreneurial freedom they need and thus to promote their strategic further development. The Group functions of Mergers & Acquisitions and Strategic Portfolio Management have also been assigned to Group Development. The economic future of the units assigned to the Group Development segment harbors both operational opportunities and risks.

New consumer credit regulations in the Netherlands. The Supreme Court of the Netherlands (Hoge Raad der Nederlanden) found in the final instance that mobile contracts that are bundled with a free or discounted device such that the price of the device is not apparent for the customer, are to be treated as consumer credit or installment purchases. Accordingly, such contracts are subject to Dutch consumer credit law. Contracts that do not comply with these specific consumer credit regulations can thus be rescinded. As a result, two individual cases against T-Mobile Netherlands and its competitor KPN were decided in the plaintiffs' favor; adequate provisions for this risk have been recognized at T-Mobile Netherlands. To ensure it complies with the legal situation in future, T-Mobile Netherlands applied for a license for 2017 to issue consumer credit. This license it received is valid with effect from January 1, 2017.

Opportunities relating to the market and environment. The telecommunications and IT market is extremely dynamic and highly competitive. The economic conditions affect our actions and impact on our Company indicators. We generally expect the situation to develop as described in the section "Market expectations".

In the following section, we present the risks and opportunities that we believe will allow us to achieve market growth and that could be significant for us in terms of our future financial position and results.

Risks relating to innovations (substitution). Innovation cycles are getting shorter and shorter. This confronts the telecommunications sector with the challenge of bringing out new products and services at shorter and shorter intervals. New technologies are superseding existing technologies, products, or services in part, in some cases even completely. This could lead to lower prices and revenues in both voice and data traffic. These substitution risks could impact our revenue and earnings, in particular in the Europe and United States operating segments. We deal with the impact of substitution risks by offering package rates, for example: We offer new and existing customers integrated solutions from our product portfolio.


Opportunities relating to innovations. In addition to the risks described, ever shorter innovation cycles enable us to drive the digital transformation of our society and to provide consumers and business customers with our own innovations – thus answering the questions of tomorrow today. That is why our innovation



See the section
"Forecast,"
page 101 et seq.



For more information on our innovation activities, please refer to the section "Innovation and product development," page 89 et seq.

and product development activities are decisive when it comes to identifying opportunities and making the most of them in an increasingly competitive environment. In order to guarantee this, and do justice to the growing convergence of networks and IT, we combined the technology, innovation and IT functions in our new Board of Management department Technology and Innovation. 

Risks relating to strategic transformation and integration. We are in a continuous process of strategic adjustments and cost cutting initiatives. If we are unable to implement these projects as planned, we will be exposed to certain risks. In other words, the benefit of the measures could be less than originally estimated, take effect later than expected, or not at all. Each of these factors, individually or in combination, could have a negative impact on our business situation, financial position and results of operations.

RISKS AND OPPORTUNITIES RELATING TO REGULATION

In the following section, we describe the main regulatory risks and opportunities that, as things currently stand, could affect our results of operations and financial position, and our reputation.

Regulatory risks arise from telecommunications-specific statutory regulations at the European and national level, and from the consequent powers of national authorities to regulate or intervene in the market and limit our freedom as regards product design and pricing. Deregulation can give rise to regulatory opportunities. Regulatory intervention, which we can only anticipate to a limited extent, may exacerbate existing price and competitive pressure. There are concerns that regulation in Germany and other European countries may also impact revenue and earnings trends in the medium-to-long term.

Areas in which national regulators may intervene

European and national laws and regulations grant national regulators extensive powers of intervention. A case in point at the European level is the **EU Regulation concerning the single market for electronic communications**, which was enacted on October 27, 2015. It comprises regulations on **international roaming, net neutrality, and disclosure obligations** and restricts our product-design options, mainly as regards retail products. The Body of European Regulators for Electronic Communications (BEREC) has published guidelines for implementing this regulation. Risks arise from how the national regulators interpret both the regulation and these guidelines. In Germany, for example, the Federal Network Agency has wide-ranging powers under law to require products to be adjusted in order to enforce the regulation and to impose fines in cases of non-compliance.

Our Group companies in Germany and abroad continue to be subject to comprehensive **regulation of wholesale products**, obligating us to make our network and services available to our competitors. The national regulators regularly check and determine the corresponding terms, conditions and prices of these

wholesale offerings. The key wholesale products subject to regulation are **unbundled local loop line, bitstream products, leased lines, termination rates** and the associated services. In addition, European and national consumer protection regulations apply. In Germany, for instance, the **Transparency Regulation** came into force on June 1, 2017, the main objective of which is to enhance transparency and cost control with telecommunications services. In this context, the Federal Network Agency introduced a system that enables consumers to measure the bandwidths available on their fixed-network and mobile lines.

In addition to the requirements of telecommunications law, our media products are also subject to special European and national regulations under media law. The latter include, in the broader sense, copyright law, regulations concerning the responsibility for published content, and requirements in relation to the content and user interfaces of media distribution platforms. Barring any changes to its shareholder structure (the Federal Republic and KfW being its major shareholders), to the legal situation or to the prevailing opinions of media regulators, it is unlikely that Telekom Deutschland will be granted a license to broadcast radio and television programs.

Changes in regulatory policy and legislation


EU legal framework for telecommunications. On September 14, 2016, the European Commission published legislative proposals for a revision of the EU legal framework for telecommunications. These proposals are currently the subject of discussions between the Parliament and the Council. The legal framework comprises the central EU rules for the telecommunications sector, in particular price and access regulation, the spectrum policy, sector-specific consumer protection rules, the provisions on universal service, and the institutional framework. We expect the new rules to be enacted in mid-2018. The corresponding provisions will then have to be transposed into national law, a process that will take at least a year. At the moment, it is difficult to predict the outcome of this extensive legislative process in many areas. The drafts currently being discussed provide for less regulation of "networks with very high capacity" in cases where competitors invest jointly, as is the case with open co-investment models. Fiber-to-the-building/home (FTTB/H) networks, in particular, could benefit from this. The terms and conditions of this lighter form of regulation are not yet clear, as is the question of whether other commercial access agreements would benefit from it as well. On the other hand, the new legal framework could result in additional obligations in accessing all networks, regardless of whether a company has significant market power (symmetrical regulation). In the area of spectrum policy, the new EU legal framework may create more harmonization, for example, a minimum license term, more legal certainty in the awarding of spectrum. However, these improvements have so far been rejected by the EU Member States. As for consumer protection, there are opportunities for a complete harmonization of obligations at the European level – thus negating the need for

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additional national regulations – but also a risk of more stringent obligations in individual areas. In particular, regulations for international calls within the EU are being discussed: This could result in a ban on surcharges for such calls above and beyond the price of national calls.

The revision of the EU legal framework for telecommunications forms part of a bouquet of new EU legislation on the single market for electronic communications that provides for amendments to the regulations governing media services – mainly due to the growing importance of Internet offerings – which are competing with the radio and TV services previously focused on (for example, under copyright law and laws for the protection of minors from harmful media). At the national level, too, specific amendments (e.g., to the German Interstate Treaty on Broadcasting) are being discussed in response to the phenomena of digitalization and convergence.

Awarding of spectrum

Risks could arise from the fact that inappropriate auction rules and frequency usage requirements, excessive reserve prices, or disproportionately high annual spectrum fees could jeopardize our planned acquisition of spectrum. By contrast, we see an opportunity in particular in the fact that such spectrum award procedures enable mobile network operators to obtain the optimum amount of spectrum for their future business. We would thus be equipped for further growth and innovation. The upcoming award procedures mainly relate to the auctioning of additional spectrum in the 0.7 GHz, 1.5 GHz and 3.5 GHz/3.7 GHz ranges. In addition, spectrum licenses, especially in the 2.1 GHz range, will expire between 2019 and 2021 in some countries and need to be renewed. Allocations of spectrum are currently in preparation in Albania, Austria, the Czech Republic, Germany, Hungary, Macedonia, Poland, and Romania, with most of them likely to take place between mid-2018 and mid-2019. 


OPERATIONAL RISKS AND OPPORTUNITIES

Personnel. In 2017, we once again used socially responsible measures to restructure the workforce in the Group, mainly by means of severance payments, partial and early retirement, and employment opportunities for civil servants and employees offered by Vivento Customer Services/Telekom Placement Services, especially in the public sector. We will continue this restructuring in the coming year. If it is not possible to implement the corresponding measures as planned or at all (for example, due to limited interest in severance payments) this may have negative effects on our financial targets. To avoid the risk of high potentials leaving the Group as a result of the staff reduction instruments, we make sure that the arrangement is voluntary on both sides in each individual case.

The right of civil servants to return to Deutsche Telekom also carries risks: When Group entities that employ civil servants are disposed of, it is generally possible to continue to employ them

at the Group entity to be sold, provided the civil servant agrees or submits an application to be employed at the respective unit in future. However, there is a risk that they may return to us from a sold entity, for instance after the end of their temporary leave from civil servant status, without the Company being able to offer them jobs. Currently around 1,658 civil servants are entitled to return from outside the Group to Deutsche Telekom in this way (as of December 31, 2017).

Risks relating to IT/NT network operations. We have an increasingly complex information/network technology (IT/NT) infrastructure, which we constantly expand and upgrade to ensure the best customer experience and consolidate our technology leadership. Outages in the current and also future technical infrastructure cannot be completely ruled out and could in individual cases result in revenue losses or increased costs. After all, our IT/NT resources and structures are the key organizational and technical platform for our operations. The ongoing convergence of IT and NT harbors risks. In order to counter these, we have combined our network, innovation, and IT activities under the new Board department Technology and Innovation.

Risks could arise in this area relating to all IT/NT systems and products that require Internet access. For instance, faults between newly developed and existing IT/NT systems could cause interruptions to business processes, products and services, such as smartphones and Entertain. In order to avoid the risk of failures, e.g., due to natural disasters or fires, we use technical early-warning systems and duplicate IT/NT systems. The Computer Emergency Response Team (CERT) at T-Systems is in charge of protecting our corporate customers' servers. In cloud computing, all data and applications are stored at a data center. Our data centers have security certification and meet strict data protection provisions and the EU regulations. All data relating to companies and private persons is protected from external access. Constant maintenance and automatic updates keep the security precautions up to date at all times. On the basis of a standardized Group-wide Business Continuity Management process, we also take organizational and technical measures to prevent damage from occurring or, if we cannot, to mitigate the subsequent effects. We also have insurance cover for insurable risks. 

Opportunities relating to IT/NT network operations. The IP transformation (all IP) offers many opportunities. A logical network is being created that speaks a single language and, in technical terms, functions largely independently of the services transmitted. This will enable efficiency gains, e.g., by reducing the complexity of maintenance and operation, switching off service-specific legacy platforms, and saving energy. In addition, all IP will generate growth potential in the short-to-medium term by improving existing services (e.g., better voice quality, more customer self-service, greater configuration flexibility) and, in the medium-to-long term,



For information on spectrum auctions that were completed in 2017 or are still ongoing, please refer to the section "The economic environment," page 42 et seq.



13 CLIMATE ACTION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



by providing an indispensable basis for convergence products and the Internet of Things (IoT) and by shortening the time to market for new products. [SDG](#)

But the all-IP network can do more. It is the network infrastructure cloud underpinning not only the virtualization of functions and services, but also joint production across borders (Pan-Net). This will also create opportunities for enhancing efficiency and for growth. The idea of developing services only once and then marketing them in different countries simultaneously promises more than just synergies – it is a chance to get those services to market faster and more cost-effectively.

5G is the next-generation telecommunication network. Not only are we involved in a large number of different organizations and forums, we are also working intensively in collaboration with research institutions and industry to develop this future standard, which will address a whole array of challenges facing telecommunication networks. These include purely technical requirements, such as achieving a substantial increase in capacity, bandwidth, availability, and lower latency. [SDG](#)

In addition, there are fundamental issues, such as machine-to-machine communication on a large scale in the Internet of Things (IoT) and the growing need for reliability, security, and guaranteed resource allocation in industrial applications. 5G thus offers not only the immediate opportunity of cost-effectively managing rapidly increasing demands in existing business models going forward, but also opportunities for further business models by marketing network capabilities (e.g., network access, security, identity, storage location, temporary storage, real-time processing) to relevant partners. We are already working on implementing the first use cases for mobile edge computing, in which data is processed in a decentralized manner (at the edges of the network). Together with other technologies like the Narrowband Internet of Things (NB-IoT) and artificial intelligence (AI), 5G and edge computing provide the underpinnings for the further digital transformation of society. [SDG](#)

The utilization of large data volumes (big data) can improve and speed up decision-making processes by enhancing transparency. It does so by shifting the basis for decisions from hypotheses to facts and, for example, enabling correlations to be recognized.

Our Systems Solutions operating segment covers innovative business areas in the digital transformation of business processes, such as the Internet of Things and cyber security. These business areas could develop faster than expected. As a pioneer of the digital transformation, we have an opportunity not only to participate in, but also actively shape, the market trend through a variety of

projects in the fields of healthcare and mobility solutions. In the ramp-up phase of these new business models based on M2M communication and big data, our partner-oriented approach is a highly promising way of contributing our core competencies – in data communication, big data, cloud computing, and cyber security – to various projects. What is more, we already have initial references in areas of the Internet of Things market, e.g., predictive maintenance. [SDG](#)

As the previous technology and development partner for toll collection business in Germany, we already have a strong competitive position. What is more, we have earned valuable references – in other European toll collection projects in Belgium and Austria and through the planned launch of a Europe-wide toll collection system (Toll4Europe) – that will help to give us an edge over our competitors.

Risks relating to the existing IT architecture in the United States.

T-Mobile US relies upon its systems and networks, and the systems and networks of other providers and suppliers, to provide and support services and, in some cases, to protect their customers' information. Failure of T-Mobile US' or others' systems, networks and infrastructure may prevent them from providing reliable service, or may allow for the unauthorized use of or interference with their networks and other systems. T-Mobile US' reputation and financial condition could be materially adversely affected by such system failures, business disruptions, due to natural disasters or other technical reasons and unauthorized use of or interference with its network and other systems. Remediation costs could include liability for information loss as well as recovering or repairing infrastructure and systems.

Future viability of the IT architecture in the United States.

In order to grow and remain competitive with new and evolving technologies in its industry, T-Mobile US will need to adapt to future changes in technology, continually invest in its network, enhance its existing offerings, and introduce new offerings to address current and potential customers' changing demands. If T-Mobile US is unable to take advantage of technological developments on a timely basis, then it may experience a decline in demand for its services or face challenges in implementing or evolving its business strategy. T-Mobile US is in the process of implementing a new billing system, which will support a portion of its subscribers, while maintaining its legacy billing system. The implementation may cause major system or business disruptions or the company may fail to implement the new billing system in a timely or effective manner.

Opportunities relating to the IT architecture in the United States.

T-Mobile US is making significant investments in its IT infrastructure.

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If this results in a significant improvement in processes, then the savings made could be higher than previously assumed.

Procurement. As a service provider and an operator and provider of telecommunications and IT products, we cooperate with a variety of suppliers of technical components, such as software, hardware, transmission systems, switching systems, outside plant, and terminal equipment.

Supply risks cannot be entirely ruled out. Delivery bottlenecks, price increases, changes in the prevailing economic conditions, or suppliers' product strategies may have a negative impact on our business processes and our results. Risks may result from the dependence on individual suppliers or from individual vendors defaulting. We employ organizational, contractual, and procurement strategy measures to counteract such risks.

Data privacy and data security. The General Data Protection Regulation – which introduces more stringent data privacy requirements across the EU – will come into force on May 25, 2018. For our Company, the new regulation will not entail any fundamental changes, given that new procedures such as the Privacy Impact Assessment – for evaluating and documenting the risks posed by data processing – are already well established in our organization. Still, we used the introduction of the General Data Protection Regulation as an opportunity to thoroughly re-assess data privacy in a three-phase project. In the first phase (2016), we specified the legal framework, setting it down in binding interpretations for our Group. The second phase was completed in 2017: We launched implementation projects in all our European Group companies and evaluated our IT systems and processes in relation to the General Data Protection Regulation. In the third phase (2018), we will carry out readiness checks. In this way, we will ensure that data privacy is implemented in a consistent manner across the Group using common requirements and processes. That will enhance efficiency, promote data privacy in Group-wide projects and improve international collaboration.

The General Data Protection Regulation is a milestone on the way to a true single European market in which the same rules apply to all players. The newly adopted rules assure Europe a high level of data protection and, at the same time, will pave the way for new digital business models. The fundamental demand for a level playing field for all market players in the EU has thus been met. In addition, the new data protection legislation closes a major regulatory gap when it comes to service providers outside of the EU. The General Data Protection Regulation will also apply to non-European market players (e.g., Google, Facebook, and Apple) targeting customers in the EU, and will thus enhance the overall competitive situation. In order to preserve the level playing field achieved by the General Data Protection Regulation, it is

particularly important that the EU member states do not make excessive use of the freedom granted them to implement additional dedicated regulations at the national level; instead, they should do so only where absolutely necessary. In the revised version of the Federal Data Protection Act, which will come into force on May 25, 2018, German legislators have responded to some of the criticisms leveled at their initial drafts and reduced the number of special regulations for the non-public sector. [SDG](#)

Regrettably, lawmakers also missed some opportunities: For instance, until such time as the E-Privacy Directive has been revised, data stored by telecommunications providers will remain subject to stricter, dedicated regulations. Telecommunications providers in Europe thus still have a competitive disadvantage in some areas – one that the new regulations that have thus far been made public will only partially alleviate. As telecommunications providers' data processing options are substantially restricted compared with what is possible under the General Data Protection Regulation, it is unlikely that big-data applications in the field of telecommunications will be able to realize their full potential. According to the current draft of the planned E-Privacy Regulation, it will be possible to process metadata only with the customer's approval. The General Data Protection Regulation does not contain compatible options for processing such data using pseudonyms. That will rule out various service models that may be useful to consumers, but cannot be implemented with anonymized data, such as services for finding parking spaces and avoiding accidents, tailored TV programming, or telemonitoring services in the healthcare field.

With regard to IT security, we are faced with numerous new challenges. In recent years, the focus has shifted from prevention to analysis. This is where our early warning system comes in: It detects new sources and types of cyber-attack, analyzes the behavior of the attackers while maintaining strict data privacy, and identifies new trends in the field of security. Along with the honeypot systems, which simulate weaknesses in IT systems, our early warning system includes alerts and analytical tools for spam mails, viruses, and Trojans. We exchange the information we obtain from all these systems with public and private bodies to detect new attack patterns and develop new protection systems. [SDG](#)

Cyber crime and industrial espionage are on the rise. We are addressing these risks with comprehensive security concepts. In order to create greater transparency and thus be in a stronger position to tackle these threats, we are relying more and more on partnerships, e.g., with public and private organizations. By means of the Security by Design principle we have made security an integral part of our development process for new products and information systems. In addition, we carry out intensive and mandatory digital security tests. [SDG](#)





For an overview of the Magenta Security portfolio along with the latest information on products and upcoming events – such as Deutsche Telekom's annual Magenta Security Convention – please refer to <https://security.telekom.com>

We provide regular updates on the latest developments in data protection and data security on our website at www.telekom.com/en/corporate-responsibility/data-protection-data-security



For information on how we will continue to shape this strategic area of operation, please refer to the section "Group strategy," page 34 et seq.

13 CLIMATE ACTION




17 PARTNERSHIPS FOR THE GOALS



We are continually striving to accelerate our growth through IT security solutions. To this end, we have combined all our security units within T-Systems. We want to leverage this end-to-end security portfolio to secure market shares and score points with security concepts on the back of megatrends like the Internet of Things and Industry 4.0. We are also continuing to expand our partner ecosystem in the area of cyber security. 

RISKS AND OPPORTUNITIES ARISING FROM BRAND, COMMUNICATION, AND REPUTATION

Negative media reports. An unforeseeable negative media report on our products and services or our corporate activities and responsibilities can have a huge impact on the reputation of our Company and our brand image. Social networks have made it possible that such information and opinions can spread much faster and more widely. Ultimately, negative reports can impact on our revenue and our brand value. In order to avoid this, we engage in a constant, intensive and constructive dialog, in particular with our customers, the media, and the financial world. For us, the top priority is to take as balanced a view as possible of the interests of all stakeholders and thereby uphold our reputation as a reliable partner.

Sustainability challenges and opportunities. For us, comprehensive risk and opportunities management also means considering the opportunities and risks arising from ecological or social aspects or from the management of our Company. To this end, we actively and systematically involve all relevant stakeholders in the process of identifying current and potential risks and opportunities. We also participate in a number of working groups and committees. In parallel with our ongoing monitoring of ecological, social and governance issues, we systematically determine our stakeholders' positions on these issues. The key tools we use here are: our year-round open online materiality survey for all stakeholders; our bi-monthly NGO report, which systematically analyzes press publications of the NGOs relevant for us; our involvement in working groups and committees, countless national and international business associations, and social organizations, e.g., GeSI, BID, Bitkom, Econsense, and BAGSO; stakeholder dialog formats organized by us, such as this year's ICT and Climate Stakeholder Day under the motto "The Impact of ICT on climate change – curse or blessing"; and our various publications, such as the press review and newsletters. 

We have identified the following as our main sustainability management issues:

- **Reputation.** How we deal with sustainability issues also entails both opportunities and risks for our reputation. A high level of service quality is one of the most important factors for improving customer perception. Customer satisfaction has been embedded in our Group management as a non-financial performance indicator to underline the importance of this issue. Transparency and reporting help to promote the trust of other external stakeholders in our Group. Our annual and CR reports also serve this purpose. However, issues such as business practices, data privacy, and work standards in the supply chain and conduct in relation to human rights also entail reputational risks: If our


brands, products, or services are connected with such issues in negative media reports, this can cause substantial damage to our reputation. As part of our sustainability management activities, we continuously review such potential risks and take measures to minimize them. We also ascertain how our products and services make a positive contribution to sustainability in order to enhance our reputation.

- **Climate protection.** We pursue an integrated climate strategy, which means focusing not only on the risks that climate change poses for us and our stakeholders, but also on the opportunities it presents. By 2030, ICT products and services will have the potential to save up to ten times as much in CO₂ emissions in other industries as the ICT sector itself generates (according to the GeSI SMARTer2030 study). This creates an opportunity to save 20 percent of global CO₂ emissions in 2030 and to keep worldwide emissions at 2015 levels with simultaneous economic growth. The additional revenue potential here amounts to USD 6.5 trillion, USD 2.0 trillion of which is for the ICT industry alone. Further, ICT solutions can save a total of USD 4.9 trillion in costs. To give a specific example: The broadband roll-out in Germany has the potential to save an aggregate amount of 19 million metric tons of CO₂ between 2012 and 2020. What is more, the economic momentum triggered by rolling out broadband can create an aggregate number of 162,000 new jobs and increase GDP by EUR 47 billion between 2015 and 2020. We are supporting this trend by evaluating our product portfolio to identify sustainability benefits. In addition, we want to continuously improve the ratio of the emissions that our products and services save to those generated by our own value chain. In 2016, for example, we saved 33 percent more emissions in Germany than we produced. Further information can be found in our 2017 CR report, published in April 2018. 

Climate change risks are already visible in the form of increasingly extreme weather conditions. This is having a direct effect on our stakeholders, e.g., our customers, suppliers, and employees. We can take preventive action in this area by reducing our own CO₂ emissions, which is one of the reasons we set ourselves the goal of achieving a 20 percent reduction in our Group-wide emissions – leaving aside our United States operating segment – by 2020 (baseline: 2008). Climate protection also carries financial risks, whether from the introduction of a levy on CO₂ emissions or an increase in energy costs. The measures we are taking to counter these risks include measuring our own energy efficiency and finding ways to improve it. Further, in 2016 four of our subsidiaries (Magyar Telekom in Hungary, OTE in Greece, T-Mobile Netherlands, and Hrvatski Telekom in Croatia) covered 100 percent of their electricity requirements with renewable energy, while a further two (T-Mobile Austria and T-Systems Netherlands) almost met this target, thus reducing climate risks.

- **Suppliers.** We see more sustainability in our supply chain as an opportunity – for our reputation and our business success. Apart from the general risks associated with our global procurement activities, we can be exposed to country- and supplier-specific risks. These include, for example, the use of child labor, the conscious acceptance of environmental damage or inadequate

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local working and safety conditions. We reduce these risks by systematically reviewing our suppliers. Our partnerships with suppliers that comply with international sustainability standards ensure a high level of product quality and reliable procurement. We have a special development program in place to help strategic suppliers introduce business practices that are both socially and ecologically acceptable while remaining economically efficient. This program showed measurable successes again in the reporting period and has three major advantages: It has a positive impact on our suppliers' working conditions, enhances their profitability, and makes the economic relevance of sustainability clear for both sides, i.e., for our suppliers and for the Group alike. For instance, better working conditions at our suppliers reduces the number of work-related accidents as well as the personnel turnover rate. That, in turn, ensures high product quality and increases productivity, while at the same time lowering costs for recruitment and training. Thus, not only are we strengthening our suppliers' profitability and CR performance, we are also significantly reducing identified risks. [SDG](#) 

Health and environment. Mobile communications, or the electromagnetic fields used in mobile communications, regularly give rise to concerns among the general population about potential health risks. This issue continues to be the subject of public, political, and scientific debate. Acceptance problems among the general public concern both mobile communications networks and the use of mobile terminals such as smartphones, tablets, and laptops. The discussion also has repercussions for the build-out of mobile communications infrastructure and the use of mobile devices. In the fixed network, it affects sales of traditional IP and DECT (digital cordless) phones and devices that use Wi-Fi technology. There is a risk of regulatory interventions, such as reduced thresholds for electromagnetic fields or the implementation of precautionary measures in mobile communications, e.g., amendments to building law or labeling requirements for handsets.

Over the past few years, recognized expert organizations such as the World Health Organization (WHO) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) have repeatedly reviewed the current thresholds for mobile communications and confirmed that – if these values are complied with – the use of mobile technology is safe based on current scientific knowledge. The expert organizations, currently the ICNIRP, regularly review the recommended thresholds on the basis of the latest scientific findings.

We are convinced that mobile communications technology is safe if specific threshold values are complied with. We are supported in this conviction by the assessment of the recognized bodies. Our responsible approach to this issue finds expression in our Group-wide EMF Policy, with which we commit ourselves to more transparency, information, participation, and financial support of independent mobile communications research, far beyond that which is stipulated by legal requirements. We aim to overcome uncertainty among the general public by pursuing an objective, scientifically well-founded, and transparent information policy. We thus continue to see it as our duty to maintain our close and successful dialog with local authorities, over and above the

statutory requirements. This also applies since our longstanding collaboration with municipalities to build out the mobile network was enshrined in law in 2013; previously, this collaboration was based on voluntary self-commitments by the network operators.

LITIGATION

Major ongoing legal proceedings. Deutsche Telekom is party to proceedings both in and out of court with government agencies, competitors, and other parties. The proceedings listed below are of particular importance from our perspective. If, in extremely rare cases, required disclosures on the significance of individual litigation and anti-trust proceedings are not made, we concluded that these disclosures may seriously undermine the outcome of the relevant proceedings.

Major ongoing legal proceedings

Toll Collect arbitration proceedings
Prospectus liability proceedings
Claims by partnering publishers of telephone directories
Claims relating to charges for the shared use of cable ducts
Claim for damages in Malaysia despite an earlier, contrary, legally binding arbitration ruling
Patents and licenses

■ **Toll Collect arbitration proceedings.** In the arbitration proceedings between the principal shareholders of Toll Collect (Daimler Financial Services AG and Deutsche Telekom AG) and the consortium company Toll Collect GbR on one side and the Federal Republic of Germany on the other concerning disputes in connection with the truck toll collection system, Deutsche Telekom received the Federal Republic of Germany's statement of claim on August 2, 2005. The Federal Republic is claiming some EUR 3.33 billion in lost toll revenues plus interest due to the delayed commencement of operations as well as contractual penalties in the amount of around EUR 1.65 billion plus interest. The Federal Republic's main claims – including contractual penalty claims – thus total about EUR 4.98 billion plus interest. In spring 2017, the principal shareholders asserted counterclaims based on breaches of duty by the Federal Republic of Germany in relation to the delay in the start of toll collection. After hearings in 2014, we reassessed the proceedings, updated Deutsche Telekom's share of the amount at risk, and recognized adequate provisions for the risk in the statement of financial position. Further hearings were held in the following years, none of which prompted us to change the provisions recognized in 2014.

■ **Prospectus liability proceedings (third public offering or DT3).** There are around 2,600 ongoing lawsuits from some 16,000 alleged buyers of T-Shares sold on the basis of the prospectus published on May 26, 2000. The plaintiffs assert that individual figures given in this prospectus were inaccurate or incomplete. The amount in dispute totals approximately EUR 80 million plus interest. Some of the actions are also directed at KfW and/or the Federal Republic of Germany as well as the banks that handled the issuances. The Frankfurt/Main Regional Court had issued certified questions to the Frankfurt/Main Higher Regional Court in accordance with the German Capital Investor Model Procee-

8 DECENT WORK AND ECONOMIC GROWTH



Please refer to the section "Corporate responsibility and non-financial statement," page 77 et seq.

dings Act (Kapitalanleger-Musterverfahrensgesetz – KapMuG) and has temporarily suspended the initial proceedings. On May 16, 2012, the Frankfurt/Main Higher Regional Court had ruled that there were no errors in Deutsche Telekom AG's prospectus. In its decision on October 21, 2014, the Federal Court of Justice revoked this ruling, determined that there was a mistake in the prospectus, and referred the case back to the Frankfurt/Main Higher Regional Court. On November 30, 2016, the Frankfurt/Main Higher Regional Court ruled that the mistake in the prospectus identified by the Federal Court of Justice could result in liability on the part of Deutsche Telekom AG, although the details of that liability would have to be established in the initial proceedings. Both Deutsche Telekom AG and some of the individual plaintiffs in the model proceedings have brought an appeal before the Federal Court of Justice against this decision. We continue to hold the opinion that there are compelling reasons why Deutsche Telekom AG should not be liable for damages. An adequate contingent liability has been recognized and is shown in the notes to the consolidated financial statements. Adequate provisions for this risk were recognized in the annual financial statements of Deutsche Telekom AG, which are prepared in accordance with German GAAP.

- **Claims by partnering publishers of telephone directories.** Several publishers that had set up joint ventures with the then DeTeMedien GmbH – formerly a wholly owned subsidiary of Deutsche Telekom AG and now named Deutsche Tele Medien GmbH – to edit and publish subscriber directories, filed claims against DeTeMedien GmbH and/or Deutsche Telekom AG at the end of 2013. The plaintiffs are claiming damages or a refund from Deutsche Tele Medien GmbH and, to a certain extent, from Deutsche Telekom AG as joint and several debtor alongside Deutsche Tele Medien GmbH. The plaintiffs base their claims on allegedly excessive charges for the provision of subscriber data in the joint ventures. The amounts claimed by the 81 original plaintiffs totaled around EUR 470 million plus interest at the end of 2014. After an agreement was reached with the majority of the publishers in October 2015 to settle the disputes and a number of claims were since dismissed conclusively, 13 actions are still pending for a remaining amount in dispute of around EUR 99 million plus interest. In ten of these proceedings, the plaintiffs lodged appeals with the Federal Court of Justice after their claims were dismissed by the court of appeal. The remaining three claims have been suspended. Five publishers whose civil actions are still pending have been pursuing their claims in parallel since June 2016 through administrative court actions against the Federal Network Agency. Two of these actions were dismissed by the court of first instance.
- **Claims relating to charges for the shared use of cable ducts.** In 2012, Kabel Deutschland Vertrieb und Service GmbH – now Vodafone Kabel Deutschland GmbH (VKDG) – filed a claim against Telekom Deutschland GmbH to reduce the annual charge for the rights to use cable duct capacities in the future and gain a partial refund of the payments made in this connection since 2004. According to its latest estimates, VKDG's claims amounted to around EUR 540 million along with around EUR 11 million for the alleged benefit from additional interest, plus interest in each case. Claims prior to 2009 are no longer being asserted by VKDG. After the Frankfurt/Main Regional Court had dismissed the complaint in 2013, the Frankfurt/Main Higher Regional Court also rejected the appeal in December 2014. In the ruling dated January 24, 2017, the Federal Court of Justice reversed the appeal ruling and referred the case back to the Frankfurt/Main Higher Regional Court for further consideration. In similar proceedings, Unitymedia Hessen GmbH & Co. KG, Unitymedia NRW GmbH and Kabel BW GmbH demanded in January 2013 that Telekom Deutschland GmbH cease charging the plaintiffs more than a specific and precisely stated amount for the shared use of cable ducts. The plaintiffs are now demanding a refund of around EUR 570 million plus interest. The claim was dismissed in the first instance by the Cologne Regional Court on October 11, 2016. The plaintiffs have appealed against this decision. At present the financial impact of both these proceedings cannot be assessed with sufficient certainty.
- **Claim for damages in Malaysia despite an earlier, contrary, legally binding arbitration ruling.** Celcom Malaysia Berhad (Celcom) and Technology Resources Industries Berhad are pursuing actions with the state courts in Kuala Lumpur, Malaysia, against eleven defendants in total, including DeTeAsia Holding GmbH, a subsidiary of Deutsche Telekom AG. The plaintiffs are demanding damages and compensation of USD 232 million plus interest. DeTeAsia Holding GmbH had enforced this amount against Celcom in 2005 on the basis of a final ruling in its favor. The main proceedings in the court of first instance began in January 2018. At present, we cannot assess their financial impact with sufficient certainty.
- **Patents and licenses.** Like many other large telecommunications and Internet providers, Deutsche Telekom is exposed to a growing number of intellectual property rights disputes. There is a risk that we may have to pay license fees and/or compensation; we are also exposed to a risk of cease-and-desist orders, for example relating to the sale of a product or the use of a technology.

Further, Deutsche Telekom intends to defend itself and/or pursue its claims resolutely in each of these proceedings.

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Proceedings concluded

■ **Reduction of the Company's contribution to the Civil Service Pension Fund.** Deutsche Telekom complies with its obligation to pay contributions to the Civil Service Pension Fund in accordance with the German Act on the Legal Provisions for the Former Deutsche Bundespost Staff (Postpersonalrechtsgesetz) and previously filed an application with the responsible Federal Ministry of Finance to have its contribution obligations reduced. After this application was rejected, Deutsche Telekom filed a suit with the competent administrative court in Cologne. This suit was dismissed, as was the appeal lodged against the dismissal. As Deutsche Telekom AG has refrained from further litigation in this matter, the proceedings have been terminated and the judgment is now final.

ANTI-TRUST PROCEEDINGS

Like all companies, our Group is subject to the regulations of anti-trust law. Given this, we have in recent years significantly expanded our compliance activities in this area too. Most recently, independent auditors certified our anti-trust compliance management system as being effective in accordance with IDW AuS 980 in 2015. Nevertheless, Deutsche Telekom and its subsidiaries, joint ventures, and associates are from time to time subject to proceedings under competition law or civil follow-on actions. In the following, we describe major anti-trust proceedings and the resulting claims for damages.

Claims for damages against Slovak Telekom following the European Commission's decision to impose fines. The European Commission decided on October 15, 2014 that Slovak Telekom had abused its market power on the Slovak broadband market and as a result imposed fines on Slovak Telekom and Deutsche Telekom. The fines were paid in January 2015. Slovak Telekom and Deutsche Telekom challenged the European Commission's decision on December 29, 2014 before the Court of the European Union. Following the decision of the European Commission, competitors filed damage actions against Slovak Telekom with the civil court in Bratislava. These claims seek compensation for alleged damages due to Slovak Telekom's abuse of a dominant market position, as determined by the European Commission. At present, three claims totaling EUR 174 million plus interest are still pending. At present, we cannot assess the financial impact with sufficient certainty.

FINANCIAL RISKS

Liquidity, credit, currency, interest rate risks

With regard to its assets, liabilities and planned transactions, our Group is particularly exposed to liquidity risks, credit risks, and the risk of changes in exchange rates and interest rates. To contain these risks, we use selected derivative and non-derivative hedging instruments (hedges), depending on the risk assessment. As only risks with an impact on cash flows are hedged, derivative financial instruments are used solely for hedging and never for speculative purposes. The following risk areas – liquidity, credit, currency, and interest rate risks – are evaluated after implementation of risk containment measures. ☐

Liquidity risk. To ensure the Group's and Deutsche Telekom AG's solvency and financial flexibility at all times, our system of liquidity management includes a liquidity reserve, in the form of credit lines and cash, that is sufficient to cover bonds falling due and long-term loans for at least the next 24 months. For medium- to long-term financing, we primarily use bonds issued in a variety of currencies and jurisdictions. These instruments are generally issued via Deutsche Telekom International Finance B. V. and are forwarded within the Group as internal loans.

The graphic on the next page shows the development of the liquidity reserve in relation to maturity dates. As of the end of 2017 and in the preceding quarters, we clearly met our targets for the liquidity reserve to cover at least the maturities due in the next 24 months.

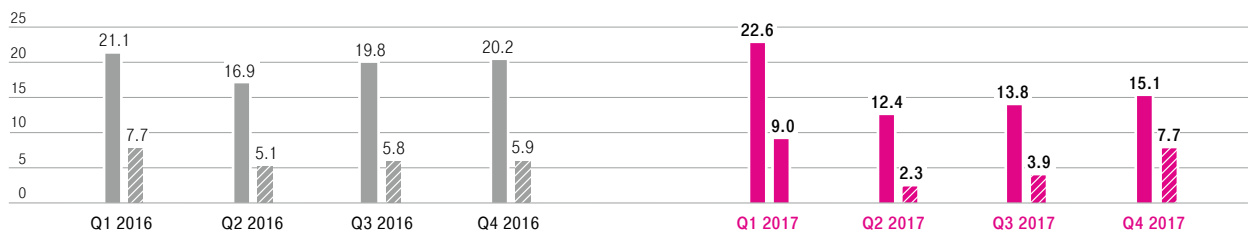
In addition to the reported liabilities to banks, Deutsche Telekom had standardized bilateral credit agreements with 22 banks for a total of EUR 12.9 billion as of December 31, 2017. As of December 31, 2017, EUR 0.2 billion of these credit lines had been utilized. According to the credit agreements, the terms and conditions depend on our rating. The bilateral credit agreements have an original maturity of 36 months and can, after each period of twelve months, be extended by a further twelve months to renew the maturity of 36 months. From today's perspective, our access to the international debt capital markets is not jeopardized.



For the evaluation, please refer to the table on page 116.

Liquidity reserve and maturities in 2017 compared with 2016

billions of €




■ Liquidity reserve (absolute figures)

▨ Maturities in the next 24 months

(Callable bonds of T-Mobile US are included with their original maturity up to the date of the call)

Credit risk. In our operating business and certain financing activities, we are exposed to a credit risk, i.e., the risk that a counterparty will not fulfill its contractual obligations. To keep this credit risk to a minimum, we conclude transactions with regard to financing activities only with counterparties that have at least a credit rating of BBB+/Baa1; this is linked to an operational credit management system. In addition, we have concluded collateral agreements for our derivative transactions. These ensure that, on a daily basis, we receive compensation payments in the amount of the receivables due from contract banks and that we make compensatory payments in the case of liabilities due. In cases of insolvency, the collateral agreements stipulate that all contracts in force are offset against each other, leaving a net receivable or liability. We continuously monitor accounts receivable in operations in a decentralized manner, i.e., at the individual units. Our business with corporate customers, especially with international carriers, is subject to special solvency monitoring.

Currency risks. The currency risks result from investments, financing measures, and operations. Risks from foreign-currency fluctuations are hedged if they affect the Group's cash flows. However, foreign-currency risks that do not influence the Group's cash flows (e.g., risks resulting from the translation of assets and liabilities of foreign operations into the Group's reporting currency) are not hedged.

Interest rate risks. Our interest rate risks mainly result from interest-bearing liabilities, primarily in the eurozone and the United States. Interest risks are managed as part of our interest rate management activities, in the course of which the maximum permissible negative deviation from the planned finance costs is determined – this is termed the risk budget. To ensure compliance with the risk budget, we manage the composition of the liabilities portfolio (ratio of fixed- to variable-interest debt instruments and average fixed-interest period) by issuing primary (non-derivative) financial instruments and, where necessary, also deploying derivative financial instruments. Regular reports are submitted to the Board of Management and Supervisory Board. 

Tax risks

We are subject to the applicable tax laws in many different countries. Risks can arise from changes in local taxation laws or case law and different interpretations of existing provisions. These risks can impact both our tax expense and benefit as well as tax receivables and liabilities.

Other financial risks

This section contains information on other financial risks that we consider to be immaterial at present or cannot evaluate based on current knowledge.

Rating risk. As of December 31, 2017, Deutsche Telekom's credit rating with Moody's was Baa1, while Fitch and Standard & Poor's rated us BBB+. All three agencies gave us a "stable" outlook. A lower rating would result in interest rate rises for some of the bonds issued by us.

Sales of shares by the Federal Republic or KfW Bankengruppe.

As of December 31, 2017, the Federal Republic and KfW Bankengruppe jointly held approximately 31.9 percent in Deutsche Telekom AG. It is possible that the Federal Republic will continue its policy of privatization and sell further equity interests in a manner designed not to disrupt the capital markets and with the involvement of KfW Bankengruppe. There is a risk that the sale of a significant volume of shares by the Federal Republic or KfW Bankengruppe, or any speculation to this effect, could have a negative impact on the price of the T-Share.

Our **CR strategy** enhances the value of our Company in the long term, which also has a positive effect of reducing business risks. Investors with a long-term horizon acknowledge this approach. In the capital markets, this is evident, for example, in the proportion of T-shares held by investors that base their investment decisions, at least in part, on sustainability criteria. As of September 30, 2017, around 18 percent of all T-Shares were held by SRI (socially responsible investment) investors, and almost 3 percent were held by investors who manage their funds primarily in accordance with SRI aspects.



For additional explanations, please refer to Note 36 "Financial instruments and risk management" in the notes to the consolidated financial statements, page 230 et seq.

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Impairment of Deutsche Telekom AG's assets. The value of the assets of Deutsche Telekom AG and its subsidiaries is reviewed periodically. In addition to the regular annual measurements, specific impairment tests may be carried out, for example where changes in the economic, regulatory, business or political environment suggest that the value of goodwill, intangible assets, property, plant and equipment, investments accounted for using the equity method, or other financial assets might have decreased. These tests may lead to the recognition of impairment losses that do not, however, result in cash outflows. This could impact to a considerable extent on our results, which in turn may negatively affect the T-Share price.

ACCOUNTING-RELATED INTERNAL CONTROL SYSTEM

Deutsche Telekom AG's internal control system (ICS) is based on the internationally recognized COSO (Committee of Sponsoring Organizations of the Treadway Commission) Internal Control – Integrated Framework, COSO I, as amended on May 14, 2013.

The Audit Committee of the Supervisory Board of Deutsche Telekom AG monitors the effectiveness of the ICS as required by § 107 (3) sentence 2 AktG. The Board of Management is responsible for defining the scope and structure of the ICS at its discretion. Internal Audit is responsible for independently reviewing the functionality and effectiveness of the ICS in the Group and at Deutsche Telekom AG, and, to comply with this task, has comprehensive information, audit, and inspection rights.

The accounting-related ICS comprises the principles, methods, and measures used to ensure appropriate accounting. It is continuously being refined and aims to ensure the consolidated financial statements of Deutsche Telekom are prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union, as well as with the regulations under commercial law as set forth in § 315e (1) HGB. Another objective of the accounting-related ICS is the preparation of the annual financial statements of Deutsche Telekom AG and the combined management report in accordance with German GAAP.

It is generally true of any ICS that regardless of how it is specifically structured there can be no absolute guarantee that it will achieve its objectives. Therefore, as regards the accounting-related ICS, there can only ever be relative, but no absolute, certainty that material accounting misstatements can be prevented or detected.

Group Accounting manages the processes of Group accounting and management reporting. Laws, accounting standards, and other pronouncements are continuously analyzed as to whether and to what extent they are relevant and how they impact on financial reporting. The relevant requirements are defined in the Group Accounting Manual, for example, communicated to the relevant units and, together with the financial reporting calendar that is binding throughout the Group, form the basis of the financial reporting

process. In addition, supplementary process directives such as the Intercompany Policy, standardized reporting formats, IT systems, as well as IT-based reporting and consolidation processes support the process of uniform and compliant Group accounting. Where necessary, we also draw on the services of external service providers, for example, to measure pension obligations. Group Accounting ensures that these requirements are complied with consistently throughout the Group. The staff involved in the accounting process receive regular training. Deutsche Telekom AG and the Group companies are responsible for ensuring that Group-wide policies and procedures are complied with. The Group companies ensure the compliance and timeliness of their accounting-related processes and systems and, in doing so, are supported and monitored by Group Accounting.

Operational accounting processes at the national and international level are increasingly managed by our shared service centers. Harmonizing the processes enhances their efficiency and quality and in turn, improves the reliability of the internal ICS. The ICS thus safeguards both the quality of internal processes at the shared service centers and the interfaces to the Group companies by means of adequate controls and an internal certification process.

Internal controls are embedded in the accounting process depending on risk levels. The accounting-related ICS comprises both preventive and detective controls, which include:

- IT-based and manual matching
- The segregation of functions
- The dual checking principle
- Monitoring controls
- General IT checks such as access management in IT systems, and change management


We have implemented a standardized process throughout the Group for monitoring the effectiveness of the accounting-related ICS. This process systematically focuses on risks of possible misstatements in the consolidated financial statements. At the beginning of the year, specific accounts and accounting-related process steps are selected based on risk factors. They are then reviewed for effectiveness in the course of the year. If control weaknesses are found, they are analyzed and assessed, particularly in terms of their impact on the consolidated financial statements and the combined management report. Material control weaknesses, the action plans for eradicating them, and ongoing progress are reported to the Board of Management and additionally to the Audit Committee of the Supervisory Board of Deutsche Telekom AG. In order to ensure a high-quality accounting-related ICS, Internal Audit is closely involved in all stages of the process.



For a detailed explanation, please refer to the section "Summary of accounting policies – Judgments and estimates" in the notes to the consolidated financial statements, pages 168 and 169.

OTHER DISCLOSURES

CORPORATE GOVERNANCE STATEMENT IN ACCORDANCE WITH § 289f AND § 315d HGB

The Corporate Governance Statement in accordance with § 289f and § 315d HGB forms part of the combined management report. 


 The statement can be found on the Deutsche Telekom website www.telekom.com under Investor Relations in the Management & Corporate Governance section.

CLOSING STATEMENT BY THE BOARD OF MANAGEMENT ON THE DEPENDENT COMPANY REPORT

Since the Federal Republic of Germany, as minority shareholder of Deutsche Telekom AG, has represented a solid majority at most shareholders' meetings in the past due to its level of attendance, Deutsche Telekom is a dependent company of the Federal Republic of Germany in accordance with § 17 (1) AktG.

Deutsche Telekom is not subject to any control or profit and loss transfer agreement with the Federal Republic of Germany. Under § 312 AktG, the Board of Management of Deutsche Telekom AG has therefore prepared a dependent company report describing relations between the controlling entity and dependent companies. The Board of Management issued the following statement at the end of the report: "The Board of Management hereby declares that, under the circumstances known to the Board of Management at the time the corporate transactions were performed, the Company received appropriate remuneration for such transactions. The Company did not perform or omit any actions in the interests of, or on the instructions of, the controlling company or any affiliated companies of the Federal Republic."

LEGAL STRUCTURE OF THE DEUTSCHE TELEKOM GROUP

Deutsche Telekom AG, Bonn, is the parent of the Deutsche Telekom Group. Its shares are traded on the Frankfurt/Main Stock Exchange as well as on other stock exchanges. 

SHAREHOLDERS' EQUITY

Each share entitles the holder to one vote. These voting rights are restricted, however, in relation to treasury shares (at December 31, 2017: around 19 million in total).

Capital increase. The resolution on the dividend of EUR 0.60 per share for the 2016 financial year gave shareholders the choice between payment in cash or having their dividend entitlement converted into Deutsche Telekom AG shares. Dividend entitlements of Deutsche Telekom AG shareholders amounting to EUR 1.4 billion for shares from authorized capital (2013 authorized capital) were contributed in June 2017 and thus did not have an impact on cash flows. Deutsche Telekom AG carried out an increase in issued capital of EUR 0.2 billion against contribution of dividend entitlements for this purpose in June 2017. This increased capital reserves by EUR 1,143 million, and under IFRS, by EUR 1,175 million. The number of shares rose by 84,556,563.


Treasury shares. The shareholders' meeting resolved on May 25, 2016 to authorize the Board of Management to purchase shares in the Company by May 24, 2021, with the amount of share capital accounted for by these shares totaling up to EUR 1,179,302,878.72, provided the shares to be purchased on the basis of this authorization in conjunction with the other shares of the Company that the Company has already purchased and still possesses or are to be assigned to it under § 71d and § 71e AktG do not at any time account for more than 10 percent of the Company's share capital. Moreover, the requirements under § 71 (2) sentences 2 and 3 AktG must be complied with. Shares shall not be purchased for the purpose of trading in treasury shares. This authorization may be exercised in full or in part. The purchase can be carried out in partial tranches spread over various purchase dates within the authorization period until the maximum purchase volume is reached. Dependent Group companies of Deutsche Telekom AG within the meaning of § 17 AktG or third parties acting for the account of Deutsche Telekom AG or for the account of dependent Group companies of Deutsche Telekom AG within the meaning of § 17 AktG are also entitled to purchase the shares. The shares are purchased through the stock exchange in adherence to the principle of equal treatment (§ 53a AktG). Shares can instead also be purchased by means of a public purchase or share exchange offer addressed to all shareholders, which, subject to a subsequently approved exclusion of the right to offer shares, must also comply with the principle of equal treatment.

The shares may be used for one or several of the purposes permitted by the authorization granted by the shareholders' meeting on May 25, 2016 under item 6 on the agenda. The shares may also be used for purposes involving an exclusion of subscription rights. They may also be sold on the stock market or by way of an offer to all shareholders, or withdrawn. The shares may also be used to fulfill the rights of Board of Management members to receive shares in Deutsche Telekom AG, which the Supervisory Board has granted to these members as part of the arrangements governing the compensation of the Board of Management, on the basis of a decision by the Supervisory Board to this effect.

Under the resolution of the shareholders' meeting on May 25, 2016, the Board of Management is also authorized to acquire the shares through the use of equity derivatives.

For information on the treasury shares in accordance with § 160 (1) No. 2 AktG, please refer to the notes to the annual financial statements of Deutsche Telekom AG as of December 31, 2017.

On the basis of the authorization by the shareholders' meeting on May 25, 2016 described above and corresponding authorizations by the shareholders' meeting on May 12, 2011 and May 24, 2012, 110 thousand shares were acquired in June 2011, 206 thousand

 For information on the composition of capital stock in accordance with § 289a (1) HGB and § 315a HGB of direct and indirect equity investments, please refer to Note 15 "Shareholders' equity" in the notes to the consolidated financial statements, page 206 et seq., and to the notes to the annual financial statements of Deutsche Telekom AG as of December 31, 2017.

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shares in September 2011, and 268 thousand shares in January 2013. The total volumes amounted to EUR 2,762 thousand in the 2011 financial year, and EUR 2,394 thousand in the 2013 financial year (excluding transaction costs). This increased the number of treasury shares by 316 thousand and 268 thousand, respectively. Further, 90 thousand shares and 860 thousand shares were acquired in September and October 2015, respectively, for an aggregate amount of EUR 14,787 thousand (excluding transaction costs); these acquisitions increased the number of treasury shares by 950 thousand.

No treasury shares were acquired in the reporting period.

As part of the Share Matching Plan, a total of 2 thousand treasury shares were transferred free of charge to the custody accounts of eligible participants in 2012 and 2013 respectively. A further 90 thousand treasury shares were transferred free of charge in the 2014 financial year. An additional 140 thousand treasury shares were transferred in 2015. In the 2016 financial year, 232 thousand treasury shares were transferred. Transfers of treasury shares to the custody accounts of employees of Deutsche Telekom AG are free of charge. In cases where treasury shares are transferred to the custody accounts of employees of other Group companies, the costs have been transferred at fair value to the respective Group company since the 2016 financial year.

A total of 300 thousand treasury shares were reallocated in January, March, April, May, June, July, August, September, October, and December 2017 and transferred to the custody accounts of eligible participants of the Share Matching Plan. As of December 31, 2017, disposals of treasury shares resulting from the transfers in the reporting period accounted for less than 0.01 percent, or EUR 769 thousand, of share capital. Gains on disposal arising from transfers of treasury shares amounted to EUR 2,986 thousand. In the reporting year, 107 thousand treasury shares with a fair value of EUR 1,763 thousand were billed to other Group companies. Transfers of treasury shares increased retained earnings by EUR 511 thousand and capital reserves by EUR 310 thousand.

As part of the acquisition of VoiceStream Wireless Corp., Bellevue, and Powertel, Inc., Bellevue, in 2001, Deutsche Telekom AG issued new shares from authorized capital to a trustee, for the benefit of holders of warrants, options, and conversion rights, among others. These options or conversion rights expired in full in the 2013 financial year. As a result, the trustee no longer had any obligation to fulfill any claims in accordance with the purpose of the deposit. The trust relationship was terminated at the start of 2016 and the deposited shares were transferred free of charge to a custody account of Deutsche Telekom AG. The 18,517 thousand previously deposited shares are accounted for in the same way as treasury shares in accordance with § 272 (1a) HGB. This equates

to 0.4 percent, or EUR 48 million, of Deutsche Telekom's capital stock. On the basis of authorization by the shareholders' meeting on May 25, 2016, the treasury shares acquired free of charge may be used for the same purposes as the treasury shares acquired for a consideration.

Authorized capital and contingent capital. The shareholders' meeting on May 16, 2013 authorized the Board of Management to increase the share capital with the approval of the Supervisory Board by up to EUR 2,176,000,000 by issuing up to 850,000,000 no par value registered shares against cash and/or non-cash contributions in the period ending May 15, 2018. The Board of Management was permitted to exercise the authorization in full or on one or more occasions in partial amounts. The Board of Management was authorized, subject to the approval of the Supervisory Board, to exclude residual amounts from shareholders' subscription rights. Furthermore, the Board of Management was authorized, subject to the approval of the Supervisory Board, to disapply shareholders' subscription rights in the event of capital increases against non-cash contributions when issuing new shares for business combinations or for acquisitions of companies, parts thereof, or interests in companies, including increasing existing investment holdings, or other assets eligible for contribution for such acquisitions, including receivables from the Company. Further, the Board of Management was authorized, subject to the approval of the Supervisory Board, to determine the further content of share rights and the conditions under which shares are issued (**2013 authorized capital**). The shareholders' meeting resolved on May 31, 2017 to cancel the 2013 authorized capital to the extent that it still existed, effective the date of entry of the 2017 authorized capital described below. Following the increase in issued capital against contribution of dividend entitlements, 2013 authorized capital amounted to EUR 1,381,674,257.92. The cancellation of the remaining 2013 authorized capital was entered in the commercial register on July 11, 2017.

The shareholders' meeting on May 31, 2017 authorized the Board of Management to increase the share capital with the approval of the Supervisory Board by up to EUR 3,600,000,000 by issuing up to 1,406,250,000 no par value registered shares against cash and/or non-cash contributions in the period ending May 30, 2022. This authorization may be exercised in full or on one or more occasions in partial amounts. The Board of Management is authorized, subject to the approval of the Supervisory Board, to exclude residual amounts from shareholders' subscription rights. Furthermore, the Board of Management is authorized, subject to the approval of the Supervisory Board, to disapply shareholders' subscription rights in the event of capital increases against non-cash contributions when issuing new shares for business combinations or acquisitions of companies, parts thereof, or interests in companies, including increasing existing investment holdings, or other assets eligible

for contribution for such acquisitions, including receivables from the Company. However, the value of the new shares for which shareholders' subscription rights have been disappplied on the basis of this authorization – together with the value of the shares or conversion and/or option rights or obligations under bonds issued or sold since May 31, 2017 subject to the disapplication of subscription rights – must not exceed 20 percent of the total share capital; the latter is defined as the amount existing as of May 31, 2017, upon entry of the authorization, or upon the issue of the new shares, whichever amount is lowest. If the issue or sale is carried out in analogous or mutatis mutandis application of § 186 (3) sentence 4 AktG, this shall also constitute the disapplication of subscription rights. Further, the Board of Management is authorized, subject to the approval of the Supervisory Board, to determine the further content of share rights and the conditions under which shares are issued (**2017 authorized capital**). The shareholders' meeting on May 31, 2017 instructed the Board of Management to enter the 2017 authorized capital described above in the commercial register only when (i) the existing 2013 authorized capital (in the necessary partial amount) has been utilized to grant the shareholders the possibility described under item 2 of the agenda of the shareholders' meeting on May 31, 2017 to opt for shares (dividend in kind) instead of a cash dividend payment and the related capital increase has been entered, or (ii) the dividend has been paid out in full in cash. 2017 authorized capital was entered in the commercial register on July 11, 2017 after the condition specified under (i) had been met.

As of December 31, 2017, the share capital was contingently increased by up to EUR 1,100,000,000, comprising up to 429,687,500 no par value shares (**2014 contingent capital**). The contingent capital increase will be implemented only to the extent that

1. the holders or creditors of bonds with warrants, convertible bonds, profit participation rights, and/or participating bonds (or combinations of these instruments) with options or conversion rights, which are issued or guaranteed by Deutsche Telekom AG or its direct or indirect majority holdings by May 14, 2019, on the basis of the authorization resolution granted by the shareholders' meeting on May 15, 2014, make use of their option and/or conversion rights or
2. those obligated as a result of bonds with warrants, convertible bonds, profit participation rights, and/or participating bonds (or combinations of these instruments), which are issued or guaranteed by Deutsche Telekom AG or its direct or indirect majority holdings by May 14, 2019, on the basis of the authorization resolution granted by the shareholders' meeting on May 15, 2014, fulfill their option or conversion obligations

and other forms of fulfillment are not used. The new shares shall participate in profits starting at the beginning of the financial year in which they are issued as the result of the exercise of any option or conversion rights or the fulfillment of any option or conversion obligations. The Supervisory Board is authorized to amend § 5 (3) of the Articles of Incorporation in accordance with the particular usage of the contingent capital and after the expiry of all the option or conversion periods.

MAIN AGREEMENTS INCLUDING A CHANGE OF CONTROL CLAUSE

The main agreements entered into by Deutsche Telekom AG, which include a clause in the event of a change of control, principally relate to bilateral credit lines and several loan agreements. In the event of a change of control, the individual lenders have the right to terminate the credit line and, if necessary, serve notice or demand repayment of the loans. A change of control is assumed when a third party, which can also be a group acting jointly, acquires control over Deutsche Telekom AG.


In addition, the other members of the Toll Collect consortium (Daimler Financial Services AG and Cofiroute S.A.) have a call option in the event that the ownership structure of Deutsche Telekom AG changes such that over 50 percent of its share capital or voting rights are held by a new shareholder and this change was not approved by the other members of the consortium.

On November 2, 2016, Deutsche Telekom AG signed a change agreement to the shareholder agreement with the Greek government from May 14, 2008 on Hellenic Telecommunications Organization S.A., Athens, Greece (OTE); the change agreement concerned the accession of the Hellenic Republic Asset Development Fund (HRADF) as a party to the contract. Under this agreement, the Greek government, together with HRADF, is, under certain circumstances, entitled to acquire all shares in OTE from Deutsche Telekom AG as soon as one (or more) person(s), with the exception of the Federal Republic of Germany, either directly or indirectly acquire(s) 35 percent of the voting rights of Deutsche Telekom AG.

In the master agreement establishing the procurement joint venture BuyIn in Belgium, Deutsche Telekom AG and Orange S.A. (formerly France Télécom S.A.)/Atlas Services Belgium S.A. (a subsidiary of Orange S.A.) agreed that if Deutsche Telekom or Orange comes under the controlling influence of a third party or if a third party that is not wholly owned by the Orange group of companies acquires shares in Atlas Services Belgium S.A., the respective other party (Orange and Atlas Services Belgium S.A. only jointly) may terminate the master agreement with immediate effect.

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CHANGES IN THE CONSOLIDATED GROUP

60 German and 186 foreign subsidiaries are fully consolidated in Deutsche Telekom's consolidated financial statements (December 31, 2016: 61 and 188). 9 associates (December 31, 2016: 13) and 7 joint ventures (December 31, 2016: 7) are also included using the equity method. 

BUSINESS COMBINATIONS

Deutsche Telekom did not affect any material business combinations in the 2017 financial year.

COMPENSATION REPORT

The "Compensation report" details the compensation system underlying Board of Management compensation as well as the specific remuneration received by the individual members of the Board of Management. It takes into consideration the requirements of the German Commercial Code taking account of the provisions of German Accounting Standard No. 17 (GAS 17), the recommendations of the German Corporate Governance Code (GCGC), and the International Financial Reporting Standards (IFRS).

Changes in the composition of the Board of Management and contract extensions. Claudia Nemat has been responsible for the new Board department Technology and Innovation since January 1, 2017. Srini Gopalan succeeded her as member of the Board of Management responsible for Europe on the same date. On May 30, 2017, the Supervisory Board resolved to extend Dr. Christian P. Illek's position as the Board member responsible for Human Resources by five years effective April 1, 2018. At its meeting on July 18, 2017, the Supervisory Board resolved to accept Niek Jan van Damme's resignation as the Board of Management member responsible for Germany with effect from midnight on December 31, 2017, and to replace him in that position with Dr. Dirk Wössner for a period of three years beginning January 1, 2018. Also as of December 31, 2017, Reinhard Clemens resigned from his position as Board member responsible for T-Systems. The Supervisory Board accepted his resignation at its meeting on September 13, 2017. At the same meeting, Adel Al-Saleh was appointed Board member responsible for T-Systems for a period of three years beginning January 1, 2018.

Compensation of the Board of Management

Basis of Board of Management compensation. On February 24, 2010, the Supervisory Board resolved on a new system for the compensation of the Board of Management members, taking into account the provisions specified in the German Act on the Appropriateness of Management Board Remuneration (Gesetz zur Angemessenheit der Vorstandsvergütung – VorstAG) that has been in effect since August 5, 2009. The shareholders' meeting of Deutsche Telekom AG on May 3, 2010 approved this system. The compensation of Board of Management members comprises various components. Under the terms of their service contracts, members of the Board of Management are entitled to an annual fixed remuneration and annual variable performance-based remuneration (Variable I), a long-term variable remuneration component (Variable II), as well as fringe benefits and deferred benefits based on a company pension entitlement. The Supervisory Board de-

fines the structure of the compensation system for the Board of Management and reviews this structure and the appropriateness of compensation at regular intervals.

The fixed annual remuneration is determined for all Board of Management members based on market conditions in accordance with the requirements of stock corporation law. It is ensured that Board of Management compensation is oriented toward the sustained development of the Company and that there is a multi-year measurement base for the variable components.

At its discretion and after due consideration, the Supervisory Board may also reward extraordinary performance by individual or all Board of Management members in the form of a special bonus.

In accordance with market-oriented and corporate standards, the Company grants all members of the Board of Management additional benefits under the terms of their service contracts, some of which are viewed as non-cash benefits and taxed accordingly. This mainly includes being furnished with a company car and accident and liability insurance, and reimbursements in connection with maintaining a second household.

Sideline employment generally requires prior approval. Generally, no additional compensation is paid for being a member of the management or supervisory board of other Group entities.

In the event of temporary incapacity for work caused by illness, accident, or any other reason for which the respective Board of Management member is not responsible, the fixed basic remuneration continues to be paid; in the event of an uninterrupted period of absence due to illness of more than one month, claims to variable remuneration are reduced pro rata in line with the uninterrupted period of absence. The continued payment of remuneration ends at the latest after an uninterrupted period of absence of six months, or for a maximum of three months following the end of the month in which the Board of Management member's permanent incapacity for work is established.

Variable performance-based remuneration

The variable remuneration of the members of the Board of Management is divided into Variables I and II. Variable I contains both short-term and long-term components consisting of the realization of budget figures for specific performance indicators, the implementation of the strategy and adherence to the Group's Guiding Principles. Variable II is oriented solely toward the long term. This ensures that the variable remuneration is oriented toward the sustained development of the Company and that there is a predominantly long-term incentive effect. The variable compensation elements include clear upper limits, while the amount of compensation is capped overall.

Variable I. The annual variable remuneration of Board of Management members is based on the achievement of targets set by the Supervisory Board of Deutsche Telekom AG for each member of the Board of Management at the beginning of the financial year. The set of targets is composed of corporate targets (50 percent)



The principal subsidiaries of Deutsche Telekom AG are listed in the notes to the consolidated financial statements in the section "Summary of accounting policies" under "Principal subsidiaries," page 173 et seq.

related to unadjusted revenue, unadjusted EBITDA and free cash flow, as well as personal targets for the individual members of the Board of Management. The personal targets consist of targets oriented toward the sustained success of the Company concerning the implementation of the strategy (30 percent) and value adherence (adherence to Guiding Principles), which accounts for 20 percent. The agreement on targets and the level of target achievement for the respective financial year are determined by the plenary session of the Supervisory Board. Levels of target achievement exceeding 100 percent are rewarded on a straight-line basis, capped at 150 percent of the award amount. Any higher levels of target achievement will not be taken into consideration. To ensure the long-term incentive effect and orientation toward the sustained development of the Company, a third of the variable remuneration set by the plenary session of the Supervisory Board must be invested in shares of Deutsche Telekom AG; these shares must be held by the respective Board member for a period of at least four years.

Variable II. The exclusively long-term-oriented Variable II is measured based on the fulfillment of four equally weighted performance parameters (return on capital employed (ROCE), adjusted earnings per share, customer satisfaction, and employee satisfaction). Each parameter determines a quarter of the award amount. Levels of target achievement exceeding 100 percent are rewarded on a straight-line basis, capped at 150 percent of the award amount. The assessment period is four years, with the assessment being based on average target achievement across the four years planned at the time the tranche was determined. The award amount is decoupled from other remuneration components and is set for each member of the Board of Management individually.

In the 2017 financial year, the following absolute nominal amounts were pledged to the Board of Management members in the event of 100 percent target achievement.

	2017 tranche	2016 tranche
Reinhard Clemens	650,000	650,000
Niek Jan van Damme	644,000	644,000
Thomas Dannenfeldt	670,000	670,000
Srini Gopalan (since January 1, 2017)	550,000	-
Timotheus Höttges	1,342,000	1,342,000
Dr. Christian P. Illek	550,000	550,000
Dr. Thomas Kremer	550,000	550,000
Claudia Nemat	675,000	675,000

Information on the Share Matching Plan. In the 2017 financial year, the Board of Management members, as described above, were contractually obliged to invest a third of Variable I in shares of Deutsche Telekom AG. Deutsche Telekom AG will grant one additional share for every share acquired as part of this Board of Management member's aforementioned personal investment (Share Matching Plan) on expiration of the four-year lock-up period, provided they are still a member of the Board of Management.

GAS 17 and IFRS 2 require disclosure not only of the total expense related to share-based payment from matching shares in the 2017 financial year and the fair value of the matched shares at their grant date, but also of the number of entitlements to matching shares and their development in the current financial year.

The fair value of the matching shares at grant date shown in the following table does not represent a component of remuneration for the Board of Management members in 2017. It is an imputed value of the entitlements to matching shares determined on the basis of relevant accounting policies. Here, the fair value equates to the share price at grant date less an expected dividend mark-down. The following table is based on expected target achievement for the 2017 financial year and thus on the estimated amount of the personal investment to be made by the respective Board of Management member to establish his or her entitlements to matching shares. The final number of entitlements to matching shares identified for the 2017 financial year may be higher or lower than the amounts estimated here.

The total share-based payment expense for entitlements to matching shares from 2012 to 2017 to be recognized for the financial years 2016 and 2017 pursuant to IFRS 2 is included in the two last columns of the table.

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	Number of entitlements granted to matching shares since 2010 at the beginning of the financial year	Number of new entitlements to matching shares granted in 2017	Number of shares transferred in 2017 as part of the Share Matching Plan	Fair value of the entitlements to matching shares at grant date €	Cumulative total share-based payment expense in 2017 for matching shares for the years 2013 through 2017 €	Cumulative total share-based payment expense in 2016 for matching shares for the years 2012 through 2016 €
Reinhard Clemens	159,248	13,484	24,934	184,994	50,429	184,443
Niek Jan van Damme	150,748	13,359	26,279	183,286	241,645	188,132
Thomas Dannenfeldt	44,138	13,898	0	190,686	153,021	120,267
Srini Gopalan (since January 1, 2017)	0	11,409	0	156,533	26,231	-
Timotheus Höttges	239,544	27,838	25,974	381,941	379,393	353,485
Dr. Christian P. Illek	25,181	11,409	0	156,533	99,980	60,164
Dr. Thomas Kremer	72,183	11,409	13,057	156,533	163,949	143,105
Claudia Nemat	105,021	14,002	28,251	192,109	193,826	193,228

By December 31, 2017, Deutsche Telekom had acquired 565,596 shares for the purpose of awarding matching shares to Board of Management members as part of the Share Matching Plan. In 2017, matching shares were again transferred to individual members of the Board of Management. A total of 118,495 shares were transferred to Board of Management members in 2017 (2016: 88,792).

Arrangements in the event of termination of a position on the Board of Management. Service contracts for members of the Board of Management concluded since the 2009 financial year include a severance cap in case of premature termination without good cause allowing a compensation payment that, in line with the recommendations of the German Corporate Governance Code, is limited to a maximum of two years' remuneration (severance cap) and may not exceed the remuneration due for the remaining term of the service contract.

The service contracts for members of the Board of Management at Deutsche Telekom AG do not include any benefits in the event of the termination of a position on the Board of Management as a result of a change of control.

Board of Management member service contracts generally stipulate a post-contractual prohibition of competition. Pursuant to these provisions, members of the Board of Management are prohibited from rendering services to or on behalf of a competitor for the duration of one year following their departure. As compensation for this restricted period, they receive either a payment of 50 percent of the last fixed annual remuneration and 50 percent of the most recent Variable I on the basis of 100 percent target achievement, or 100 percent of the last fixed annual remuneration.

Company pension plan

Company pension plan (existing entitlement). The members of the Board of Management are entitled to a company pension. Benefits from the company pension plan are in direct relation to the beneficiary's annual salary. The Board of Management members receive company pension benefits based on a fixed percentage of their last fixed annual salary for each year of service rendered prior to their date of retirement. The pension payments may be in

the form of a life-long retirement pension upon reaching the age of 62 or in the form of an early retirement pension upon reaching the age of 60. Opting for the early retirement pension scheme is connected with actuarial deductions, however. The company pension is calculated by multiplying a basic percentage rate of 5 percent by the number of years of service as a member of the Board of Management. After ten years of service, the maximum pension level of 50 percent of the last fixed annual remuneration will be attained.

The pension payments to be made increase dynamically, at a rate of 1 percent. In addition, the pension agreements include arrangements for pensions for surviving dependents in the form of entitlements for widows and orphans. In specifically provided exceptional cases, entitlement to a widow's pension is excluded. The standard criteria for eligibility in the pension arrangements are in line with market conditions. In the event of a permanent incapacity for work (invalidity), the respective period of service through the scheduled end of the current period of appointment serves as the basis for the period of service eligible for calculating the pension.

Company pension plan (new entitlement). A plan with a contribution-based promise in the form of a one-time capital payment upon retirement is set up for all Board of Management members with a new entitlement to a company pension. A contribution is paid into the Board member's pension account for each year of service at an interest rate corresponding to market levels. Annual additions to the pension account have no effect on cash or cash equivalents. The cash outflow is only effective upon the Board member's retirement. As a rule, the date of retirement is the beneficiary's 62nd birthday. For pension agreements signed before December 31, 2011, Board of Management members can also opt to draw early retirement benefits from their 60th birthday, subject to corresponding actuarial deductions. The amount to be provided annually is individualized and decoupled from other remuneration components. The exact definition of the contribution is based on a comparison with peer companies that are suitable for benchmarking and also offer plans with contribution-based promises.

In addition, the pension agreements include arrangements for pensions for surviving dependents in the form of entitlements for widows and orphans. In the event of a permanent incapacity for work (invalidity), the beneficiary is also entitled to the pension fund.

Service cost and defined benefit obligations for each member of the Board of Management are shown in the following table:

€	Service cost 2017	Defined benefit obligation (DBO) Dec. 31, 2017	Service cost 2016	Defined benefit obligation (DBO) Dec. 31, 2016
Reinhard Clemens	797,142	7,803,566	737,710	7,132,977
Niek Jan van Damme	302,706	3,225,063	303,289	2,874,190
Thomas Dannenfeldt	281,578	1,200,998	276,804	903,460
Srini Gopalan (since January 1, 2017)	305,625	306,749	-	-
Timotheus Höttges	1,129,225	12,183,195	1,030,510	11,203,561
Dr. Christian P. Illek	272,566	778,582	269,168	496,574
Dr. Thomas Kremer	247,956	1,525,513	250,534	1,253,693
Claudia Nemat	291,092	2,077,262	213,170	1,756,131

An annual contribution of EUR 290,000 was allocated to Niek Jan van Damme in accordance with the provisions of the new company pension plan. The contributions for Thomas Dannenfeldt, Srini Gopalan, Dr. Christian P. Illek, Dr. Thomas Kremer, and Claudia Nemat amount to EUR 250,000 each for each year of service rendered.

The pension expense resulting from the company pension plan is shown as service cost.

Board of Management compensation for the 2017 financial year. In reliance on legal requirements and other guidelines, a total of EUR 21.3 million (2016: EUR 16.7 million) is reported in the following table as total compensation for the 2017 financial year for the members of the Board of Management. The Board of Management compensation comprises the fixed annual remuneration as well

as other benefits, non-cash benefits and remuneration in kind, short-term variable remuneration (Variable I), fully earned tranches of long-term variable remuneration (Variable II), and the fair value of the matching shares. This was calculated on the basis of the estimated amount of Variable I at the grant date and the resulting number of entitlements to matching shares.

The fixed annual remuneration and other remuneration are totally unrelated to performance.

Total compensation. The compensation of the Board of Management is shown in detail in the following table:

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		Non-performance-based compensation		Performance-based compensation			Total compensation
		Fixed annual remuneration	Other remuneration	Short-term variable remuneration	Long-term variable performance-based remuneration (Variable II)	Long-term variable performance-based remuneration (fair value of matching shares)	
Reinhard Clemens	2017	840,000	20,387	709,800	676,000	184,994	2,431,181
	2016	840,000	25,221	733,850	468,000	185,899	2,252,970
Niek Jan van Damme	2017	850,000	27,040	821,744	665,687	183,286	2,547,757
	2016	850,000	28,913	781,172	396,000	184,183	2,240,268
Thomas Dannenfeldt	2017	860,000	24,631	835,490	572,000	190,686	2,482,807
	2016	860,000	26,711	858,270	-	191,619	1,936,600
Sriini Gopalan (since January 1, 2017)	2017	700,000	1,139,610 ^a	654,500	-	156,533	2,650,643
	2016	-	-	-	-	-	-
Timotheus Höttges	2017	1,450,000	29,061	1,749,968	1,135,680	381,941	4,746,650
	2016	1,450,000	156,742	1,760,704	547,560	383,809	4,298,815
Dr. Christian P. Illek	2017	700,000	35,741	685,850	-	156,533	1,578,124
	2016	700,000	37,585	674,850	-	157,299	1,569,734
Dr. Thomas Kremer	2017	700,000	63,620	654,500	572,000	156,533	2,146,653
	2016	700,000	65,910	666,600	396,000	157,299	1,985,809
Claudia Nemat	2017	900,000	78,567	804,600	702,000	192,109	2,677,276
	2016	900,000	75,616	807,975	486,000	193,049	2,462,640
	2017	7,000,000	1,418,657	6,916,452	4,323,367	1,602,615	21,261,091
	2016	6,300,000	416,698	6,283,421	2,293,560	1,453,157	16,746,836

^a This amount includes a one-time sign-on bonus of EUR 500,000 and a payment of EUR 620,000 to compensate for the loss of share-based compensation he would have been entitled to at the previous employer. Sriini Gopalan was obligated to invest the net amount paid out from the compensation payment in shares of Deutsche Telekom AG. Upon expiry of lock-up period, he can freely dispose of these shares.

The amounts shown in the “Long-term variable performance-based remuneration (Variable II)” column had been pledged to the eligible Board of Management members in the 2014 financial year.

Niek Jan van Damme resigned from his position as member of the Board of Management effective midnight on December 31, 2017. The termination agreement between Niek Jan van Damme and the Company contains the components described below. The Company will pay Niek Jan van Damme a final settlement of EUR 2.3 million for early termination of his service contract. For his participation in Deutsche Telekom AG's Share Matching Plan, Niek Jan van Damme was awarded a total of 51,300 matching shares in January 2018, but has no other entitlements to matching shares. Niek Jan van Damme will participate on a pro rata basis in the tranches of long-term variable remuneration (Variable II) granted to him. Potential payments of long-term variable remuneration will not take place until after expiry of the term of the plan and will be calculated on the basis of the final level of target achievement as determined by the Supervisory Board. Niek Jan van Damme has vested rights to a Board of Management pension; this entitlement remains in place for the amount in the pension account as of December 31, 2017 until such time as he retires.

Reinhard Clemens also resigned from the Board of Management effective midnight, December 31, 2017. The termination agreement between Reinhard Clemens and the Company contains the components described below. Reinhard Clemens will receive a final settlement of EUR 2.0 million for early termination of his service contract. For his participation in Deutsche Telekom AG's Share

Matching Plan, Reinhard Clemens was awarded 36,312 matching shares in January 2018, but has no other entitlements to the transfer of matching shares. In accordance with his completed period of service, Reinhard Clemens will participate on a pro rata basis in the tranches of long-term variable remuneration (Variable II) granted to him. Potential payments of long-term variable remuneration will not take place until after expiry of the term of the plan for each tranche and will be calculated on the basis of the final level of target achievement as determined by the Supervisory Board. Reinhard Clemens has vested rights to a Board of Management pension; this entitlement will remain in place for the amount earned as of December 31, 2017 until such time as he retires.

As of December 31, 2017, sufficient provisions were recognized to cover the existing obligations from both termination agreements. No member of the Board of Management received benefits or corresponding commitments from a third party for his or her activity as a Board of Management member during the past financial year.

Former members of the Board of Management. A total of EUR 11.3 million (2016: EUR 7.2 million) was included for payments to and entitlements for former members of the Board of Management and those who left in the reporting year as well as any surviving dependents.

Provisions (measured in accordance with IAS 19) totaling EUR 195.4 million (December 31, 2016: EUR 201.6 million) were recognized for current pensions and vested rights to pensions for this group of persons and their surviving dependents.

Other. The Company has not granted any advances or loans to current or former Board of Management members, nor were any other financial obligations to the benefit of this group of people entered into.

Table view in accordance with the requirements of the German Corporate Governance Code

The following tables are based on model tables 1 and 2 recommended by the German Corporate Governance Code, which present the total compensation granted for the reporting year and the remuneration components allocated.

Benefits granted for the reporting year

Compensation of the Board of Management

€

	Timotheus Höttges			
	Function: Chairman of the Board of Management (CEO) since Jan. 1, 2014			
	2016	2017	2017 (min.)	2017 (max.)
Fixed remuneration	1,450,000	1,450,000	1,450,000	1,450,000
Fringe benefits	156,742	29,061	29,061	29,061
Total fixed annual remuneration	1,606,742	1,479,061	1,479,061	1,479,061
One-year variable remuneration	1,342,000	1,342,000	0	2,013,000
Multi-year variable remuneration	1,725,809	1,723,941	0	4,026,000
Of which: 2016 Variable II (4-year term)	1,342,000			
Of which: 2017 Variable II (4-year term)		1,342,000	0	2,013,000
Of which: 2016 Share Matching Plan (4-year term)	383,809			
Of which: 2017 Share Matching Plan (4-year term)		381,941	0	2,013,000
Total	4,674,551	4,545,002	1,479,061	7,518,061
Service cost	1,030,510	1,129,225	1,129,225	1,129,225
TOTAL COMPENSATION	5,705,061	5,674,227	2,608,286	8,647,286

	Srini Gopalan			
	Function: Europe since Jan. 1, 2017			
	2016	2017	2017 (min.)	2017 (max.)
Fixed remuneration		700,000	700,000	700,000
Fringe benefits		1,139,610 ^a	1,139,610 ^a	1,139,610 ^a
Total fixed annual remuneration	-	1,839,610	1,839,610	1,839,610
One-year variable remuneration		550,000	0	825,000
Multi-year variable remuneration	-	706,533	0	1,650,000
Of which: 2016 Variable II (4-year term)				
Of which: 2017 Variable II (4-year term)		550,000	0	825,000
Of which: 2016 Share Matching Plan (4-year term)				
Of which: 2017 Share Matching Plan (4-year term)		156,533	0	825,000
Total	-	3,096,143	1,839,610	4,314,610
Service cost		305,625	305,625	305,625
TOTAL COMPENSATION	-	3,401,768	2,145,235	4,620,235

^a This amount includes a one-time sign-on bonus of EUR 500,000 and a payment of EUR 620,000 to compensate for the loss of share-based compensation he would have been entitled to at the previous employer. Srini Gopalan was obligated to invest the net amount paid out from the compensation payment in shares of Deutsche Telekom AG. Upon expiry of lock-up period, he can freely dispose of these shares.

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Reinhard Clemens				Niek Jan van Damme				Thomas Dannenfeldt			
Function: T-Systems				Function: Germany				Function: Finance (CFO)			
until Dec. 31, 2017				until Dec. 31, 2017				since Jan. 1, 2014			
2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)
840,000	840,000	840,000	840,000	850,000	850,000	850,000	850,000	860,000	860,000	860,000	860,000
25,221	20,387	20,387	20,387	28,913	27,040	27,040	27,040	26,711	24,631	24,631	24,631
865,221	860,387	860,387	860,387	878,913	877,040	877,040	877,040	886,711	884,631	884,631	884,631
650,000	650,000	0	975,000	644,000	644,000	0	966,000	670,000	670,000	0	1,005,000
835,899	834,994	0	1,950,000	828,183	827,286	0	1,932,000	861,619	860,686	0	2,010,000
650,000				644,000				670,000			
	650,000	0	975,000		644,000	0	966,000		670,000	0	1,005,000
185,899				184,183				191,619			
	184,994	0	975,000		183,286	0	966,000		190,686	0	1,005,000
2,351,120	2,345,381	860,387	3,785,387	2,351,096	2,348,326	877,040	3,775,040	2,418,330	2,415,317	884,631	3,899,631
737,710	797,142	797,142	797,142	303,289	302,706	302,706	302,706	276,804	281,578	281,578	281,578
3,088,830	3,142,523	1,657,529	4,582,529	2,654,385	2,651,032	1,179,746	4,077,746	2,695,134	2,696,895	1,166,209	4,181,209

Dr. Christian P. Illek				Dr. Thomas Kremer				Claudia Nemat			
Function: Human Resources				Function: Data Privacy, Legal Affairs and Compliance				Function: Technology and Innovation			
since Apr. 1, 2015				since June 1, 2012				since Oct. 1, 2011			
2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)	2016	2017	2017 (min.)	2017 (max.)
700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	900,000	900,000	900,000	900,000
37,585	35,741	35,741	35,741	65,910	63,620	63,620	63,620	75,616	78,567	78,567	78,567
737,585	735,741	735,741	735,741	765,910	763,620	763,620	763,620	975,616	978,567	978,567	978,567
550,000	550,000	0	825,000	550,000	550,000	0	825,000	675,000	675,000	0	1,012,500
707,299	706,533	0	1,650,000	707,299	706,533	0	1,650,000	868,049	867,109	0	2,025,000
550,000				550,000				675,000			
	550,000	0	825,000		550,000	0	825,000		675,000	0	1,012,500
157,299				157,299				193,049			
	156,533	0	825,000		156,533	0	825,000		192,109	0	1,012,500
1,994,884	1,992,274	735,741	3,210,741	2,023,209	2,020,153	763,620	3,238,620	2,518,665	2,520,676	978,567	4,016,067
269,168	272,566	272,566	272,566	250,534	247,956	247,956	247,956	213,170	291,092	291,092	291,092
2,264,052	2,264,840	1,008,307	3,483,307	2,273,743	2,268,109	1,011,576	3,486,576	2,731,835	2,811,768	1,269,659	4,307,159

Benefits allocated for the reporting year

Unlike the table of benefits granted shown on the previous page, the table below contains not the target values for short- and long-term variable remuneration components, but rather the actual benefits allocated for 2017. There is another difference between the following table and the table of benefits granted with regard to the presentation of the Share Matching Plan. The figures for the Share Matching Plan disclosed in the following table show the value of the benefits allocated applicable under German tax law at the time of transfer of the matching shares, whereas the table of benefits granted on the previous pages shows the fair values of remuneration at the grant date.

Compensation of the Board of Management

€

	Timotheus Höttges		Reinhard Clemens	
	Function: Chairman of the Board of Management (CEO) since Jan. 1, 2014		Function: T-Systems until Dec. 31, 2017	
	2016	2017	2016	2017
Fixed remuneration	1,450,000	1,450,000	840,000	840,000
Fringe benefits	156,742	29,061	25,221	20,387
Total fixed annual remuneration	1,606,742	1,479,061	865,221	860,387
One-year variable remuneration	1,760,704	1,749,968	733,850	709,800
Multi-year variable remuneration	1,099,526	1,585,809	839,525	1,118,579
Of which: Variable II (4-year term) ^a	547,560	1,135,680	468,000	676,000
Of which: Share Matching Plan (4-year term) ^b	551,966	450,129	371,525	442,579
Other	0	0	0	0
Total	4,466,972	4,814,838	2,438,596	2,688,766
Service cost	1,030,510	1,129,225	737,710	797,142
TOTAL COMPENSATION	5,497,482	5,944,063	3,176,306	3,485,908

	Dr. Thomas Kremer		Claudia Nemat	
	Function: Data Privacy, Legal Affairs and Compliance since June 1, 2012		Function: Technology and Innovation since Oct. 1, 2011	
	2016	2017	2016	2017
Fixed remuneration	700,000	700,000	900,000	900,000
Fringe benefits	65,910	63,620	75,616	78,567
Total fixed annual remuneration	765,910	763,620	975,616	978,567
One-year variable remuneration	666,600	654,500	807,975	804,600
Multi-year variable remuneration	396,000	795,928	596,283	1,178,312
Of which: Variable II (4-year term) ^a	396,000	572,000	486,000	702,000
Of which: Share Matching Plan (4-year term) ^b	0	223,928	110,283	476,312
Other	0	0	0	0
Total	1,828,510	2,214,048	2,379,874	2,961,479
Service cost	250,534	247,956	213,170	291,092
TOTAL COMPENSATION	2,079,044	2,462,004	2,593,044	3,252,571

^a Variable II as shown in the column for 2017 relates to the payment of the 2014 tranche; the figure in the column for 2016 relates to the payment of the 2013 tranche.

^b The Share Matching Plan relates to the non-cash benefit arising from the inflow of the matching shares, with the corresponding personal investment having been made in 2012 or 2013.

^c This amount includes a one-time sign-on bonus of EUR 500,000 and a payment of EUR 620,000 to compensate for the loss of share-based compensation he would have been entitled to at the previous employer. Srinji Gopalan was obligated to invest the net amount paid out from the compensation payment in DTAG shares. Upon expiry of lock-up period, he can freely dispose of these shares.

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Niek Jan van Damme		Thomas Dannenfeldt		Sri Gopal		Dr. Christian P. Illek	
Function: Germany		Function: Finance (CFO)		Function: Europe		Function: Human Resources	
until Dec. 31, 2017		since Jan. 1, 2014		since Jan. 1, 2017		since Apr. 1, 2015	
2016	2017	2016	2017	2016	2017	2016	2017
850,000	850,000	860,000	860,000		700,000	700,000	700,000
28,913	27,040	26,711	24,631		1,139,610 ^c	37,585	35,741
878,913	877,040	886,711	884,631	-	1,839,610	737,585	735,741
781,172	821,744	858,270	835,490		654,500	674,850	685,850
749,066	1,132,139	0	572,000	-	0	0	0
396,000	665,687	0	572,000		0	0	0
353,066	466,452	0	0		0	0	0
0	0	0	0		0	0	0
2,409,151	2,830,923	1,744,981	2,292,121	-	2,494,110	1,412,435	1,421,591
303,289	302,706	276,804	281,578		305,625	269,168	272,566
2,712,440	3,133,629	2,021,785	2,573,699	-	2,799,735	1,681,603	1,694,157

COMPENSATION OF THE SUPERVISORY BOARD

The compensation received by the members of the Supervisory Board is specified under § 13 of the Articles of Incorporation of Deutsche Telekom AG. Under the compensation system applicable for the 2017 financial year, members of the Supervisory Board receive fixed annual compensation of EUR 70,000.00.

The Chairman of the Supervisory Board receives a further EUR 70,000.00 and the Deputy Chairman EUR 35,000.00. Members of the Supervisory Board also receive compensation as follows for activities on Supervisory Board committees:

- (a) The Chairman of the Audit Committee receives EUR 80,000.00, ordinary members of the Audit Committee EUR 40,000.00.
- (b) The Chairman of the General Committee receives EUR 70,000.00, ordinary members of the General Committee EUR 30,000.00.
- (c) The Chairman of the Nomination Committee receives EUR 25,000.00, ordinary members of the Nomination Committee EUR 12,500.00.
- (d) The Chairman of any other committee receives EUR 40,000.00, ordinary members of any other committee EUR 25,000.00.

Chairmanship and membership of the Mediation Committee are not remunerated.

Members of the Supervisory Board receive an attendance fee amounting to EUR 1,000.00 for each meeting of the Supervisory Board or its committees that they have attended. The Company reimburses value-added tax payable on remuneration and expenses.

The total compensation of the members of the Supervisory Board in 2017 amounted to EUR 2,899,500.00 (plus VAT).

The Company has not granted any advances or loans to current or former Supervisory Board members, nor were any other financial obligations to the benefit of this group of people entered into.

The compensation of the individual members of the Supervisory Board for 2017 is as follows:

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in €

Member of the Supervisory Board	Fixed remuneration	Meeting attendance fee	Total
Baldauf, Sari	95,000.00	12,000.00	107,000.00
Bednarski, Josef	165,000.00	25,000.00	190,000.00
Dr. Bernotat, Wulf H. (until August 27, 2017 †)	80,000.00	7,000.00	87,000.00
Brandl, Monika	95,000.00	12,000.00	107,000.00
Geismann, Johannes	158,750.00	27,000.00	185,750.00
Hanas, Klaus-Dieter	95,000.00	12,000.00	107,000.00
Hauke, Sylvia ^a (until June 30, 2017)	60,000.00	6,000.00	66,000.00
Hinrichs, Lars	95,000.00	14,000.00	109,000.00
Dr. Jung, Helga	70,000.00	10,000.00	80,000.00
Kallmeier, Hans-Jürgen ^b (until December 31, 2017)	135,000.00	19,000.00	154,000.00
Prof. Dr. Kaschke, Michael	110,000.00	14,000.00	124,000.00
Koch, Nicole ^c	70,000.00	10,000.00	80,000.00
Kollmann, Dagmar P.	187,500.00	21,000.00	208,500.00
Kreusel, Petra Steffi ^d	110,000.00	17,000.00	127,000.00
Prof. Dr. Lehner, Ulrich (Chairman)	300,000.00	27,000.00	327,000.00
Schröder, Lothar ^e (Deputy Chairman)	240,000.00	25,000.00	265,000.00
Dr. Schröder, Ulrich	135,000.00	2,000.00	137,000.00
Sommer, Michael	111,666.67	14,000.00	125,666.67
Spoo, Sibylle	95,000.00	8,000.00	103,000.00
Streibich, Karl-Heinz	120,000.00	17,000.00	137,000.00
Suckale, Margret (since September 28, 2017)	29,583.33	3,000.00	32,583.33
Topel, Karin (since July 1, 2017)	35,000.00	5,000.00	40,000.00
	2,592,500.00	307,000.00	2,899,500.00

^a In addition to remuneration for her activities as a member of the Supervisory Board of Deutsche Telekom AG, Sylvia Hauke also received other remuneration amounting to EUR 8,000.00 (including meeting attendance fees) in the 2017 financial year (for her mandate as member of the supervisory board of Telekom Deutschland GmbH).

^b In addition to remuneration for his activities as a member of the Supervisory Board of Deutsche Telekom AG, Hans-Jürgen Kallmeier also received other remuneration amounting to EUR 16,000.00 (including meeting attendance fees) in the 2017 financial year (for his mandate as member of the supervisory board of T-Systems International GmbH).

^c In addition to remuneration for her activities as a member of the Supervisory Board of Deutsche Telekom AG, Nicole Koch also received other remuneration amounting to EUR 4,500.00 (including meeting attendance fees) in the 2017 financial year (for her mandate as member of the supervisory board of Telekom Shop Vertriebsgesellschaft mbH).

^d In addition to remuneration for her activities as a member of the Supervisory Board of Deutsche Telekom AG, Petra Steffi Kreusel also received other remuneration amounting to EUR 15,500.00 (including meeting attendance fees) in the 2017 financial year (for her mandate as member of the supervisory board of T-Systems International GmbH).

^e In addition to remuneration for his activities as a member of the Supervisory Board of Deutsche Telekom AG, Lothar Schröder also received other remuneration amounting to EUR 25,000.00 (including meeting attendance fees) in the 2017 financial year (EUR 19,000.00 for his mandate as member of the supervisory board of Deutsche Telekom Services Europe GmbH and EUR 6,000.00 as Chairman of the Data Privacy Advisory Council).

SHARE OWNERSHIP BY MEMBERS OF THE BOARD OF MANAGEMENT AND THE SUPERVISORY BOARD

Members of the Board of Management and Supervisory Board of Deutsche Telekom AG were reported to have purchased 270,755 shares and sold 9,531 in the course of 2017. Total direct or indirect holdings in the Company or associated financial instruments by members of the Board of Management and the Supervisory Board do not exceed 1 percent of the shares issued by the Company.

ANNEX: REPORT ON EQUALITY AND EQUAL PAY

Deutsche Telekom is a leading integrated telecommunications company, with a presence in more than 50 countries.

We embrace diversity. With its global focus, our Group unites a wide variety of different cultures, experience, and talent, and we are actively committed to fostering this diversity. Our ultimate goal is to benefit from the creativity and innovation that diversity offers. As early as 1992, our then Board of Management launched a program for the advancement of women. That program ushered in a whole range of measures that are still in place today, including efforts to increase the percentage of women in management positions and in technical professions, and to come up with more flexible working-time models for both women and men.

Since 2010, our goal has been to achieve a share of 30.0 percent of women in (upper and middle) management. The corresponding figure in 2010 was already a gratifying 22.7 percent across the Group, and by 2016 we had succeeded in raising it to 25.4 percent. The corresponding figures for our Group companies in Germany have also risen: from 12.5 percent in 2010 to 21.2 percent in 2016. At year-end 2016, women accounted for 35.3 percent of our global workforce. At Deutsche Telekom AG, they made up an average of 42.5 percent of the workforce in 2016. On average, 62.5 percent of these women worked full time, while 37.5 percent worked part time.

In 2015, the Act on the Equal Participation of Women and Men in Management came into force in Germany, creating a statutory obligation to fill 30.0 percent of supervisory board positions with women. We have gone a step further, setting ourselves the goal of filling 30.0 percent of board of management and managing board positions and 30.0 percent of management level 1 and 2 positions with women. Deutsche Telekom AG had already achieved one of these goals at the end of 2016, with 40.0 percent of its Supervisory Board positions held by women. The corresponding figures for management levels 1 and 2 at year-end 2016 were gratifying as

well, at 29.6 percent and 25.5 percent respectively. Only at Board of Management level was the share of women – at 14.3 percent – not yet close to the target level. We continue our efforts to promote gender equality and focus on raising the profile of this issue in HR processes, for example using

- regular reports that track the trend in what we term the fair share quota;
- events and partnerships such as women@work, FEMTEC, and the STEM award;
- partnerships with HR consultants that specialize in finding women to fill management positions;
- strategic succession planning with a focus on rules for filling positions (e.g., at least one woman on the successor shortlist);
- flexible working-time options such as flexitime, part time with a guaranteed option to return to full-time work, phased retirement, family care leave, leave of absence, lifetime work accounts, leave without pay, parental leave, caregiver's leave, education leave, tandem models, working from home or on the move.

Improving its employees' work-life balance is a top priority for Deutsche Telekom, which is why we offer company childcare facilities or parent-child offices at many locations. We also have an experienced partner in the shape of AWO Lifebalance GmbH, a company that offers our employees information and consultation free of charge on all aspects of childcare and care for the next-of-kin, and can help find the right services for them. The latter include not only classical childcare and nursing care services, but also personal and household services.

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In order to create the basis for diversity among our junior staff, we rely on a selection procedure that is geared to talent – one that focuses less on grades, and more on the aptitudes, strengths and interests that the applicants require for their respective courses of training/study and for their prospective careers within our Group. This selection procedure enables us to win over new talent and access previously untapped pools of applicants. Another project, which we are conducting in cooperation with Germany's Federal Employment Agency, focuses on training and cooperative study programs on a part-time basis. Since 2011, we have been offering single parents part-time training and cooperative study programs. To enable this target group to balance the demands of bringing up their children and still earning initial professional qualifications, we allow them to reduce their weekly working time to 25 hours (though they still have to complete their study times in full).

Since 2015, we have been raising awareness of unconscious bias. In 2016 alone, more than 130 classroom and online workshops were held on this topic, and we began rolling out these workshops worldwide in July 2017. Unconscious bias refers to prejudicial assumptions that people hold regarding the capabilities, skills and tendencies of other people. Such assumptions are affected by numerous different factors, many of them physical. Unconscious bias thus denotes thought processes that occur unconsciously and very quickly, without being sufficiently questioned. For example, we often select applicants who seem similar to us, or who seem to be the right fit for our corporate culture. As a result, we can overlook others with great innovative and creative potential.

In order to prepare women for positions on supervisory boards, a Supervisory Board Readiness Program was conducted for women in management positions in 2015 and 2016. A new round of this program, which was entitled "Update your readiness," was launched in November 2017. Our mentoring program Child and Career [Karriere mit Kind] helps ease workers back into their jobs

after a period of parental leave. The focus is on avoiding gaps in the individual's career and promoting a change in culture that will enable people to strike a balance between their careers and their parental obligations.

In our Company, compensation is based on the nature and scope of a person's work and not on their gender. Our collective agreements on remuneration and other matters reached with the trade unions ensure a transparent, gender-neutral system of compensation. As a result, we offer remuneration that is independent of gender, age, and nationality.